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The Significant Factors in Industrial Conflict,
with Special Reference to
Three New Zealand Industries

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ABSTRACT

The scope of this study is broader than that of most others on industrial conflict and encompasses individual and employer-initiated forms of conflict as well as stoppages. Industrial conflict is a complex concept and there is consequently a need for an explicit ordering of ideas. Our theoretical discussion in Part 1 is aimed at providing a general framework for later empirical analysis. It begins with a conceptualization of industrial conflict which embraces many causes, settings, parties and forms. The more important of these forms are outlined before factors influencing the distribution of industrial conflict are surveyed. It ends with an investigation of the ways in which the economic effects of such conflict may be observed and to some extent measured.

Three industries, meat freezing, building and construction, and waterfront, account for a disproportionate amount of industrial conflict in New Zealand and it is on these that the empirical analysis of this thesis centres. In order to understand the context of conflict in these industries, their economic, technical and organisational environments are outlined in Part 2. Part 3 contains the empirical investigation itself, beginning with the place of these three industries in the national perspective and then dealing with the industries in turn. In each case, both official statistics and material obtained by interviews and questionnaires are used to analyze conflict in detail and to evaluate possible factors shaping it. No simple conflict patterns are found. These industries are, for example, stoppage prone but all contain several units which are virtually stoppage free. But in each industry certain fundamental features are found to be influential in shaping the patterns. Of prime importance is the technology, although economic features, such as the nature of worker remuneration, ownership patterns and the level of throughput, are also important. These conclusions are summarised in Part 4 where it is noted that, while the three industries have features predisposing them toward conflict, our understanding of and command over these features can be improved.

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PART 1

THEORETICAL FRAMEWORK

Chapter I

A CONCEPTUALIZATION OF INDUSTRIAL CONFLICT

Studies of industrial conflict take many forms. Some concentrate on the varieties of conflict, others on its costs and benefits and still others on its causes. Many are very specific, dealing with only one form of industrial conflict, e.g. the strike, and then with just one aspect of that form, e.g. the inter-industry distribution of strikes. Few studies of industrial conflict are comprehensive and, more importantly, few have any theoretical basis. Theoretical analysis provides a means of ordering not only ideas on a subject but also empirical information.

I. THEORIES OF INDUSTRIAL RELATIONS

There are various levels of investigation in the literature on industrial relations. The most general are those theories which attempt to provide a comprehensive framework for the analysis of the major features of industrial relations. Success in that endeavour would provide a useful conceptualization of industrial conflict.

Probably the best known theory of industrial relations is Dunlop's "systems approach".¹ Dunlop started from the observation that industrial relations has been a cross roads where a number of disciplines have met and, as such, has lacked a theoretical core. It has been an area where facts have outrun ideas and integrating theory has lagged behind experience. He sought to provide a theoretical core in the form of the industrial relations system. Dunlop defines an industrial relations

1. John T. Dunlop, *Industrial Relations Systems* (Henry Holt, New York, 1958). The description of Dunlop's work as the "systems approach" or "systems model" is widely used in the literature. See A.N.J. Blain and John Gennard, "Industrial Relations Theory - A Critical Review", *British Journal of Industrial Relations*, Vol. VIII, Nov. 1970, pp. 392-395.

system by stating its structure. "An industrial-relations system at any one time in its development is regarded as comprised of certain actors, certain contexts, an ideology which binds the industrial-relations system together, and a body of rules created to govern the actors at the work place and work community."² The "system" is the central concept in his approach. The wider society is seen as the total social system, which contains several subsystems, such as the economy, the political subsystem and the industrial relations subsystem. These systems are, of course, not mutually exclusive.

The components of an industrial relations system, mentioned in the above definition, are actors, contexts, an ideology and rules. These components are spelt out in the following lengthy but vital quote from Dunlop.

"In brief outline the theoretical framework is concerned with analyzing the workings of industrial-relations systems which vary in scope from an enterprise to a sector or to a country as a whole. Regardless of its scope, an industrial-relations system is regarded as having certain common properties and structure and as responding to specified influences....Every industrial-relations system involves three groups of actors:

(1) workers and their organizations, (2) managers and their organizations, and (3) governmental agencies concerned with the work place and the work community. Every industrial-relations system creates a complex of rules to govern the workplace and work community....The actors in an industrial-relations system are regarded as confronting an environmental context at any one time. The environment is comprised of three interrelated contexts: the technology, the market or budgetary constraints, the power relations and statuses of the actors. The system is bound together by an ideology or understandings shared by all the actors. The central task of a theory of industrial relations is to explain why particular rules are established in particular industrial-relations

2. Dunlop, *op.cit.*, p. 7.

systems and how and why they change in response to changes affecting the system."³

Dunlop has attempted to define an analytical structure and in doing so has directed attention to certain areas. In particular, the structure focuses on rules - the dependent variable to be "explained" by the other characteristics of the industrial relations system (the "independent variables"). The establishment and administration of rules is seen as the major concern of the industrial relations system.

As a basis for a conceptualization of industrial conflict, the systems approach has a number of weaknesses. First, it has inadequacies even as a theory of industrial relations.⁴ The appeal of the approach lies in its apparent precision, but in performance the appearance is not realised. The basic concept, the "system", is very fuzzy. Dunlop avoids giving any clear definition of what he means by it and it is not easy to repair the deficiency. Moreover, the selection of components of the system is arbitrary. It is not made clear why rules should be the focus of industrial relations, except to imply that they are a general feature. The same might be said about other variables, for example, industrial conflict. Similarly, the selection of the "independent variables" is arbitrary. Another difficulty lies in the variables themselves which are so broadly defined as to be hardly defined at all.

The nature of the relationships between the variables is not enumerated. The approach maintains there are relationships between certain variables but the forms of these relationships are not specified. In view of the undefined nature of the variables and of the relationships existing between them, it is not surprising that the approach is incapable of generating testable hypotheses.

3. Dunlop, *op.cit.*, pp. viii-ix.

4. For a discussion of some of these inadequacies see Blain and Gennard, *op.cit.*, pp. 398-402, 405-406, much of which is repeated in A.N.J. Blain, *Pilots and Management: Industrial Relations in U.K. Airlines* (Allen and Unwin, London, 1972), Ch. II. Blain's book is an application of Dunlop's theory to the British airline industry.

In our empirical analysis we shall not follow the systems approach, but will rely on an assessment of opinions and on partial tests. This procedure is not necessarily inferior to Dunlop's, given what can actually be done with his approach.⁵

The second major weakness of the "systems approach" as a basis for a conceptualization of industrial conflict lies in its lack of treatment of conflict itself. Dunlop deliberately preferred to emphasize the structural features of an industrial relations system, stating that while "the concern with labor peace and warfare probably has stimulated interest in the larger subject of industrial-relations systems,....such classifications have almost no relevance to the present inquiry".⁶ While each author is free to choose his own area of interest, this choice cannot be accepted when one is concerned with the wider subject of industrial conflict.

Another well-known theory of industrial relations is that of Flanders. Like Dunlop, he placed heavy emphasis on rules, identifying a system of industrial relations with a system of rules.⁷ The substance of industrial relations is seen to be the making and administration of rules for regulating employment relations.⁸ Flanders was interested not only in rules but in the processes of rule formation. The major rule-making process in the British system of industrial relations is collective bargaining and much of Flanders' writings are devoted to its study. Collective bargaining is seen as a political institution involving a power relationship between organisations. The parties meet in collective bargaining to

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5. The inadequacies of the systems approach as a theory of industrial relations have undoubtedly limited the use made of it by researchers. See Kenneth F. Walker, "The Comparative Study of Industrial Relations", *International Institute for Labour Studies Bulletin*, No. 3, Nov. 1967, p. 117; and Blain, *op.cit.*, p. 52.
 6. Dunlop, *op.cit.*, p. 3.
 7. Allan Flanders, "Industrial Relations: What is Wrong With the System?" in *idem*, *Management and Unions: The Theory and Reform of Industrial Relations* (Faber and Faber, London, 1970) p. 86.
 8. Allan Flanders and Alan Fox, "Collective Bargaining from Donovan to Durkheim", in Flanders, *Management and Unions*, p. 252.

decide the rules that are to regulate their relationships.

While bearing certain similarities to the systems model, Flanders' approach is basically different. Flanders emphasised the process of rule-making through collective bargaining while Dunlop sought to outline the features of an industrial relations system. The more specific nature of Flanders' analysis has its reward in covering some matters largely disregarded by Dunlop, one of which is industrial conflict.

In studying bargaining, one is necessarily confronted with the fact of conflict between the parties. Flanders outlined in some depth the types of conflict to be settled by collective bargaining.⁹ The words "settled by collective bargaining" are significant for therein lies the weakness of Flanders' analysis as a theory of industrial conflict. In focusing on collective bargaining he concentrates not on conflict as such but on its regulation. The input to collective bargaining is seen to be "conflict and disorder" and the output rules which serve to regulate conflict.¹⁰ Flanders focused, in other words, not on the input but on the process and output of collective bargaining. The place of conflict in his theory is shown in the statement that "everything appertaining to the resolution of conflict between the parties, including grievance settlement, must be considered as belonging to [collective bargaining] institutions".¹¹

A theoretical approach to the study of industrial relations giving central place to industrial conflict is that of Margerison.¹² He challenges Flanders' and Dunlop's view that the formulation and application of rules is the core of industrial relations, arguing that these theorists are incorrect in their emphasis on the resolution of conflict. Industrial

9. See, for example, Allan Flanders, "Collective Bargaining: A Theoretical Analysis", in *idem*, *Management and Unions*, pp. 229-230.

10. Flanders and Fox, *op.cit.*, p. 252.

11. Flanders, "Collective Bargaining: A Theoretical Analysis", p. 222.

12. G.J. Margerison, "What Do We Mean by Industrial Relations? A Behavioural Science Approach", *British Journal of Industrial Relations*, Vol. VII, July 1969, pp. 273-286.

relations should be concerned with the generation of conflict rather than its resolution. Margerison sees conflict as the basic concept that should form the basis of the study of industrial relations.¹³ Using this premise, he sought to develop a model incorporating two major conceptual levels of industrial relations. One is the intra-plant level where situation factors, such as technology, work task and job content, and interaction factors produce three types of conflict - distributive, structural and human relations. These are seen as being resolved through collective bargaining, structural analysis of socio-technical systems and man-management analysis respectively. The second level of industrial relations is outside the firm and mainly concerns conflict not resolved at the intra-organisation level.

Margerison's approach contains useful contributions to a conceptualization of industrial conflict, including the notions that conflict is an inherent part of industrial society; that the enterprise is the basic unit of analysis in the study of industrial relations; and that enterprises are comprised of different parties with different objectives. Viewed in itself as a conceptualization of industrial conflict, however, the approach has several deficiencies. Margerison argues that industrial relations is a multi-disciplinary subject and develops a model dividing the subject into the "major forms of industrial relations areas".¹⁴ In attempting to split the subject into preserves of specific academic disciplines he has artificially divided industrial conflict into isolated and seemingly unrelated areas. Each area of conflict, it is argued, is best studied by a particular discipline (or disciplines) and each has definite (and different) forms and bases of resolution. The effect of such categorisation is to cloud the basic nature of industrial conflict. For example, it is argued that the demarcation dispute is a symptom of structural conflict and that the discipline most suited to study such conflict is industrial sociology. Why the demarcation dispute cannot be a form of distributive conflict and should not be studied by a

13. *Ibid.*, p. 274.

14. Margerison, *op.cit.*, p. 276.

number of disciplines, including economics and industrial sociology, is not clear. Furthermore, greater emphasis should have been placed on why conflict occurs. We are told there are different types of conflict but the focus is on their outcomes and bases for resolution rather than on the basic reasons for their existence. A conceptualization of industrial conflict should involve deeper analysis of the objectives of participants in the enterprise than does Margerison's theory.

While the approaches discussed do not provide an adequate conceptualization of industrial conflict, they contain features which should be included in one. All three authors suggest the enterprise is composed of parties which may have different objectives. Margerison also suggests that conflict is an inherent part of industrial society and that the enterprise is the basic unit of analysis.

II. CONCEPTIONS OF THE ENTERPRISE

Conflict largely occurs in the enterprise. But before discussing particular conceptions of the enterprise it is appropriate to define what we mean by the term "industrial conflict". This is far from an easy task. The phenomenon of conflict is not only highly complex but also is present in most aspects of human experience. As a result, the word "conflict" has diverse meanings. Many studies of industrial conflict seek to avoid this problem of definition by giving no definition at all. Where a word has many meanings, however, the problem is not solved by failing to specify the particular meaning used. For our purposes conflict exists when any potential positions of parties are incompatible.¹⁵ In other words, it is a relationship between parties which have incompatible goals. Industrial conflict is that conflict arising out of the employment relationship. The parties may be individuals or groups, with the result that it can occur between individuals and groups, between groups, and between individuals. It

15. This definition is similar to Boulding's one of competition. See Kenneth E. Boulding, *Conflict and Defense: A General Theory* (Harper and Row, New York, 1962) p. 4.

follows that industrial conflict, as we define it, is not confined solely to conflict between trade unions and groups of employers. It can also occur between a worker (or workers) and an employer (or employers), between workers, between workers and trade unions, between trade unions, between trade unions and employers, between employers and between employers' organisations.¹⁶ Our definition in no way defines the forms industrial conflict may take. We are thus not limited to studying one form of conflict, e.g. the strike, but can take into account its varied manifestations.

Conflict exists where any potential positions of parties are incompatible. The enterprise¹⁷ is where workers and employers meet most often. It is to be expected, therefore, that conflict will arise within the enterprise and even conflict which is initiated outside a specific enterprise may be internalised there. Moreover, a person's conception of the enterprise will shape his understanding of the nature of industrial conflict and his reaction to its manifestation.

In starting a conceptualization of conflict with an analysis of the enterprise we are not implying that the enterprise can be regarded as separate from the society within which it operates. In many ways the enterprise reflects the wider society (or, as some argue, the wider society reflects the nature of the enterprise). For example, the property relations embodied in the firm are among the major defining features of a society. But the enterprise, in addition to being the basic organisation of employment, is also a focus for the study of those aspects of the wider society which are important in the generation and conduct of industrial conflict.

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16. Our definition logically includes conflict between employers in the product market but by convention industrial conflict between employers is limited to conflict in the factor market and particularly to the employment of labour.
 17. The enterprise refers not only to the industrial firm or company but also to the state-owned corporation, government department, charitable institution or other non-profit making organisation which employs labour. When our discussion concerns specifically the industrial organisation, the words "firm" or "company" will be used.

It is possible to see the enterprise in a number of different ways. Among the conceptions found in the literature, and requiring particular consideration, are the "unitary" and "pluralistic" ones.¹⁸

1. The Enterprise as a Unitary System

In this frame of reference the enterprise is seen to consist of employers and workers jointly striving toward a common objective. The enterprise has a single focus of authority and of loyalty and may be likened to a team. While the existence of two groups in the employment situation is recognised, the division is seen as a functional one. The enterprise is an organic unity with a basic interdependence between its parts.¹⁹

If the fundamental interests are shared by management and managed alike and if the enterprise is a unitary system then it follows that harmony is the norm in industrial relations. Conflict is then "'deviant behaviour', a kind of disease in need of treatment".²⁰ Underlying this harmony convention is the belief that any deviation from the norm of harmony will generally be temporary. The causes of deviation are seen to be amenable to remedial action. The enterprise is regarded as some sort of equilibrium system. Should the equilibrium be disturbed, forces may be brought into use which restore it.

The beliefs that the enterprise is a unitary system in which industrial harmony is the norm, and that conflict is a sign of industrial ill-health are widely held. The notion of

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18. See Alan Fox, *Industrial Sociology and Industrial Relations* (Research Paper No. 3, Royal Commission on Trade Unions and Employers' Associations, HMSO, London, 1966) p. 3; and *idem*, "Industrial Relations: A Social Critique of Pluralist Ideology" in John Child (ed.), *Man and Organization* (Allen and Unwin, London, 1973) pp. 185-233.
 19. See V.L. Allen, *Militant Trade Unionism: A Re-Analysis of Industrial Action in an Inflationary Situation* (Merlin Press, London, 1966) p. 94.
 20. J. Pen, *Harmony and Conflict in Modern Society* (McGraw-Hill, London, 1966) p. 2.

the unitary system has strong roots in the works of numerous academic writers. The pioneer of "scientific management", Frederick W. Taylor, had "a firm conviction that the true interests of the two [management and labour] are one and the same".²¹ The father of the "human relations" school, Elton Mayo, and a number of his disciples also shared this view.²² Etzioni has highlighted the "unitary" view of "human relations" writers in saying, "there are almost lyric pages in Human Relations writing which depict the worker as anxious not to miss a day at the factory or to come too late lest he miss spending some time with his friends, and even as anxious not to disappoint his foreman who is like a warm and understanding father to him. The work team itself is often referred to as a family....In short, the Human Relations school point to a perfect balance between the organization's goals and the workers' needs."²³

The conception of the enterprise as a unitary system constitutes an ideology ingrained into the thinking of countless managers and employers. This ideology finds expression in familiar clichés in which the team analogy is refined and stressed to the point of abuse.²⁴ It underlies reference to strikers as "upsetters of industrial peace"²⁵ and such expressions as "a great desire to return to industrial harmony".²⁶ Equally many examples can be found of the view that conflict is a sign of ill-health.²⁷

21. Frederick W. Taylor, "The Principles of Scientific Management" in *idem*, *Scientific Management* (Harper and Row, New York, 1947) p. 10.

22. For the view of one such disciple see Burleigh B. Gardner, *Human Relations in Industry* (Irwin, Chicago, 1945) p. 283.

23. Amitai Etzioni, *Modern Organizations* (Prentice-Hall, Englewood Cliffs, N.J., 1964) p. 40.

24. See, for example, Fox, *Industrial Sociology and Industrial Relations*, pp. 3-4.

25. *Evening Post*, 21 July, 1971 (reported speech of industrialist, Sir Clifford Plimmer).

26. *Evening Post*, 25 June, 1971 (reported speech of H.E.L. Pickering, M.P.).

27. See, for example, Reinhard Bendix and Lloyd H. Fisher, "The Perspectives of Elton Mayo", in Amitai Etzioni (ed.), *Complex Organizations: A Sociological Reader* (Holt,

(Footnote 27 is continued on the next page.)

While the unitary ideology holds wide sway, does it correspond with observable facts? The brief answer is that it does not. The very existence of trade unions holds profound implications for the ideology's empirical validity. If all participants in the production process belong to a team pursuing a common purpose and if the leadership of that team acts in the interests of all, it follows that trade unions are unnecessary. The beliefs that trade unions are unnecessary and are alien interlopers introducing conflict into an otherwise harmonious situation undoubtedly underlay the steadfast resistance of some employers to their establishment. The fact that trade unions became established presents the adherents to the harmony convention with a glaring inconsistency.

The existence of trade unionism is rationalized in a number of ways by those possessing the unitary frame of reference. Some argue that the acceptance of trade unionism came through its being recognised as a necessary protection for the worker from the adverse effects of unregulated labour markets. Others see unionism as an historical carry-over, brought into existence initially by the unenlightened policies of employers in the past who failed to comprehend that humane treatment of their workers was good business. Others see unions as an outcome of sectional greed, or an imperfect knowledge of the "national interest" or even of where workers' own best interests lie. It is clear that none of these arguments recognises the existence of trade unions as evidence that legitimate differences of interests are present in industry.

As mentioned, the convention of industrial harmony acknowledges that the organic unity of the enterprise may be disrupted but only by temporary and transient factors. For each such factor it is assumed there exists a remedy that will facilitate the solving of the underlying "problem" and allow a return to the natural harmonious state. Such a pragmatic approach, however, is inadequate in the face of the long-term

(Footnote 27 continued):

Rinehart and Winston, New York, 1961) p. 114; or Paul Einzig, *Decline and Fall? Britain's Crisis in the Sixties* (Macmillan, London, 1969) p. 74.

manifestation of conflict. That significant industrial conflict should exist in this enlightened day and age must prove galling to those possessing the unitary frame of reference. Even though most employers have been obliged to accept the establishment of trade unions and the supposed disruption this entails, no doubt it was thought that unions would eventually see the logic of the harmony convention and shape their policies accordingly. Thus in the literature there are numerous mentions of a "maturing" process through which trade unions are assumed to pass. The fact that union attitudes as manifest in stoppage policies have not "matured" can only be explained by extraneous factors such as the short-sightedness of union officials, the presence of agitators, and so on.

The ever presence of the whole panoply of devices for conflict regulation and resolution such as grievance committees, joint industrial councils, conciliation committees, mediation services and the like must present the adherents to the harmony convention with a logical inconsistency. If conflict is merely a transient thing, such permanent bodies should not be necessary. Various *ad hoc* approaches tempered with a generous paternalism should suffice. The logical inconsistency, however, lies not in the existence of devices which can only be testimony to the continual presence of conflict but in the frequent use made of them by the many managements adhering to the harmony notion.

The equation of industrial conflict with collective forms²⁸ and the lockout tends to reinforce managements in their belief in the harmony convention. In many industries the collective forms, e.g. strikes, go-slows, work-to-rules, etc., are far from continuously present. This lack of continuity is taken as evidence that conflict is merely a temporary deviation from the normal state of harmony. Such thinking is fallacious, however, because it rests on a severely restricted view of industrial conflict. The excluded forms of conflict, that is those connected with the individual worker and those initiated by the employer other than the lockout, are numerous and to

28. See Chapter II.

ignore them greatly under-estimates the extent of conflict in the enterprise. The lack of collective forms of conflict may indicate not a lack of conflict but merely that it is finding expression in other ways.

It seems that the unitary ideology is found wanting in the face of observable facts. Why then is it still widespread? The first reason lies in the purposes served by the ideology for those subscribing to it. Secondly, it is all too easy to rationalise the presence of conflict in a fashion considered compatible with the ideology. Fox argues that the unitary view of the enterprise serves as a method of self-assurance; an instrument of persuasion; and a technique for seeking legitimation of authority.²⁹

The belief that the participants in the enterprise are, in most respects, in fundamental accord is a source of comfort and reassurance to those in a position of management. The opposite belief, i.e. that substantial discord is present, is corrosive of self-confidence. The ideology is also used by managers and employers as an instrument to persuade workers and the public as a whole that industry is a harmony of purpose, "which only fools or knaves choose to disrupt".³⁰ Finally, the propagation of the notion that the interests of employers and workers are identical serves to confer legitimacy on the government of the enterprise. The belief that it acts in the interests of all concerned is fostered.

Rationalisations of apparent conflict take the form that it is either:

- (1) merely frictional, e.g. due to incompatible personalities; or
- (2) caused by faulty "communications", e.g. "misunderstandings" about methods or objectives; or

29. Fox, *Industrial Sociology and Industrial Relations*, p. 5.

30. *Ibid.*, p. 5.

- (3) the result of irrationality in the form of the failure to grasp the communality of interests; or
- (4) the work of agitators who incite the majority of workers who would otherwise be content.³¹

The belief that conflict is merely frictional is very widely held. The existence of "un-co-operative" personalities is ascribed either to innate psychological traits or to culturally induced personality characteristics. It appears Phelps Brown holds the former view in stating that: "For any wage-earner who has acquisitive and aggressive impulses to project, the employer at the bargaining table provides a natural lodgement and bearer".³² An example of culturally induced factors concerns the argument that conflict arises because of the disproportionate number of trade union officials who are "foreigners" possessing different cultural backgrounds from other citizens.³³ While the importance of factors such as personality incompatibilities is undoubted, they are best seen as contributory elements in a conflict situation rather than as basic causes. To the extent that personality characteristics are culturally induced, such incompatibilities may be reflections of more basic causes.

The popularity of the notion that industrial conflict arises because of faulty communications is attested to by the monotonous regularity with which it appears in the mass media.³⁴ The most logical exposition of the "communications argument" is that of Hicks which contends that perfect knowledge of the other side's position, from the point of view of objectives and possible tactics, will make any recourse to conflict action unnecessary. He states that: "Any means which enables either

31. See Fox, *Industrial Sociology and Industrial Relations*, p. 13.

32. E.H. Phelps Brown, *The Growth of British Industrial Relations: A Study from the Standpoint of 1906-14* (Macmillan, London, 1959) p. 102.

33. See *Dominion*, 27 March, 1973 (report of a speech at the 1973 Conference of the Federation of Master Painters).

34. See, for example, the editorial of the *Evening Post*, 10 April, 1972.

side to appreciate better the position of the other will make settlement easier; adequate knowledge will always make a settlement possible. The danger lies in ignorance by one side of the other's dispositions."³⁵

Improved communications have, in the minds of many, become the catch-all means of avoiding industrial conflict. If, however, the harmony convention itself is unsound the premises underlying the "communications argument" are also untenable. These premises are:

- (1) that the facts of a situation are clearly delineable and are quite unambiguous;
- (2) that these facts have precisely the same meaning to the parties; with the result that,
- (3) any misunderstanding will vanish and the source of conflict will be cleared up to the mutual benefit of the parties.

The notion of a "fact" presents numerous philosophic problems, the discussion of which rightly lies in the realm of the philosophy of science. As a practical matter, however, it seems highly improbable that people view situations in the same way. Given that perceptions differ, conceptions of what constitutes the "facts" of a situation are also likely to differ. Even if it is assumed that what constitutes the facts can be agreed upon, the premise that these facts will be interpreted in precisely the same way by the parties presupposes that they possess exactly the same frames of reference. The validity of this presumption rests upon the validity of the harmony convention. If this convention is fallacious it follows that the parties will interpret the facts in different ways and that conflict will persist despite the best efforts to reveal and propagate the facts of a situation. Because there is a basic conflict of interests in industry, this is not to say that improved communications cannot, at times, assist in the avoidance and settlement of conflict. It is to say,

35. J.R. Hicks, *The Theory of Wages* (Macmillan, London, 2nd ed., 1963) p. 147 (our emphasis).

however, that any settlement will, in general, not involve the parties arriving at a mutual agreement about the communality of their interests but merely the compromising of dissimilar positions. In other words, improved communications can facilitate the settlement of differences by compromise but not eliminate the fundamental causes of conflict.

Many of the adherents to the harmony convention would explain any apparent lack of success of improved communications in terms of the irrationality of one or both of the parties involved. According to the "irrationality argument" the failure to grasp the communality of interests results from irrationality, or even worse, from sheer stupidity. The notion that conflict arises because of irrationality is found in some of the literature on bargaining³⁶ and is also often expressed in the popular media.³⁷ Again, if the harmony convention is incorrect, the emphasis on the irrationality of the parties is misplaced and serves to divert attention from the possible existence of conflicting interests. If the enterprise is composed of conflicting groups, the rationality of the behaviour of a particular party can only be assessed in the light of that party's sectional interests.³⁸

The argument that apparent conflict is the work of agitators who incite the majority of workers who would otherwise be content is very popular.³⁹ Its appeal lies in the belief that the majority of workers, being content with the order of things, subscribe to the harmony convention. Thus the causes

36. This position can be inferred from John C. Harsanyi, "Notes on the Bargaining Problem", *Southern Economic Journal*, Vol. XXIV, April 1958, pp. 471-476. See also Robert L. Bishop's comment on Harsanyi's paper in "Game-Theoretic Analyses of Bargaining", *Quarterly Journal of Economics*, Vol. LXXVII, Nov. 1963, pp. 574-577.

37. See, for example, *Evening Post*, 18 April, 1974 (reported speech of E.E. Isbey, M.P.).

38. For a discussion of the rationality of industrial conflict, and particularly of the rationality of strike action, see Richard Hyman, *Strikes* (Fontana, London, 1972) Ch. 5.

39. See, for example, *8 O'clock*, 25 September, 1971 (reported speech of H.E.L. Pickering, M.P.); or *Evening Post*, 14 August, 1973 (reported speech of R.D. Muldoon, M.P.).

of conflict are seen to lie outside rather than within the enterprise. It is only when these extraneous influences enter into the otherwise harmonious enterprise that friction arises. A variant is that the great majority of workers involved are against the very conflict in which they are taking part.⁴⁰ Apparently agitators have the ability to provoke strikes and other forms of conflict without the support of those taking part in them.

Adherents to the unitary conception of the enterprise would be inclined to regard leaders of workers in conflict situations as "agitators". Workers, however, may regard such leaders as anything but agitators. If the interests of employers and workers differ, one would expect workers to view these leaders as acting responsibly in the pursuit of the workers' interests. Whether or not one views an individual as an agitator depends very much on one's conception of the nature of the enterprise.

Aside from this problem of definition, the "agitator argument" has other weaknesses. It fails, for example, to explain adequately how a few "militants" can infiltrate otherwise peaceful groups of workers and mislead or cajole them into "disruptive" activity. It appears that agitators have the ability to create stoppages out of nothing.⁴¹ Moreover, it fails to explain the existence of industries which have been stoppage prone for many years regardless of numerous changes in leaders, and in political affiliations of leaders, in the trade unions involved. The argument "also fails to

40. See *Evening Post*, 24 March, 1971 (reported speech of E.M. Hodder, Chairman of the Wellington Harbour Board).

41. Turner argues that "where industrial situations are likely to lead to conflict, they will generally find leaders to organize it anyway: and such leaders are naturally likely to be people of aggressive temperament, and so also to acquire strong views. The ability of such individuals to create conflict in the absence of circumstances that would induce it anyway seems to me to be highly marginal." (H.A. Turner, *The Trend of Strikes* (Leeds University Press, Leeds, 1963) p. 12.) To this we might add Knowles' comment that "one cannot agitate successfully without widespread grievances" (K.G.J.C. Knowles, *Strikes - A Study in Industrial Conflict* (Blackwell, Oxford, 1952) p. xii).

explain why it is that agitators are apparently so much more influential in some industrial situations than in others".⁴² In addition, it cannot explain why particular industries are internationally stoppage prone despite the fact that the political leanings of trade union leaders differ greatly between countries. Finally, it takes a large stretch of the imagination to argue that an admittedly small minority can spread itself so widely throughout the range of industries to account for the fact that some conflict tends to be manifest in most, if not all industries. Adherence to the argument, in general, leads to a misdirection of attention toward superficial factors and away from the basic causes of conflict. In so doing it is likely to inflame matters even further.⁴³ The same might be said in respect of the other three commonly-used rationalizations of the existence of apparent conflict.

2. The Enterprise as a Pluralistic System

According to the pluralistic frame of reference, the enterprise consists of numerous groups with separate, but sometimes related, interests. These groups include not only managers and workers but also shareholders, government, customers and often the local community.⁴⁴ Unlike in the unitary ideology, the existence of rival sources of authority and loyalty is recognised.

To say that the enterprise is composed of sectional groups is not to deny mutual dependence. Without both investment and labour per capita income would obviously be lower. To the extent that the groups are mutually dependent, they have a common interest in the survival of the unit of which they are parts. But from this it does not follow that there exists a basic harmony of interests. The common interest in survival is a remote, long-term consideration which enters little into the

42. Hyman, *op.cit.*, p. 57.

43. See, for example, Tony Lane and Kenneth Roberts, *Strike at Pilkingtons* (Fontana, London, 1971) p. 236.

44. For a discussion of the types of economic conflict that can arise between these participants see J. Pen, *op.cit.*

day-to-day conduct of the enterprise.⁴⁵

The pluralistic conception draws attention to the existence of different groups within an enterprise but it does not immediately explain the inherent nature of conflict. We will argue that there are two basic causes which lead to conflict always being present in the enterprise to a greater or lesser extent. These are:

- (a) an economic conflict of interests between management and workers, and
- (b) the subjection of the managed to authority which rests in the hands of managers.

a. The Economic Conflict of Interests

To understand the economic conflict of interests which exists between employers and workers it is necessary to first understand the nature of an economic transaction. A transaction is simply an exchange in which two commodities or services are exchanged between parties at a certain ratio of exchange (assuming two parties). For an exchange to take place both parties must gain by it. If a party to a prospective exchange thinks he will lose by it, he will not enter into it at all. This suggests a community of interest in exchange.⁴⁶ Such community of interest exists in the exchange of labour services for money between workers and employers although a proviso ought to be made in this case. The assertion that people exchange because they want to exchange assumes there is no compulsion or coercion present. The worker who owns no income-earning property, however, is to an extent coerced to sell his labour power to stay alive. While a worker may want

45. See Fox, *Industrial Sociology and Industrial Relations*, p. 4.

46. For a good treatment of the community of interest in exchange and the conflict of interest about the ratio of exchange see Kenneth E. Boulding, *Economic Analysis*, Vol. I, *Microeconomics* (Harper and Row, New York, 4th ed., 1966) Chs. 2 and 3.

to sell his labour, during the time required to earn a subsistence wage he has no choice as to whether he would rather spend his time in any other way.

While there may be a community of interest in the fact of exchange, there is always a conflict of interest about the ratio of exchange or price.⁴⁷ Such conflict is present wherever a scarcity condition exists.⁴⁸ In the case of the labour market transaction, the price of labour (i.e. the wage) is on the one hand viewed as income and on the other as a cost. This dichotomy arises primarily because the purposes of the enterprise are viewed differently by the two parties. From the point of view of labour the enterprise is fundamentally an income-generating mechanism. This being so, and given that most workers have to sell their labour power in order to enjoy even a subsistence standard of living, it is in their interests to strive for the maximum possible price for their labour services. From the point of view of employers and managers, however, the enterprise is a profit-generating (or, in the case of the non-profit making organisation, a revenue-generating) mechanism. Inputs used in the production of output are treated as costs which, in the interests of maximum, or even satisfactory, profit, must be kept to a minimum or at least restrained.⁴⁹

47. See Boulding, *Microeconomics*, p. 33.

48. See Neil W. Chamberlain, "Bargaining Power and the Costs of Disagreeing and Agreeing" in Campbell R. McConnell (ed.), *Perspectives on Wage Determination: A Book of Readings* (McGraw-Hill, New York, 1970) p. 138.

49. It is not proposed here to discuss at length the question of whether or not firms seek to maximise profits. Suffice is to say that most alternative theories to profit maximisation stress the objective of making at least a "satisfactory" level of profits. The very pursuit of a profit objective raises the possibility of an economic conflict of interests. An economic conflict is also present in public corporations and non-profit making enterprises, given that managements seek to live within assigned "budget constraints". Forces similar to those in private enterprise are therefore operative on the wage rate. For a good summary of the debate on the profit maximisation question see Richard M. Cyert and James G. March, *A Behavioural Theory of the Firm* (Prentice-Hall, Englewood Cliffs, N.J., 1963).

The economic conflict of interest then is primarily a conflict over the price of labour services. But there may also be an element of conflict in the fact of exchange, in that the worker may resent having to enter into the transaction at all, i.e. he may resent the compulsion on him to sell his labour services.

The conflict implicit in the labour market transaction may be heightened by the economic inequalities existing between seller and buyer of labour. To the extent that the distribution of wealth is biased in favour of buyers of labour (i.e. employers), sellers (i.e. workers) may feel that the ratio of exchange arrived at, while benefiting both parties, is nonetheless unjust. This may be so because the employer has greater material benefits to start with, and because in the exchange between individual worker and employer, the employer has, through his greater wealth, more bargaining power.⁵⁰

Another feature of a transaction is that one or other of the parties may withdraw from it. In the case of the labour market transaction this withdrawal may be temporary or permanent. If an individual worker is dissatisfied with the price offered for his labour power he can withdraw from the sale completely, i.e. leave. His ability to do so is, of course, limited by the existence of alternative buyers for those services. A worker may also temporarily withdraw, i.e. be absent, either as a protest or in order to find a more satisfactory wage elsewhere. The employer may also withdraw from the transaction if he is dissatisfied with the price of labour, to the extent that he can substitute capital for labour.

The main effect of workers combining to negotiate the price of labour services is that the possibility of temporary withdrawal from the labour market transaction increases. This is one of the main senses in which the nature of conflict changes with the introduction of trade unionism. Such temporary withdrawal may take the form of a strike which is equivalent to workers saying to an employer "we refuse to work at the

50. See Allen, *op.cit.*, p. 22.

price you insist upon and will withdraw from the sale until you recognize this fact".⁵¹ There also exists the possibility that the employer can temporarily withdraw from the transaction by imposing a lockout or other conflict form. The possibility of withdrawal means the labour market transaction and, for that matter, all types of transaction, contains an element of duress.

The fact that conflict is implicit in the labour market transaction has largely been ignored in microeconomic theory. The reasons for this lie in the economic concept of the firm which is centered on the actions of a co-ordinating unit called the entrepreneur. For theoretical purposes the entrepreneur is treated as if he were the firm. The behaviour of the firm, which is synonymous with the behaviour of the entrepreneur, is determined by the drive to maximise profits. It is assumed to behave rationally, in matters involving prices and quantities, in the pursuit of this objective. In adopting a unitary or holistic concept, any behavioural aspects are totally obscured.⁵²

The economic concept of the firm is epitomised in the early development of the marginal productivity theory as found in J.B. Clark's *Distribution of Wealth*.⁵³ Clark's theory rested on three basic assumptions:

- (1) Rational employers, in an attempt to maximise profits, will be guided by the marginal productivity of a factor in determining the relationship between

51. *Ibid.*, p. 23.

52. Hahn argues that "social class is not an explanatory variable of neo-classical theory. The latter is not formulated in terms of workers and capitalists but in terms of inputs and outputs. This lack of contact between the economic theory and sociological reality may well be the most damaging criticism of the neo-classical construction. The underlying assumption of very many agents means that problems of economic power can be ignored and the relation of economic to sociological phenomena is also untreated." (F.H. Hahn, *The Share of Wages in National Income: An Enquiry into the Theory of Distribution* (London School of Economics and Political Science, 1972) p. 2.)

53. J.B. Clark, *Distribution of Wealth* (Macmillan, London, 1899).

a factor's return and utilisation.

- (2) Perfect competition exists, so that market forces tend to equalise rates of return for all factors over time.
- (3) All markets are in long-run equilibrium and technological progress and changes in demand and supply are absent.

Under these restrictive conditions the aggregate supply of labour is fixed and, assuming an homogeneous class of labour, it follows that the general level of wages will be determined by labour's marginal product. In this sense Clark felt he had developed a theory of wages. The logical implication of this theory is that conflict is self defeating. Workers are presented with a *fait accompli*, having the options of accepting the given wage or of remaining outside the labour market (which is hardly an option at all). In Pen's words, the classical theory entails "that....purely technical data determine the share of labour in national income".⁵⁴ In this theory, which is an equilibrium one, there is no scope for conflict.

If, for some reason, the wage of labour should exceed its marginal product the number of workers employed must fall because labour will be replaced by capital, i.e. the employer will respond to a wage increase in such a way as to increase the marginal product of labour. Classical economics also often supposes that there are only two factor inputs and no profits. In this case labour's share and capital's share must add up to the value of output, i.e. production is exactly exhausted. Again, labour's share of output is technically determined.

The neo-classical approach of Marshall⁵⁵ and Hicks⁵⁶ attacked the second and third of Clark's assumptions. Marshall

54. Pen, *op.cit.*, p. 21.

55. Alfred Marshall, *Principles of Economics* (Macmillan, London, 8th ed., 1920).

56. Hicks, *op.cit.*

showed that Clark's theory is not one of wages but of the demand for labour. Supply must also be taken into account as it is the interaction of supply and demand which determines the wage. Both the classical and neo-classical approaches, however, posit similar behaviour on the part of the individual employer. Thus much of what we have said above applies to both. The rational entrepreneur's demand for labour must be governed by its marginal product. Labour, in consequence, is viewed in the same way as capital and raw materials. They all represent costs of production which must be minimised.

It is only in the more recent bargaining theory of wages that the existence of conflict in the labour market transaction has been recognised.⁵⁷ In this theory employers are conceived as having upper limits above which they will not go in making a wage bargain. The productivity of labour is only one consideration in the setting of these limits. The lower limit is set by minimum wage rates established by government, the possibility of labour moving elsewhere and so on. The actual wage rate is indeterminate, being established by bargaining between the parties.

With the flowering of macroeconomics came the realisation that, at least in theory, conflict can be "aggregated" out of existence.⁵⁸ This realisation had its source in the Keynesian proposition that national income is explained by total expenditure. At the national level, wage increases can be passed on in prices to such an extent that there is no drop in profits. This is so because wages influence not only costs but also the creation of money incomes. This parallel movement of wages and profits points to the existence of a "Great Harmony" in that: "Unions and employers, measured against macro-economic reality, do not seem to be conflicting groups; what is good for one is good for the other".⁵⁹

This "Great Harmony", being purely macroeconomic in

57. See Maurice Dobb, *Wages* (Nesbet, London, 1933).

58. See Pen, *op.cit.*, pp. 64-5.

59. *Ibid.*, p. 65.

character, does not apply to all workers and employers in that some firms will fail to keep up with the rising total incomes. It is also extremely precarious, being accompanied by price increases which shift the conflict to others. It is here that the "macroeconomic reality" Pen speaks of begins to assume a Utopian flavour. The "Great Harmony" is only sustained at the expense of outsiders who are mainly affected by the price increases. The weak groups of society suffer. It is precisely because governments have seen fit to protect these weak groups and to safeguard producers for export such as farmers that Pen's "Great Harmony" has never been achieved. Prices and wages have not been allowed to march forward together in unchecked fashion so that for all practical purposes conflict cannot be "aggregated" out of existence.

b. The Subjection of the Managed to Authority Vested in Managers

The second basic source of industrial conflict derives from a unique feature of labour as a factor of production. As opposed to raw materials and capital, labour services cannot be hired without the presence of the owner. Labour power and the labourer are inseparable.⁶⁰ Thus in hiring labour services, employers are in fact hiring people, the activities of whom must be co-ordinated and controlled in order for organisation to exist. This feature is common to all enterprises.

A prerequisite of co-ordination is a structure of authority relations. In other words, the enterprise is a system which establishes authority relations between the various positions. By the nature of authority: "The incumbents of certain positions are endowed with the right to make decisions as to who does what, when, and how; the incumbents of other positions have

60. This feature distinguishes the labour market transaction from other types of transactions. In the usual transaction the seller parts with his commodity at the point of sale. In the labour market exchange, however, the seller must always be with his service if the transaction is to take place at all.

to submit to these decisions".⁶¹ Thus for the worker, the labour market transaction involves not only a contract to sell labour services but also an obligation to comply with the commands of given persons.

It is from this differentiation of dominating and subject-ed groups that conflict arises. Wherever one group exercises authority over another, or one individual exercises authority over another, the possibility of conflict is present. In the work situation workers necessarily sacrifice certain areas of freedom in the selling of their labour. During the hours of work, they have very restricted control over their lives. Given that workers have a yen for freedom and a desire to control their own destinies, it is in their interests to submit themselves to authority as little as possible and even to attempt to usurp it. * From the point of view of management, however, authority is necessary for the effective control of the organisation and any restraint on its use must be resisted. As authority relations are inherent in the enterprise it follows that a basic conflict of interests from this source is always present.

It is the differential distribution of authority that is the basic source of conflict and not so much how authority is exercised. The way in which it is exercised can contribute to conflict situations but cannot explain why conflict is inherent in the enterprise. Thus, even the most benevolent exercise of authority will not eliminate conflict.

The fact that authority relations are the crucial factor means that industrial conflict will be present wherever there are organisations employing labour, irrespective of the form of society. The differential distribution of authority is implicit in the nature of the organisation and not in a form of property ownership.⁶² Thus Dahrendorf argues that: "If a

61. Ralf Dahrendorf, *Class and Class Conflict in Industrial Society* (Routledge and Kegan Paul, London, 1959) p. 249.

62. Friedrich Engels seemed to support this view in stating that, "on the one hand, a certain authority, no matter how delegated, and, on the other hand, a certain subordination are things which, independent of all social

(Footnote 62 is continued on the next page.)

person occupies a position of domination in an enterprise, it is irrelevant in principle whether his authority is based on property, election by a board of directors, or appointment by a government agency".⁶³ This is because: "In capitalist as in post-capitalist society, in the Soviet Union as in the United States, the industrial enterprise is an imperatively co-ordinated association. Everywhere it displays those conditions of social structure which give rise to social conflict."⁶⁴ A proviso ought to be made, however, to Dahrendorf's argument. While the fact of domination is the basic cause of conflict, that on which the domination is based can also lead to conflict. The underlying conflict arising from the differential distribution of authority may be heightened if the basis of that distribution is also questioned.

As already mentioned, the economic concept of the firm totally obscures any behavioural aspects. For theoretical purposes labour is treated as a factor of production and all factors are treated on the same inanimate level. That the input labour has human characteristics is ignored. As a consequence such concepts as co-ordination (of human activities), and authority are foreign to traditional microeconomic theory. It is not surprising, therefore, that it ignores the possibility that conflict can arise in the enterprise because of the nature of authority relations.

III. CONCLUSION

The two basic sources of conflict are interrelated in that they are both implicit in the labour market transaction and in the running of the enterprise. On the one hand, the worker undertakes to sell his labour services at a certain price and also to submit to authority exercised by persons

(Footnote 62 continued):

organization, are imposed upon us". (Friedrich Engels, "On Authority" in Lewis S. Feuer (ed.), *Karl Marx and Friedrich Engels, Basic Writings on Politics and Philosophy* (Doubleday, New York, 1959) p. 484 - our emphasis.)

63. Dahrendorf, *op.cit.*, p. 254 (our emphasis).

64. *Ibid.*, pp. 248-249.

other than himself. The employer, on the other hand, undertakes to purchase labour services at that price given that he will be in a dominant position of authority.

The price of labour has opposing forces operating on it, the two parties seeking to push it in opposite directions. Also, from management's viewpoint, the unequal distribution of authority is necessary to achieve the purposes of the enterprise as they see them, but from the workers' viewpoint it is seen as a device whereby labour is dominated and subjugated.

These basic sources of conflict are inherent in all enterprises, irrespective of the type of society. The labour market contract is fundamental to all forms of employment and the differential distribution of authority to imperatively coordinated enterprises. The nature of a particular society can be an important factor in generating industrial conflict and in exacerbating conflict from these two basic causes, but these causes transcend societies.

In arguing that conflict is inherent in the enterprise, we have concentrated on its basic causes which are always present to some extent. This is not to say that in particular situations there are not many other causes of conflict but that these other causes are not general enough to support the contention that conflict is inherent in the enterprise.

Our discussion of the last section, during which our conceptualization of industrial conflict was outlined, started with a pluralistic view of the enterprise. In recent times the application of the pluralistic ideology to industrial relations has been criticised.⁶⁵ This criticism has been directed at the assumptions of the underlying political theory of democratic pluralism which include the notions that power is not so unevenly distributed among parties as to enable any one to

65. See, for example, Hyman, *op.cit.*, pp. 156-160; J.E.T. Eldridge, "Industrial Conflict: Some Problems of Theory and Method", in John Child (ed.), *Man and Organization*, *op.cit.*, pp. 158-184; and Fox, "Industrial Relations", *op.cit.*

coerce another;⁶⁶ that the parties acknowledge the right of others to exist;⁶⁷ and that values are not so divergent that workable compromises cannot be achieved.⁶⁸ These assumptions appear more applicable to New Zealand than they do to Great Britain from where most of this critical literature has emerged. In any event, our conceptualization of industrial conflict is based on the existence of divergent groups in the enterprise and of the inherent nature of conflict and is not dependent on a pluralistic view of politics and society in general.

66. See Ralph Miliband, *The State in Capitalist Society* (Weidenfeld and Nicolson, London, 1969) p. 146; and Fox, "Industrial Relations", p. 197.

67. See Robert Paul Wolff, "Beyond Tolerance", in Robert Paul Wolff, Barrington Moore Jnr. and Herbert Marcuse, *A Critique of Pure Tolerance* (Jonathan Cape, London, 1969) p. 29.

68. See Fox, "Industrial Relations", p. 197.

Chapter II

THE FORMS OF INDUSTRIAL CONFLICT

We stated earlier that conflict exists when potential positions of parties are incompatible and that industrial conflict is conflict arising out of the employment relationship. Industrial conflict so defined can involve many causes, settings and parties and, consequently, can find expression in a variety of forms. We shall divide those forms initiated by workers into two broad categories: collective and individual. Collective forms are those initiated by a group, i.e. by a party consisting of two or more workers. Individual forms are initiated by one person. Whether a worker-initiated manifestation of industrial conflict is classified as collective or individual depends only on the nature of the initiating party and is not influenced by the nature of other involved parties. We prefer the collective/individual distinction to the widely used organised/unorganised classification as it avoids any connotations about degrees of rationality.¹ No such distinction will be made in the case of employer-initiated forms of conflict because of the difficulty in ascertaining whether the initiating party is the employer group or an individual.

For many people, industrial conflict is the strike, just as international conflict is warfare. According to this view only overt expressions of incompatibility or opposition indicate conflict. Other, less obvious, expressions indicate "discontent" or "dissatisfaction" but not conflict. The essence of conflict, however, is not overtness but incompatibility. There is no limit, at least conceptually, to the number of forms industrial conflict can take. Those discussed in this

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1. Cf., for example, Richard Hyman, *Strikes* (Fontana, London, 1972) p. 53; A.E.C. Hare, *Report on Industrial Relations in New Zealand* (Whitcombe and Tombs, Wellington, 1946) p. 44; W.H. Scott, Enid Mumford, I.C. McGivering and J.M. Kirkby, *Coal and Conflict: A Study of Industrial Relations at Collieries* (Liverpool University Press, 1963) pp. 43-51; and Arthur Kornhauser, Robert Dubin and Arthur M. Ross (eds.), *Industrial Conflict* (McGraw-Hill, New York, 1954) p. 14.

chapter are the ones recognised in the literature.

I. WORKER-INITIATED FORMS OF INDUSTRIAL CONFLICT

1. Collective Forms

The Strike

A strike may be defined as a stoppage of work by a group of workers in order to express a conflict. It is a stoppage of work and so is conceptually, although not always practically, distinct from actions which only restrict the production process, e.g. overtime bans and go slows. The stoppage is usually temporary, in that the strikers intend to return to work for the same employer, although it is not necessarily so.² There have been occasions when workers have used the strike in an endeavour to force particular employers out of business. On other occasions, employers have reacted to intended temporary stoppages by closing down. The strike is always a collective action involving a group. The group, furthermore, consists of workers and this feature distinguishes the strike from other phenomena popularly labelled "strikes", e.g. rent "strikes", rate "strikes" etc. The nature of the conflict being expressed is a complex question. Usually the other party is an employer to whom a grievance or demand is being expressed in an effort to gain a concession. The other party or parties, however, may be a worker, a group of workers, a trade union and so on. A demarcation strike, for example, has all the features of a strike yet is usually an inter-union conflict. While the strike is usually an expression of industrial conflict, it need not necessarily be so. It can be a manifestation of other types of conflict. Industrial conflict arises out of the employment relationship and so involves those who are directly or indirectly parties to that relationship. On this basis it is conceivable that industrial conflict may at times involve the government or other parties not generally associated with industry. In practice it is often difficult to distinguish

2. Cf. Hyman, *op.cit.*, p. 17 which states that a strike is a temporary stoppage.

between strikes expressing industrial conflict and those expressing other types of conflict.³ In some cases, however, our definition is easily applied. The recent strikes over the French nuclear bomb tests, for example, were clearly non-industrial as the employment relationship was not involved, one of the parties (i.e. the French government) being in no way connected with it.

Strikes are popularly classified into several types. The general strike is a strike by all organised workers in a community or nation. The official strike is supported and/or sanctioned by the union while the unofficial strike is not (this distinction is not very important in New Zealand where most strikes are official). The sympathy strike is a strike by workers to show support for other workers involved in a conflict and to bring pressure on the employer concerned. The demarcation strike involves a dispute between unions over the coverage of workers in an industry or occupation and is usually designed to bring pressure to bear not only on rival unions but also on particular employers.

A distinction is often made in the literature between so-called "major" and "minor" strikes.⁴ The distinguishing characteristic is usually duration, although worker involvement is also sometimes used. "Major" strikes last a considerable period and may involve a large number of workers. While acknowledging that the strike is not an homogeneous phenomenon, we shall not use this distinction because of its sensitivity to the arbitrarily chosen distinguishing characteristics. A "major" strike in terms of duration may be "minor" in terms of involvement or of man-days lost. Similarly, a "minor" strike in terms of particular criteria may be major in its effects, and vice versa.

The strike is often accompanied by other expressions of

3. See Don J. Turkington, "The Trend of Strikes in New Zealand 1946-70: Part I", *Journal of Industrial Relations*, Vol. 15, March 1973, pp. 44-5.

4. See, for example, Hare, *op.cit.*, p. 47 and Hyman, *op.cit.*, p. 19.

industrial conflict. For example, strikers may seek to institute a boycott by exhorting customers not to buy the goods or services of an employer directly involved in a dispute. Also, strikers may picket the establishment where the conflict is taking place in an effort to persuade workers to join a strike or to discourage non-strikers from working, to discourage customers from patronizing the concern or to gain publicity. Both the boycott and the picket are uncommon forms of conflict in New Zealand. More common is the use of the media to publicize a particular viewpoint. Parties to disputes regularly release statements to the media and on occasions purchase advertising space or time in an effort to win public support for their positions. Strikes, along with some other forms of industrial conflict, are also often accompanied by lobbying of politicians by the parties. Expressions of industrial conflict are not confined to the work situation.

The strike is also often preceded by other forms of conflict, not the least of which is the threat to take certain actions. Workers may threaten to strike or to impose a go slow and so on. (A threat may equally come from the employer's side.) The threat plays an important part in conflict situations. An action need not be overt in order to be an expression of industrial conflict.

Mass Resignation

A mass resignation involves the resignation of employment by a group of workers in order to express a conflict. It differs from a strike in involving a termination of employment, although in both cases workers normally intend to return to work for the same employer. In New Zealand the mass resignation has at times been used instead of the strike in a misguided effort to avoid legal sanctions against strikes. The legislation, however, makes no distinction between the strike and mass resignation, the emphasis being on the collective action of workers in discontinuing employment.

The Work to Rule

A work to rule involves a group of workers adhering strictly to the letter of awards, agreements, regulations and other instruments relating to their employment in order to express a conflict. All occupations are subject to a labyrinth of rules and regulations which, if rigidly adhered to, can reduce output substantially below customary levels. Modern industry operates only because many rules and regulations are not normally rigidly followed. The work to rule differs from the strike in being a regulation or restriction on output rather than a stoppage of work.

The work to rule does not generally involve equal emphasis on all relevant rules and regulations. Those with the greatest potential effect on the opposing party are the most rigidly adhered to. Some workers prefer the work to rule to other conflict forms because it can be more easily "justified" to those not directly involved. It puts pressure on the opponent but unlike the strike, for example, involves no breach of contract. On the contrary, it entails strict adherence to at least some of the terms of the employment contract. More euphemistic names for the work to rule include the "withdrawal of good-will" and the "withdrawal of co-operation".

The Go Slow

A go slow is a deliberate reduction of output by a group of workers in order to express a conflict. According to this definition the work to rule is a special case of the go slow but we shall treat them as separate. In a go slow workers put pressure on the opposing party by producing less than is customary. Those on hourly rates need not, in the absence of retaliation, necessarily suffer a drop in earnings. The same applies in the case of the work to rule. Such actions are, therefore, generally less costly to workers involved than is the strike. The employer, on the other hand, often finds them more costly than the strike as he is forced to meet most variable costs while enjoying a significantly reduced output.

Some employers, in addition, find restrictions on output more difficult to combat. Others, however, react by forcing a stoppage of work. In the freezing industry, for example, employers often react by withholding stock for slaughter and so force an eventual shutdown of all departments.

The Stop Work Meeting

A stop work meeting is a stoppage of work by a group of workers in order to discuss a matter of interest. It may be sanctioned by the employer ("authorised") or not sanctioned ("unauthorised"). The unauthorised stop work meeting is usually an expression of industrial conflict. Such meetings are often held to discuss a particular conflict and to formulate strategy. It is not uncommon, therefore, for unauthorised stop work meetings to precede other forms of industrial conflict such as the strike. The stop work meeting, however, is often itself used as a tactic to bring pressure to bear on the opponent.

Not all stop work meetings concern matters relating to the employment relationship and so, at times, can be manifestations of other types of conflict. The same applies, of course, to most, if not all, the actions listed in this chapter.

The Ban

A ban is a refusal by a group of workers to undertake certain work in order to express a conflict. Workers perform all usual functions except those the subject of the ban. The effect is to restrict output rather than stop work altogether. Bans take many different forms. Types commonly experienced in New Zealand include the overtime ban where workers collectively refuse to work overtime and the load-out ban where workers refuse to dispatch a certain commodity or class of commodities (a variant of which is the export load-out ban). The "black" ban involves the "blacking" of an item, the result of which is normally a refusal by all organised workers, whether directly

involved or not, to handle it. Other bans include those on wet weather work, on using particular pieces of equipment, on processing certain raw materials and so on. A ban can be very specific. In the transportation sector, for example, it is not uncommon to place a ban on the handling of a single item of cargo. The ban shares certain features with the go slow. It can, for example, bring substantial pressure to bear on the opposing party while not necessarily involving a drop in the earnings of workers involved.

Other Worker-Initiated Collective Forms of Industrial Conflict

Less usual manifestations include the occupation by workers of business premises. This may take the form of a "sit-in" (work stoppage within the plant), a lockout of management personnel or even a "work-in" (worker organised production, often to prevent the close down of a plant). These actions, along with most other collective forms of conflict, can occasionally be accompanied by violence. Violence, especially in the form of a riot, can itself be an expression of industrial conflict.

Conflict can also take the form of sabotage where groups of workers deliberately damage or destroy plant, equipment, products etc.⁵ Such action can take many forms ranging from, for example, the destruction of a whole plant through to the production of deliberately faulty goods. Collective action can influence not only the level but also the quality of output.

The use of instruments of conflict regulation such as conciliation councils and bargaining committees does not in itself necessarily indicate conflict. In the course of conciliation or bargaining, however, an incompatibility may be discovered and so conflict arises. Furthermore, the way in which these instruments are used can be an expression of

5. See Laurie Taylor and Paul Walton, "Industrial Sabotage: Motives and Meanings", in Stanley Cohen (ed.), *Images of Deviance* (Penguin, Harmondsworth, Eng., 1971) p. 219.

conflict. Workers, or for that matter employers, may, for example, clog a particular procedure specifically to put pressure on the opposing party.

In conflict situations, groups of workers may unilaterally adopt rules (some of which may break managerial rules) in order to increase their control over the work situation. Such practices are generally labelled by employers as "feather-bedding" or "restrictive practices". At a more general level, workers can refuse to co-operate in the administration of the award or agreement.

2. Individual Forms

Labour Turnover

We shall define labour turnover as the number of terminations of employment during a given period expressed as a percentage of average labour force for that period. Terminations can be divided into three broad categories: worker-initiated, employer-initiated and miscellaneous. Those due to death, permanent disability, reaching retirement age, drafting into the armed services etc., may be classed as miscellaneous. Such terminations are not usually expressions of conflict, although some may be indirect results of it (e.g. conflict induced tension resulting in a disabling or fatal accident). It would be desirable to exclude miscellaneous terminations in using labour turnover as a measure of industrial conflict.

Not all worker-initiated terminations are necessarily expressions of conflict. For example, the decision to marry or become pregnant, and so to leave work, may result from industrial conflict but more likely from other considerations. A difficult situation to classify is that where a worker leaves a job he regards as "satisfactory" for one he expects to be even more attractive. A strict application of our definition of industrial conflict may result in such terminations being classified as expressions of conflict, but we should treat them differently if they could be statistically identified.

Worker-initiated terminations may, however, be the result of industrial conflict. A worker in a conflict situation may react by withdrawing from it altogether, i.e. by leaving his employment. This is especially likely if he is unable to solve the conflict in some other way or is unwilling to attempt to live with it. A worker will leave if he has both the desire and the ability to do so.⁶ Conflict is not only a determinant of the desirability of movement but is also the cue for search behaviour, through which the perceived ease of movement (i.e. ability) is established. The more intense the conflict, the more intense will be the search for alternatives and, probably, the wider the range of alternatives the worker is willing to accept.

Some terminations are employer-initiated expressions of conflict. If the potential positions of an employer and a worker are mutually incompatible, the employer may dismiss the worker. Even some worker-initiated terminations may be the deliberate result of employer action. Rather than dismiss a worker, an employer may make his life so "miserable" that the worker will leave apparently of his own free will.

There is voluminous empirical evidence in the literature attesting to the importance of industrial conflict as a determinant of labour turnover. The relationship has in practice usually been tested by determining if measures of turnover are associated with measures of job satisfaction.⁷ Of the seven studies reviewed by Vroom, all indicated the expected negative relationship between satisfaction and turnover. Furthermore, Lefkowitz notes that "the observed consistency of the job dissatisfaction-turnover relationship is remarkable", although "studies differ with respect to the specific sources of dissatisfaction held responsible".⁸

6. For a formalised treatment see James G. March and Herbert A. Simon, *Organizations* (Wiley, New York, 1958) Ch. 4.

7. For reviews of the literature, see, for example, Victor H. Vroom, *Work and Motivation* (Wiley, New York, 1964) pp. 175-178; and Joel Lefkowitz, "Personnel Turnover", in Lawrence Edwin Abt and Bernard F. Riess (eds.), *Clinical Psychology in Industrial Organization* (Grune and Stratton, New York, 1971) pp. 69-90.

8. Lefkowitz, *op.cit.*, p. 76.

In using labour turnover as a measure of industrial conflict one would ideally like to separate out those types of turnover not usually resulting from conflict. This, however, is generally not a practical proposition as labour turnover statistics are not compiled with this distinction in mind.

Absence

We shall take absence to mean the failure of workers to attend work when they are scheduled to do so. A worker is "scheduled to work" on any working day other than authorised holidays. Our definition thus includes time away from work due to illness, injury or any other cause including, for example, a day at the races. Not all absences need be of a day or more, but may take the form of lateness and spells away from work during the working day. It is customary, however, to exclude time lost due to collective forms of conflict such as the strike etc. Also we shall consider injuries separately under the heading of industrial accidents.

A worker in a conflict situation may withdraw temporarily from it by being absent from the job. Conflict is particularly likely to take this form if the worker is unable or unwilling to leave and is unable to express his conflict in a collective way. Industrial conflict can also indirectly lead to absence in that the associated tensions and worry can cause illness.⁹

Illness absence is often not regarded as an expression of industrial conflict. But this view is not completely valid. Sickness often provides an avenue whereby a worker can withdraw from the work situation while continuing to be paid and gaining the sympathy of the employer.¹⁰ Also, as argued, conflict can

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9. See T.T. Paterson, *Glasgow Limited: A Case-Study in Industrial War and Peace* (Cambridge University Press, London, 1960) p. 101; and Arthur Kornhauser, *Mental Health of the Industrial Worker: A Detroit Study* (Wiley, New York, 1965).
 10. See David Mechanic, "Response Factors in Illness: The Study of Illness Behaviour", in Frank Baker, Peter J.M. McEwan and Alan Sheldon (eds.), *Industrial Organizations and Health, Volume I: Selected Readings* (Tavistock, London, 1969) p. 206. Baker et al., Section B, contains other relevant studies on illness and other forms of absence.

cause psychosomatic illness.

There are many empirical studies of the relationship between industrial conflict and absence.¹¹ Most of these involve tests of the relationship between measures of absence and of job satisfaction. Vroom found 10 studies on this question. Of these, six indicated the expected negative relationship between job satisfaction and absence, while a further three noted a negative relationship in some situations but not in others.

In similar fashion to labour turnover, we would like to separate out those types of absence not usually resulting from conflict. This is rarely practicable.

Industrial Accidents

Industrial accidents normally involve both injury and absence from work, and are clearly not invariably expressions of industrial conflict. But there are at least two reasons for thinking that accidents can be a form of industrial conflict. First, accidents may be caused by the worker's conscious or unconscious motivation to withdraw from the work situation in a way acceptable to himself and to his employer (the "work withdrawal hypothesis"). Second, a worker in a conflict situation may become incautious or lackadaisical, making himself more accident prone than a worker not in such a situation.

Looking at the first of these reasons, the worker suffering an accident normally continues to receive an income and is the subject of considerable sympathy. Also, the accident is the most legitimated or sanctioned form of absence in that the worker is absent with the employer's blessing. The work

11. For reviews of the literature see, for example, Vroom, *op. cit.*, pp. 178-180; and Arthur H. Brayfield and Walter H. Crockett, "Employee Attitudes and Employee Performance", in L.L. Cummings and W.E. Scott Jnr. (eds.), *Readings in Organizational Behaviour and Human Performance* (Irwin, Homewood, Ill., 1969) pp. 276-277.

withdrawal hypothesis was first put forward by Hill and Trist who provided two tests of it.¹² First, accidents might be expected to be positively associated with other forms of absence, (i.e. withdrawal). This positive relationship was found to exist. Second, accidents might be expected to be most closely related to other forms of absence where the worker does not accept responsibility for his behaviour toward the employer. This was also found to be the case.¹³ The work of two medical practitioners, Hirschfeld and Behan, adds considerable support to the theories of Hill and Trist.¹⁴ On the basis of personal experience of approximately 300 cases of industrial accidents, they argue that many injury patients attempt to preserve their symptoms by staying clear of doctors who they fear will fail to preserve their incapacity.

In relation to the second of the above reasons, Hirschfeld and Behan note that generally before an accident occurs there is a state of conflict or anxiety within the worker, as a result of which he acts in a way endangering his safety.

It is, of course, absurd to suggest that all industrial accidents are the result of industrial conflict. In particular, a worker is unlikely deliberately to have an accident which causes him great suffering and pain. It is noteworthy, however, that the bulk of accidents occurring at the firm studied by Hill and Trist were of a type consistent with the work withdrawal hypothesis. The prevailing accident pattern was summed up "as consisting of common mishaps causing superficial injuries leading to relatively short absences".¹⁵ This was

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12. J.M.M. Hill and E.L. Trist, "A Consideration of Industrial Accidents as a Means of Withdrawal from the Work Situation: A Study of their Relation to Other Absences in an Iron and Steel Works", *Human Relations*, Vol. VI, Nov. 1953, pp. 357-380.
 13. For a subsequent study supporting the first of these results but not the second, see Peter F.C. Castle, "Accidents, Absence, and Withdrawal from the Work Situation", *Human Relations*, Vol. IX, May 1956, pp. 223-233.
 14. Alexander H. Hirschfeld and Robert C. Behan, "The Accident Process: Etiological Considerations of Industrial Injuries", in Baker et al., *op.cit.*, pp. 265-279.
 15. Hill and Trist, *op.cit.*, p. 368.

despite the presence of heavy vehicles and machinery, and hot molten metal.

The few studies on the industrial accident-job satisfaction relationship have generally found the expected negative relationship to hold.¹⁶ As with turnover and absence, we would like to be able to separate out those accidents not resulting from industrial conflict, but again this is generally not a practical proposition.

Other Worker-Initiated Individual Forms of Industrial Conflict

Not all individual forms of industrial conflict involve withdrawal from the work-place. Conflict can, for example, be manifest as individual acts of sabotage where a worker deliberately damages or destroys plant, equipment, products, etc. Individual acts of sabotage can assume a similar variety of forms to collective acts. Sabotage can be particularly "effective", in terms of damage suffered by the employer. It is, however, difficult for employers to prove the existence of sabotage let alone do anything about it.

Industrial conflict can also take the form of pilfering. By stealing goods and other items from his employer a worker may feel he is "getting my own back on management" and simply taking "what is rightfully, but not legally, mine". Not all pilfering results from industrial conflict. In some cases, pilfering is felt to be at least implicitly condoned by the employer and to be a traditional and legitimate "perk". In others, workers steal from their employers for similar reasons as they might steal from anyone else. Pilfering, by its nature, is difficult for the employer to identify and therefore do much about.

A worker may express a conflict by reducing his level of job performance. He may, for example, institute his own "go

16. See Vroom, *op.cit.*, p. 180; and T.T. Paterson, *op.cit.*, Part III.

slow" or simply be less attentive to his work. Such a manifestation is particularly likely if the intensity of the conflict is not high or if alternative collective or individual forms are not available to the worker. In a more general sense, conflict may be expressed by the breaking of managerial rules. A worker may refuse to co-operate with management to the extent that he can while avoiding dismissal.

3. Conclusion

It is clear that industrial conflict can be expressed by workers in many ways. The situation influences the strategy adopted and so the form conflict takes. In one situation it may, for example, be manifested as a strike, while in another as a go slow or work to rule or even as absence or turnover. Furthermore, a group of workers may adopt several actions at once, e.g. a strike, a boycott and picketing, or may vary its tactics over the course of a conflict, e.g. a ban, replaced by a go slow, which is in turn replaced by a strike. Similarly, an individual worker may, for example, simultaneously lower his performance and break managerial rules, or change his tactics from, say, pilfering to sabotage. Moreover, individual forms may be replaced by collective forms and vice versa. Considerations influencing the form conflict will take include the intensity of the conflict, the ability of a party to adopt a particular tactic, the expected effectiveness of available tactics and the actions of the opposing party.

A conflict considered of little importance is unlikely to be expressed in a way that is potentially costly to the initiating party. Moreover, a conflict considered of little importance to the group of workers is more likely to take an individual rather than collective form. Even if a conflict is considered of general importance, it may not find expression in a collective form if the workers lack the ability to engage in collective action. That depends on their degree of cohesion and quality of organisation. Even if a party is able to adopt a tactic, it may not do so if it is expected to be ineffective. Expected benefits and costs have to be evaluated,

at least implicitly. A worker in a conflict situation may not, for example, withdraw by leaving if he expects that the action's costs will exceed its benefits, especially if there exist alternative expressions which he expects will yield a net benefit. Similarly, a group of workers may be unlikely to choose, say, a go slow, if they expect to suffer more from it than does the employer, given the existence of alternative tactics. The expected effectiveness of a tactic is greatly influenced by such factors as the structure of the product market, the profitability of the enterprise, the nature of the production process, the nature of the product or service and so on. Tactical considerations are also influenced by the opponent's reactions. Workers may, for example, cease to consider a go slow an appropriate action after some of those involved have been dismissed by the employer. Go slows may thus be countered by dismissals which in turn are countered by strikes and so on.

II. EMPLOYER-INITIATED FORMS OF INDUSTRIAL CONFLICT

The Lockout

A lockout is a stoppage of work initiated by the employer in order to express a conflict and is thus the antithesis of a strike. It usually takes the form of the literal locking out of workers from their place of employment. Other forms include the withholding of raw materials in order to force an eventual shutdown. The lockout, as with the strike, is normally intended to be temporary. In general, the same workers are employed as previously, although lockouts are at times used to get rid of workers considered by the employer to be "undesirable". Conflict can occasionally take the form of a close down where an employer permanently shuts down an operation as a result of opposition with another party.

There is considerable debate over whether lockouts generally precede or follow worker-initiated conflict actions. Such matters, however, are tactical considerations and will vary from one situation to another. For our purposes it is

not important which party first takes action. But a party to a conflict often seeks to establish that the opponent "fired the first shot" in an effort to convince the public of the justness of its own cause.

The Mass Notice of Dismissal

A mass notice of dismissal involves an employer informing a group of workers of his intention to dismiss them on the expiration of a period of notice in order to express a conflict. The workers' employment is terminated if the dismissal is carried out. The mass notice is essentially a formalised threat of lockout, and is normally made on the understanding that it will be withdrawn if the opposing party makes certain concessions.

Priority Designated Work

In a conflict situation employers may designate an activity as "priority work". Groups of workers are assigned the priority work before any other and, should they refuse it, are suspended or dismissed. This process can continue until either a concession is gained or all workers are laid off.

Other Employer-Initiated Forms of Industrial Conflict

At times employers may unilaterally change conditions of work as an expression of conflict. For example, the chain speed may be increased in assembly line operations, certain rules and regulations may be enforced in an unusually strict way (the antithesis of the work to rule), new rules may be created and so on. Many people fail to recognise such actions as expressions of conflict, regarding them simply as normal aspects of the managerial process. In adopting these tactics the employer therefore often avoids being seen as the aggressor in conflict situations. An employer, furthermore, can discriminate among workers in respect of job positions, job assignments and so on.

Often he can discriminate with considerable freedom and still remain within the letter of the award or agreement and of other rules and regulations. It is often difficult to prove discrimination, let alone do anything about it.

Employers may also attempt to get rid of the opposing party. We have already mentioned the mass notice of dismissal. Other tactics in this area include individual dismissals, "forced" resignations, suspensions and transfers. Such actions may be reinforced by the use of the "blacklist", i.e. a list containing the names of workers considered "troublesome". Workers whose names are listed may not be hired in new jobs or may be fired from their present jobs.

In these actions the initiating party may be the employer group or simply a member of that group acting independently.

Conclusion

Employer-initiated forms of industrial conflict are numerous and diverse. Many of them can involve the use of so-called "managerial prerogatives" and are consequently difficult to recognise as expressions of conflict. As is the case with other parties, the situation influences the strategy adopted. Several tactics may be used at once and tactics may be varied over the course of a conflict. Furthermore, the forms of conflict available to the foreman may be somewhat limited compared with those available to the general manager. Thus the form conflict takes in a particular situation depends significantly on the nature of the employer party involved.

All parties to industrial conflict have, at least potentially, a range of tactics at their disposal. A state of conflict is, by its nature, a state of interdependence. The tactics adopted by one party depend greatly on the expected effect on and reaction of the opponent. This also implies that conflict situations are dynamic. In fact, positions must change if the conflict is to end.

III. THE ASSOCIATION OF THE FORMS OF INDUSTRIAL CONFLICT

Studies of the statistical association of the forms of industrial conflict have been confined to worker-initiated forms. Scott, Mumford, McGivering and Kirkby, among others, have argued that insofar as labour turnover, absence, industrial accidents etc. are expressions of the same thing, it might be expected that these individual forms of conflict will be positively associated.¹⁷ But this does not necessarily follow. For example, workers may express conflict in a situation where alternative employment opportunities are scarce or diminishing through absence or accidents rather than through turnover. It is quite conceivable that, say, absence and turnover are both expressions of conflict yet are inversely related statistically. Despite this, most empirical studies have revealed a positive relationship between turnover and absence, although cases of a negative relationship or no relationship have been revealed.¹⁸ A further study noted a positive relationship between accident rates and turnover, between accident rates and rates of product spoilage, and between the incidence of ill-health and turnover.¹⁹

For similar reasons to those given in respect of individual forms, we have no *à priori* expectations about the relationship which might exist between collective and individual forms of conflict.²⁰ In situations where collective forms are not readily available to workers, conflict tends to assume individual forms, the result being an inverse statistical relationship.

17. Scott *et.al.*, *op.cit.*, pp. 55-59. See also Hill and Trist, *op.cit.*, pp. 360 and 369; Paterson, *op.cit.*, p. 100; and John Crowther, "Absence and Turnover in the Divisions of One Company, 1950-1955", *Occupational Psychology*, Vol. 31, Oct. 1957, pp. 256-258.

18. For reviews of empirical studies of this relationship see Lefkowitz, *op.cit.*, p. 73; or Thomas F. Lyons, "Turnover and Absenteeism: A Review of Relationships and Shared Correlates", *Personnel Psychology*, Vol. 25, 1972, pp. 271-281.

19. Paterson, *op.cit.*, pp. 88-108.

20. Neither do we have any *à priori* expectations about the relationship which might exist between collective forms of conflict.

In other situations, however, high levels of collective action may be associated with high levels of individual action so that a positive relationship holds. While the empirical evidence on this question is far from extensive, a number of studies have observed an inverse relationship. For example, Knowles found such a relationship between strikes and absence in the British coal-mining industry.²¹ This finding has been supported by a more recent study on that industry.²² Moreover, a negative relationship between strikes and labour turnover in various industries was found in an unpublished study by Goldthorpe.²³ Paterson, on the other hand, noted a category of strikes which was preceded by an increase in labour turnover, accidents and similar indices and followed by a reduction in these indices,²⁴ so that the simple correlation between strikes and individual forms of conflict would be positive.

IV. CONCLUSION

There is no single perfect indicator of industrial conflict. Some of the actions listed in this chapter are better indicators than others but we would argue that all of them can be expressions of industrial conflict. A narrow view of industrial conflict can be misleading. Those holding such a view may, for example, interpret a situation of no strikes as indicating a lack of industrial conflict. This could be the case but workers may simply be expressing conflict through individual forms or less noticeable collective forms, and employers may be adopting actions not recognized as industrial conflict. Industrial conflict must be viewed as a complex phenomenon which can find expression in a diversity of forms.

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21. K.G.J.C. Knowles, *Strikes - A Study in Industrial Conflict* (Blackwell, Oxford, 1952) pp. 225-226.
 22. L.J. Handy, "Absenteeism and Attendance in the British Coal-Mining Industry: An Examination of Post-War Trends", *British Journal of Industrial Relations*, Vol. VI, March 1968, pp. 27-50.
 23. This study, along with a number of others on this question, is reviewed by E.P. Kelsall, "A Theoretical Setting for the Study and Treatment of Strikes", *Occupational Psychology*, Vol. 32, Jan. 1958, p. 2.
 24. Paterson, *op.cit.*, p. 204.

V. APPENDIX: NEW ZEALAND STATISTICAL INFORMATION

Worker-Initiated Collective Forms of Conflict

In the official statistics, a number of collective forms are grouped under the heading of "industrial stoppages". This term is defined to include strikes (and lockouts), organised go slows, refusal to work overtime, or other "clearly manifested passive resistance methods", unauthorised stop work meetings and unauthorised delays in resuming work after "recognised" stop work meetings. There is no minimum size below which stoppages are not recorded. While this is a very comprehensive definition, there is no formal obligation to report stoppages to the Department of Labour.²⁵ In practice many small strikes, go slows etc. escape the notice of the Labour Department and so are not recorded. For example, in 1973 only 36 "partial stoppages" (reduction of normal rate of output) were reported in the official statistics (out of a total of 394 industrial stoppages) and it is difficult to believe that only 10% of stoppages take the form of partial stoppages. The statistics include only stoppages in which a demand is made on the employer (or the employees in the case of a lockout), although for one year brief statistics on "political stoppages" were noted in a commentary by the Department of Labour.²⁶

Major sources of official stoppage statistics include the *Monthly Abstract of Statistics* (Department of Statistics, Wellington) which covers stoppage frequency, number of firms affected, duration, involvement, working days lost, and wages lost. Each of these statistics is broken down by industry. Most of this information is also found in the *Report on Statistics of Prices, Wages, and Labour* (Department of Statistics), although some of it is there presented in considerably more detail. This Report contains additional data on the geographic distribution of stoppages, on duration in calendar days and on

25. For definitions used in a number of countries see Malcolm Fisher, *Measurement of Labour Disputes and Their Economic Effects* (OECD, Paris, 1973).

26. *Labour and Employment Gazette*, Vol. XXII, May 1972, pp. 20-2.

the distribution of stoppages by cause, method of settlement and result. A comprehensive survey of stoppage information is the *New Zealand Official Yearbook* (Department of Statistics). An annual commentary on stoppages is found in the May issue of the *Labour and Employment Gazette* (Department of Labour, Wellington).

Worker-Initiated Individual Forms of Conflict

Labour Turnover

Turnover data is collected by the Department of Labour in its six-monthly survey of employment. This survey covers units which together employ about 70% of the total labour force. Turnover figures for surveyed industries (excluding building and construction and seasonal industries) are published in the *Labour and Employment Gazette*. Terminations are expressed as a percentage of average payroll strength (for six months). Data for engagements and payroll strength are published so that an engagement or accession rate can also be calculated. All figures are published on an industry group basis. This information is reproduced in the *Report on Statistics of Prices, Wages, and Labour*. Unpublished turnover rates for individual industries are available from the Labour Department although such rates are non-existent for a number of major industries, e.g. construction and meat freezing. Turnover rates, along with numerous other statistics on conflict forms, for the waterfront industry are published in the *Annual Report of the Waterfront Industry Commission*, G. 2 (Government Printer, Wellington). Official statistics on types and causes of turnover, measures of cost and so on are non-existent (except, in some instances, for the waterfront industry).

Absence

There are no official statistics on absence (except for the waterfront industry).

Industrial Accidents

Accident data are extensive, being collected as part of the accident compensation procedure. The statistics relate only to accidents qualifying for compensation and are published in the *Report on Industrial Injuries* (Department of Statistics). This Report includes statistics on frequency rates, time lost, compensation payments, nature of injury, agency of accident and so on. Many of these statistics are broken down by industrial division, industrial group and individual industry, and some by occupational group. Recent accident statistics are published in supplements to the *Monthly Abstract of Statistics* and commentaries on industrial injuries in the *Labour and Employment Gazette*. Of statistics on forms of industrial conflict, those for accidents are by far the most extensive, although not always the most up-to-date. The latest *Report on Industrial Injuries* at the time of writing (mid-1975) was for 1970.

Other Individual Forms

No official statistics on other individual forms of industrial conflict are available. This is not surprising in view of the nature of some of these forms. Fragmentary information on related matters, e.g. prosecutions for theft as a servant, is undoubtedly available but is unlikely to be very useful.

Employer-Initiated Forms of Conflict

The only employer-initiated form explicitly referred to in the official statistics is the lockout (other than the penalty - see Chapter VII). Lockouts are treated as industrial stoppages and so are included with worker-initiated collective forms. No statistics specifically on lockouts are now reported. For sources, see those mentioned in relation to industrial stoppages. Again, because of the nature of some of the other employer-initiated forms, it is not surprising that statistics on them are non-existent.

Chapter III

THE DISTRIBUTION OF INDUSTRIAL CONFLICT

Although conflict is inherent in the enterprise, there is more conflict in some situations than in others. In this chapter we discuss some of the factors influencing the level of industrial conflict. In so doing we inevitably also examine factors influencing the form conflict takes.

I. THE INDUSTRIAL ENVIRONMENT

Most studies of factors influencing the level of industrial conflict are somewhat limited in scope. That of Kerr and Siegel is no exception.¹ They were concerned with only one form of conflict (the strike) and one level of aggregation (the industry). Kerr and Siegel sought to explain an observed tendency for certain industries in industrialised nations to be consistently strike prone, while others are consistently strike free.² Their explanation centred on two aspects of the "industrial environment", namely, the location of the worker in society and the character of the job and the worker.

The industrial environment strongly influences the location of the worker in society which, in turn, determines the worker's propensity to strike. There are two extreme locational situations in which the worker may be found: as a member

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1. Clark Kerr and Abraham Siegel, "The Interindustry Propensity to Strike - An International Comparison", in Arthur Kornhauser, Robert Dubin and Arthur M. Ross (eds.), *Industrial Conflict* (McGraw-Hill, New York, 1954) pp. 186-212.
 2. The tendency for strikes to be unequally distributed among industries has also been noted in a number of more recent studies. See, for example, D.W. Oxnam, "The Incidence of Strikes in Australia", in J.E. Isaac and G.W. Ford (eds.), *Australian Labour Relations: Readings* (Sun Books, Melbourne, 1966) pp. 18-46; Don J. Turkington, "The Trend of Strikes in New Zealand 1946-70: Part II", *Journal of Industrial Relations*, Vol. 15, June 1963, pp. 143-157; and E.W. Evans and P. Galambos, "Work Stoppages in the United Kingdom 1965-70: A Quantitative Study", *Bulletin of Economic Research*, Vol. 25, May 1973, pp. 22-42.

of an "isolated mass" or as an integrated member of a differentiated group. According to Kerr and Siegel, industries in which workers form an isolated mass tend to be strike prone. The characteristics of an isolated mass determine the workers' ability and, in part, their desire to strike.

Members of an isolated mass generally live in communities which are separate, either in a geographic or sociological sense or both. This results in such workers having a strong identity with one another and a feeling of isolation from the rest of the community. They therefore generally have common grievances, a tendency reinforced by the workers forming a largely homogeneous, undifferentiated group in which there is little occupational stratification. There exists, as a result, a high degree of group cohesion which partly explains why these workers are usually highly unionized. They also tend to be immobile internally and between industries. Their allegiance is thus to their fellow workers rather than to management and they have little fear of jeopardizing promotional prospects by engaging in strike action. External immobility limits the workers' ability to express conflict by leaving and, to a lesser extent, by being absent. The separateness and homogeneity of an isolated mass means that its members have little association with "the public" and so are relatively unaffected by public opinion. The workers are also detached from the employer, partly because he belongs to a distinct and unattainable socio-economic group, and also because the same industrial environment that creates strike prone workers also creates "bad" employers. For the isolated mass the strike is seen as "a kind of colonial revolt against far-removed authority, an outlet for accumulated tensions, and a substitute for occupational and social mobility".³

Workers in industries where the propensity to strike is low tend to be integrated into the wider differentiated community. They are more likely to live in multi-industry communities, to associate with people with dissimilar working experiences, and to belong to associations with heterogeneous

3. Kerr and Siegel, *op.cit.*, p. 193.

memberships. The workers are also more mobile externally and have access to higher skilled jobs or managerial positions within the enterprise. The employer is also not so remote and not so "callous" if remote. Furthermore, the community can bring pressure to discourage strike action and the union, if it exists at all, is less likely to be the chosen instrument of protest. These factors mean that individual grievances are less likely to coalesce into mass grievances.

Kerr and Siegel summarize the influence of locational characteristics by saying that: "(a) industries will be highly strike prone when the workers (i) form a relatively homogeneous group which (ii) is unusually isolated from the general community and which (iii) is capable of cohesion; and (b) industries will be completely strike free when their workers (i) are individually integrated into the larger society, (ii) are members of trade groups which are coerced by government or the market to avoid strikes, or (iii) are so individually isolated that strike action is impossible".⁴

As regards the character of the job and the worker, Kerr and Siegel argue that, "the inherent nature of the job determines, by selection and conditioning, the kinds of workers employed and their attitudes, and these workers, in turn, cause conflict or peace".⁵ The proposition is that features of the job, such as whether it is difficult or pleasant, or seasonal or permanent, determine the type of workers employed in it. The unskilled, casual job fosters an independent spirit and attracts "tough, inconstant, combative, and virile workers" who will be inclined to strike. The opposite type of job (skilled, steady, and physically easy) attracts women and the type of man "who will abhor strikes".⁶

It can be seen that Kerr and Siegel's explanations of strike proneness emphasize factors influencing the ability to strike. The explanations are in fact seen to be consistent

4. Kerr and Siegel, *op.cit.*, p. 195.

5. *Ibid.*, p. 195.

6. *Ibid.*, p. 195.

with the proposition that strikes occur where they can occur. The reasons why conflict arises and factors influencing the desire to strike are relatively neglected.

A number of authors have pointed out that separation and isolation need not necessarily lead to strikes.⁷ Walker notes that in the case of the Broken Hill metal mines isolation has added to the sense of common interest between employer and worker. By contrast, the isolation of certain New South Wales coal fields worked in the opposite direction by cutting off miners from the rest of the community and separating them from the social consequences of their action. Rimlinger argues that the environmental tendency toward strike proneness among coal miners may be counteracted or reinforced by socio-cultural and historical factors. These broader factors determine whether miners are united and aggressive, or whether aggressiveness gives way to compliance where solidarity lends itself to indirect managerial control, or even whether solidarity gives way to intense individualism where co-operation and collective action are unsuccessful. Rimlinger used these factors to explain why miners in a given country may either be highly strike prone or almost strike free (and why the strike proneness of miners tends to vary between countries). In so doing he has highlighted a deficiency in the Kerr and Siegel approach, namely, its inability to account for differences in strike proneness between enterprises within the same industry. In his explanation of this phenomenon Rimlinger stressed socio-cultural and historical differences between regions. He is not alone in arguing that the region can have an independent effect on strike proneness.

Knowles has tested the proposition that the social environment of workers outside industry will affect their propensity

7. See Kenneth F. Walker, *Australian Industrial Relations Systems* (Harvard University Press, Cambridge, Mass., 1970); and Gaston V. Rimlinger, "International Differences in the Strike Propensity of Coal Miners: Experience in Four Countries", *Industrial and Labor Relations Review*, Vol. 12, April 1959, pp. 389-405.

to strike.⁸ After allowing for the effect of the regional concentration of industries, he discovered that strike proneness in the U.K. does in fact differ between regions. He found, nonetheless, that the nature of the industry has a stronger effect on strike proneness than the nature of the region, leading him to conclude "it matters less where you live than what you do for a living".⁹ Other evidence, however, fails to support this conclusion.

After studying regional and sectoral strike patterns in Australia, Gordon concluded that regional determinants of strike patterns are generally more significant than national industry influences.¹⁰ Aspects of Jamieson's study of British Columbia also fail to support Kessler's argument.¹¹

depending on the particular measure of strikes used.¹² Kerr and Siegel's method of gauging strike proneness was to compare an industry's rank order of man-days lost with its rank order of employment. The classification of the industry's propensity to strike (as high, low, etc.) depended on where the difference between these two rank orders fell within an apparently arbitrary scale. The more common, and more sensible, method is to study the ratio of man-days lost to workers employed (worker loss ratio) for each industry under study. Despite these apparent statistical inadequacies of Kerr and Siegel's approach, most single country inter-industry studies making use of several measures of the strike and of strike proneness have revealed patterns not inconsistent with that on which Kerr and Siegel based their analysis.¹³

A more serious limitation of the Kerr and Siegel study, from our point of view, is its concentration solely on one worker-initiated collective form of conflict, i.e. the strike. (Strictly their data covered strikes and lockouts but their analysis is only in terms of strikes.) It is not made clear how the industrial environment influences other collective forms, individual forms (with the possible exception of labour turnover), or employer-initiated forms. As a result, possible interrelationships between the forms of conflict are not enumerated.

Kerr and Siegel also fail to spell out adequately the causal influences embodied in their hypotheses. Strikes are said to occur in industries which segregate large numbers of workers who have relatively unpleasant jobs. But what causes isolated masses and unpleasant jobs? This question is unanswered, unless one interprets an undefined "industrial environment" as the cause. It would appear that Kerr and Siegel's determinants of strike proneness are themselves largely determined by the technology of an industry. While

12. R. Ward and G. Zis, "Trade Union Militancy as an Explanation of Inflation: An International Comparison", *The Manchester School of Economics and Social Studies*, March 1974, pp. 46-65.

13. See references in footnote 2, p. 52.

factors other than technology may be important in particular industries, e.g. the geographic location of coal in the case of coal mining, Kerr and Siegel's evidence suggests the general conclusion that strikes occur most in industries with technologies which segregate large numbers of workers and produce unpleasant jobs.

II. TECHNOLOGY

There is a voluminous literature on the relationship between technology and industrial behaviour. Some of it, such as the work of Woodward, is concerned with industrial behaviour in general rather than with those aspects related to industrial conflict.¹⁴ Woodward argues that: "Because of the complex nature of the relationships which connect the technology of a firm with its structure, it is likely that some, but not all, characteristics of technology will be reflected in organizational structure or in industrial behaviour".¹⁵ In a study of south Essex industry she noted that pressure on people, and so personal conflicts, increased as technology moved from small batch and unit production to large batch and mass production, peaking in assembly-line production.¹⁶ Such pressure then fell as technology moved into process production. Some of the characteristics of process production - the relaxation of pressure, smaller working groups, increased ratio of supervisors to operators and reduced need for labour economy - were seen as being conducive to "industrial peace".

Some other authors have dealt more specifically with the relationship between technology and forms of industrial

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14. See Joan Woodward, *Management and Technology* (HMSO, London, 1958); *idem*, *Industrial Organization: Theory and Practice* (Oxford University Press, London, 1965); and *idem* (ed.), *Industrial Organization: Behaviour and Control* (Oxford University Press, London, 1970).
 15. Tom Kynaston Reeves, Barry A. Turner and Joan Woodward, "Technology and Organizational Behaviour", in Woodward (ed.), *Industrial Organization: Behaviour and Control*, p. 15.
 16. Woodward, *Management and Technology*.

conflict. In a study of the U.S. automobile industry Walker and Guest sought to determine whether or not the absence and turnover behaviour of workers on jobs with extreme mass production characteristics differed from that of workers not on such jobs.¹⁷ At a general level, they found that the quit rate for auto-assembly plants was higher than for all manufacturing industries and for all but one non-manufacturing industry. Moreover, in an individual assembly plant, they found a significant positive correlation between absence and mass production characteristics. Workers whose jobs had strong mass production characteristics were absent more often than workers whose jobs had weak mass production characteristics. Also, the quit rate for production workers (those on the assembly line) was twice as high as that for non-production workers (those on maintenance, stock, salvage, and other non-production jobs).

Walker and Guest's study, along with many others in this area, fails to clearly enumerate the behavioural mechanisms underlying the observed differences in worker behaviour. It appears that the characteristics of mass production work - high degree of repetitiveness and of mechanical pacing, low learning time, few breaks in job routine and few opportunities for social interaction - strongly influenced the worker's attitude to his job, usually in an unfavourable way. The strength of these attitudes was in turn reflected in the level of withdrawal from the job.

Wedderburn and Crompton found considerable differences in attitudes and behaviour among workers in several chemical plants, the technologies of which ranged from a continuous flow process to routine machine minding.¹⁸ The plant with the greatest continuous flow production (Works A), had the lowest level of absence, the lowest rate of increase in labour

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17. Charles R. Walker and Robert H. Guest, *The Man on the Assembly Line* (Harvard University Press, Cambridge, Mass., 1952).
 18. Dorothy Wedderburn and Rosemary Crompton, *Workers' Attitudes and Technology* (Cambridge University Press, London, 1972); and Dorothy Wedderburn, "What Determines Shopfloor Behaviour?", *New Society*, 20 July 1972, pp. 128-130.

turnover and, during a three year period, experienced no collective manifestations of conflict other than a site-wide overtime ban. The other plant with considerable continuous flow production (Works B) also had low absence and experienced only one stoppage in addition to the overtime ban. Turnover at this plant, however, was somewhat higher than at Works A. The plant with the greatest machine minding production (Works C) had the highest level of absence, the fastest rate of increase in labour turnover and a high level of stoppages.

These behaviour differences were seen as resulting largely, but not entirely, from technological differences. Differences in technology produce differences in types of jobs and in kinds of authority relationships. The jobs associated with continuous flow chemical production largely involved monitoring and adjusting equipment and provided considerable autonomy and variety. These jobs were the most favoured. Machine minding jobs, on the other hand, lacked autonomy and gave little opportunity to exercise discretion. As regards authority relationships, the continuous flow worker had considerable control over his own work, with the supervisor performing a collaborative role rather than the policing one associated with many of the machine minding jobs.

The work of Woodward, Wedderburn and Crompton *et al.* has been criticised for its concentration on technology to the exclusion of other possible influences on worker behaviour.¹⁹ In particular, they have been criticised for paying insufficient attention to those social influences which are independent of technology. Wedderburn and Crompton included some of these influences in their analysis but concluded their importance had been exaggerated. Many studies on the influence of technology invite such criticism, however, because of their lack of rigour and failure to specify adequately the mechanisms underlying the propositions being expounded.

19. See, for example, John H. Goldthorpe, David Lockwood, Frank Bechhofer and Jennifer Platt, *The Affluent Worker: Industrial Attitudes and Behaviour* (Cambridge University Press, London, 1968); and E.L. Trist, G.W. Higgin, H. Murray and A.B. Pollock, *Organizational Choice* (Tavistock, London, 1963).

The studies of Woodward, Walker and Guest, and Wedderburn and Crompton are largely concerned with the motivation of workers to engage in particular individual forms of behaviour. Little is said about the ability of workers to adopt a certain line of action. Nor are these studies much concerned with collective forms of behaviour, let alone with employer-initiated actions. From the point of view of conflict analysis, their coverage leaves much to be desired.

A study of the influence of technology which is free from some of these deficiencies is that of Kuhn.²⁰ This study is concerned with grievance bargaining or "fractional bargaining". Both worker and employer forms of behaviour are taken into account although, in the case of worker behaviour, the emphasis is naturally on collective forms. While Kuhn's analysis is of grievance bargaining, much of it can be broadened to cover bargaining generally.

Kuhn's argument is that the technological conditions under which workers perform their jobs greatly influence their attitude toward bargaining and their use of it. The technology, moreover, may transform individual into common interests and also enable workers to pursue their group interests successfully. The technology most conducive to fractional bargaining is seen to have four characteristics: it subjects workers to continued changes in work methods, standards or materials as they work at individually paced jobs; it allows workers to interact with others in their task group as they work at distinctive and specialized semi-skilled or skilled jobs; it groups workers into several nearly equal-sized task departments; and it requires continuous, rigidly sequential processing of materials into one major type of product. The first and second of these characteristics are influential in the formation of a work group and stimulate willingness of the group to engage in fractional bargaining. The third tends to strengthen the work group's autonomy and unity and to weaken the political authority of the union over the group. The

20. James W. Kuhn, *Bargaining in Grievance Settlement: The Power of Industrial Work Groups* (Columbia University Press, New York, 1961).

fourth enables the work group to disrupt the total production of a plant at a cost which is small to itself in relation to the cost it inflicts upon management. Kuhn concludes that there is a causal relationship between technology and the incidence of fractional bargaining in that: "Technology determines the ability of workers to press their demands and greatly affects their willingness to formulate demands".²¹

Tactics used by workers and union representatives in grievance bargaining include "nuisance grievances", strict interpretation of rules and provisions, the "social freeze", bans, overloading the judicial procedures, refusals to co-operate in the administration of the agreement, slowdowns, stop work meetings and walkouts (strikes). The more united the group and the stronger its bargaining position, the greater will be the range of tactics available to it and the willingness to use them. The particular tactic chosen will depend on the situation.

Kuhn tends not to analyze management actions independently but rather in terms of responses to worker tactics. In response to workers pressing a demand, management may enforce rules strictly, discriminate among workers, force grievances to arbitration (which can be costly to the opponent), change employment opportunities of work groups, or suspend or discharge workers. The technology is seen to influence the susceptibility of members of management to the force or lure of fractional bargaining.

As already indicated, Kuhn argues that fractional bargaining is accompanied by collective forms of conflict. His analysis may therefore provide an explanation of inter-industry differences in the levels of these forms. They will be highest in industries with technologies conducive to fractional bargaining. That is, in industries with technologies that foster the development of cohesive and powerful work groups. Kuhn's explanation of strike proneness thus differs fundamentally from that of Kerr and Siegel. The basis of his explanation is the cohesive work group. This implies that the labour

21. *Ibid.*, p. 166.

force of the strike prone industry will be differentiated, if only in terms of work groups. Kerr and Siegel's explanation, on the other hand, is based on an undifferentiated and homogeneous labour force (the isolated mass). Whether the work group or the labour force is the most fruitful unit for explaining inter-industry differences in strikes (and other collective forms of conflict) is an empirical question and will be investigated in later chapters.

Kuhn's analysis may also be useful at a lower level of aggregation, i.e. the intra-enterprise or intra-plant level. To the extent that technology differs between various stages of a production process, some work groups will be more cohesive and forceful than others.

Another study of plant differences in work group behaviour is that of Sayles who concluded that "a relatively small number of work groups within an industrial plant play a vital role in determining the climate and events that shape its industrial relations character".²² Again, technology is seen as influential in shaping work group behaviour, in that it affects the group's perception of both the work problems it believes are soluble by concerted effort and the relative power it can muster to do "battle" for these. These two factors, in turn, are responsible for the number and quality of pressure tactics utilized against management (and possibly against the union). The results of these efforts shape group judgement on whether future forays for similar objectives are worth future sacrifices. Work groups displaying "erratic" behaviour patterns ("unstable, highly demonstrative, volatile") were associated with short assembly lines and crew operations, with all members performing similar tasks. Groups displaying "strategic" behaviour patterns ("persistent self-interest activity....of a calculated type") were associated with individual operations and some homogeneous crew or assembly operations.²³

22. Leonard R. Sayles, *Behaviour of Industrial Work Groups: Prediction and Control* (Wiley, New York, 1958) p. 164.

23. *Ibid.*, p. 71.

A difficulty with the studies of both Kuhn and Sayles (and also of Woodward, Wedderburn *et al.*) concerns intra-industry differences in the incidence of particular forms of conflicts. If enterprises in an industry have the same technology then, other things being equal, there should be no systematic variation in the incidence of conflict among individual enterprises. In reality, however, it seems that this is generally not the case.

Both authors are aware of this problem. Kuhn attributed inter-plant differences to the presence of "special circumstances" such as particular personalities and ideologies, plant traditions of collective action and so on. Sayles noted that some interdependent plants (assembly and crew operations) had little or no overt conflict while others had a great deal. He suggests this difference is often due to the inability of the rank and file to make themselves heard, but why the extent of this inability should differ between plants within the same industry is not adequately explained. Both Kuhn and Sayles are unable to explain intra-industry differences in terms of their basic hypotheses.

One possible explanation consistent with their hypotheses is that plant technologies differ somewhat within an industry. In practice the technology is not strictly uniform and such variation may possibly explain the less extreme differences in conflict incidence between plants. Another factor likely to be important is the influence of the region, something discussed earlier. Furthermore, the size of the unit could itself have an independent influence.²⁴ The question of size will be studied in more detail later.

In his comprehensive study of Australian industrial relations, Walker concluded that "a complete knowledge of the market conditions and technology of an industry would permit fairly clear delineation of its industrial relations pattern".²⁵

24. Although Kuhn, on the basis of very limited data, tends to discount the influence of size (see p. 163).

25. Walker, *op.cit.*, p. 397.

These factors were seen as clearly determining the effectiveness of direct action, the nature of the work and the circumstances of employment, the economic horizon of workers, and the extent to which workers and employers share a common social and industrial background. They were also seen as deeply influencing the stability of the parties' organisations, the ideological and political objectives adopted by these organisations and, to a lesser degree, the extent to which unions attempt to penetrate managerial functions.

Most of the relationships involved can be briefly summarized. Direct action (i.e. the strike) is most effective where conditions of production or marketing demand rapid output and, it is argued, the more effective direct action is, the more it is used. The nature of the work, through the degree of skill required, determines to an extent the type of worker, the attitudes of whom are influenced by the social status of the industry. The hazards attached to the job, moreover, affect the whole climate of relationships in the industry. A limited economic horizon encourages "militancy" and the extent of the horizon is a function of economic security and the potential for mobility. Differences in social origins and ways of life tend to produce social barriers between employers and workers which are associated with high levels of conflict. Organisational stability in unions is most difficult to achieve in casual industries and other occupations where individual earnings are subject to wide variations. In the case of employers, a high level of competition, a wide divergence of economic interest etc. make strong organisation difficult. The union will strive to penetrate managerial functions where employment fluctuates violently and employers have opportunity to discriminate against particular workers.

On the basis of these conclusions Walker argues that: "While it would be going too far to claim that the industrial relations pattern of an industry is completely determined by its market conditions and technology, it is safe to say that these determine the problems of relationships which are posed

for solution by the parties".²⁶ In terms of the distribution of industrial conflict, we can summarize much of Walker's analysis in the proposition that industrial conflict (in its collective forms) will be high in industries where production or marketing conditions demand rapid output and where employment and individual earnings fluctuate, opportunities for discrimination exist, hazards are high but skill requirements, social status, and mobility are low. It should be emphasised, however, that Walker's study is concerned with patterns of industrial relations and not solely with industrial conflict and so differs in scope from some of those reviewed earlier, including that of Kerr and Siegel. His general thesis is limited as an explanation of the distribution of conflict to the inter-industry level. Factors outside the main hypothesis, such as regional influences, the size of the unit and "special circumstances", are relied upon to explain differences at aggregation levels below the industry. His analysis, furthermore, is little concerned with individual forms of conflict or with employer-initiated forms. It does, however, point to the importance of factors discarded or ignored by Kerr and Siegel as parts of a pattern of determinants.

III. SIZE

It is popularly believed that size has an effect on the level of industrial conflict. Empirical studies add some support to this belief.²⁷ Ingham cites two studies which found a positive relationship between size and strike activity. Turner, Clack and Roberts, however, found no such relationship in the British motor industry.²⁸ All five studies on the relationship between size and absence cited by Ingham indicate a positive association although Behrend, after reviewing three

26. Walker, *op.cit.*, pp. 397-398.

27. For a review of the literature on this question see Geoffrey K. Ingham, *Size of Industrial Organization and Worker Behaviour* (Cambridge University Press, London, 1971) Ch. 1.

28. H.A. Turner, Garfield Clack and Geoffrey Roberts, *Labour Relations in the Motor Industry* (Allen and Unwin, London, 1967) pp. 181-182.

of these studies among others, warns that: "The relationship of size and absenteeism seems to be a complex subject and, so far, research has uncovered few valid general principles".²⁹ In his own statistical analysis Ingham, nonetheless, found a strong positive relationship. The few studies on the size-accident relationship also indicate a positive relationship. There is less consistency, however, with respect to labour turnover studies. Of the five studies cited by Ingham, two found a positive relationship but three found no significant correlation. Ingham's own statistical analysis also suggested no significant relationship.

Many of the above studies must be treated with caution because they fail to incorporate testable theoretical explanations. The mechanisms underlying the observed statistical relationships are thus often not made clear. In such studies, a high correlation may indicate not the influence of size but of some more basic factor (say, technology) which is itself related to size. A practical difficulty concerns the appropriate dimension for study. Should it, for example, be the enterprise, the factory, the department, the work group and so on? In practice, most studies have been of variations in size of factories within a particular industry.

Theoretical explanations of the "size effect" tend to run as follows. As size increases, modes of control and co-ordination become impersonal and formal, the level of bureaucracy grows, the division of labour is extended and so job specialization is increased. Size is also seen to determine the number of communication linkages, and the more such linkages the greater the possibility for breakdowns in communications. The degree of "bureaucratisation" and of job specialization, and the number of communication linkages are seen to be associated with the level of industrial conflict.

Ingham has modified this orthodox explanation in an effort to account for the apparent difference between the size-absence

29. Hilde Behrend, "Voluntary Absence from Work", *International Labour Review*, Vol. LXXIX, Feb. 1959, p. 123.

relationship and the size-turnover relationship. He argues that a self-selection process may be at work. Workers seeking a high level of non-economic rewards join small, low-wage firms and those seeking high earnings join large, high-wage firms. To the extent that non-economic rewards are associated with small firms and economic rewards with large firms, it might be expected that the degree of fulfilment of expectations and wants is not dissimilar in the two situations and so turnover is unrelated to size. On the other hand, the level of identification and moral involvement of workers in small firms is high and this reduces absence as compared to the large firm where such barriers to absence are not present.

Ingham's explanation is not a complete success. In the first place, it requires an additional hypothesis explaining why large firms offer higher economic rewards than small firms. Such an hypothesis is not provided although it is in a sense more basic than the hypotheses that are advanced. This deficiency is important especially in view of the allegation that size can be viewed as an influence independent of other factors such as technology etc. His data on this relationship are based on a small sample and some of the earnings figures show little difference between the largest and smallest firms. Furthermore, it is not explained why the factors attracting workers to large enterprises do not also act as barriers to absence. Workers joining such enterprises are regarded as being economically motivated but the decision to be absent is apparently free of these same considerations. Finally, the self-selection hypothesis is difficult to test as the statement of it tends to be tautological.

While empirical studies tend to suggest a relationship between size and some conflict forms, the question of the "size effect" needs further research. If, however, such a relationship does exist it has obvious implications for the distribution of industrial conflict. Industries characterised by large employment units would tend to have relatively higher levels of collective forms and of some individual forms of conflict than those characterised by small units. Similar differences could also be expected to hold between large and

small units within the same industry.

IV. CONCLUSION

In this chapter we have analyzed influences on the level of industrial conflict. Our emphasis has been on the distribution of conflict over space rather than time. Studies on this question are diverse in approach and content and so their conclusions are difficult to synthesize into general propositions. Nevertheless, they point to a range of possible influences, the relative importance of which can be assessed in actual situations. It is our intention to do just that within the context of three New Zealand industries.

Before leaving the question, however, we shall summarize some of the influences suggested in the literature reviewed. Most studies have emphasised the role of technology, although in different ways. From Kerr and Siegel's analysis we drew the suggestion that strikes occur most in industries with technologies which segregate large numbers of workers and produce unpleasant jobs. The work of Kuhn and, to an extent, Sayles implies, on the other hand, that the level of collective forms of conflict and, possibly of employer-initiated forms, will be highest in industries where the technology creates cohesive and powerful work groups. Walker stressed not only technological but also economic factors in suggesting that collective forms will be at a high level where production and market conditions demand rapid output and where employment and earnings fluctuate, opportunities for discrimination exist, hazards are high but skill requirements, social status, and mobility are low.

Walker and Guest have associated high levels of absence and labour turnover with strong mass production characteristics. This is not inconsistent with Woodward's view of the influence of technology on industrial behaviour. Wedderburn and Crompton's study also suggests that technologies producing jobs lacking in autonomy and opportunity for the incumbent to exercise discretion will lead to high levels of individual

forms of conflict and possibly also of collective forms.

A number of authors have stressed the role of the size of the employment unit. While not being conclusive, these studies suggest that strikes, absence and accidents (and possibly turnover) are positively associated with size. Other authors have suggested that the region has an independent influence on the level of conflict.

In any particular situation it seems likely that several of the above influences will be present, as will other more specific and "random" ones which cannot be incorporated within general theoretical propositions.

Chapter IV

THE ECONOMIC EFFECTS OF INDUSTRIAL CONFLICT

Having discussed causes of industrial conflict and factors influencing its distribution we are now in a position to study its effects. Our emphasis will be on economic effects, although allusions will be made to other consequences. In discussing the effects of conflict we shall also implicitly be considering factors influencing the probability that a particular action will be successful for the initiating party.

I. WORKER-INITIATED FORMS OF INDUSTRIAL CONFLICT1. Collective Formsa. Effects on the parties to a conflict

In looking at the collective forms of conflict we shall distinguish between effects of the action itself and effects of the terms of settlement. For the parties involved the net benefit of a particular conflict action is the sum of the net benefits of the action itself and of the terms of settlement, where any of the "net benefits" may be negative; that is, a net cost may be experienced.

We shall begin the analysis with the strike, but many of the conclusions will also apply to other forms of conflict. The effects of the strike itself depend on the situation. This may seem a statement of the obvious but it is largely for this reason that the question is so complex and difficult to analyze. Looking first at the effects on the employer, a strike usually entails a fall in production, the extent of which depends on involvement and duration. If the enterprise's entire work force strikes, operations will normally cease immediately and the longer the workers remain on strike the greater will be the fall in output. If only part of the work force is involved, the extent of the fall will, other things being equal, depend

on the importance of the strikers' place in the production process. The more "strategic" their position, the more quickly their absence affects operations and so the greater is the reduction in output. This, of course, implies that other workers (or other factors of production generally) are not substituted in the short term for those on strike.

The effect of the fall in production on the employer will depend on many factors, not the least of which is the size of stocks of the product. The fall in production may have no immediate effect on sales, and so on profits, providing stocks are sufficient to meet the demand for the product over the duration of the strike. Nevertheless, a long term loss in profits will result if additional costs must be incurred in order to replenish stocks. Profits will be unaffected only where stocks can be built up again by using previously utilized capacity (other things remaining the same). Where, however, stocks are excessive, a strike may in fact be profitable to the employer by reducing them to a level nearer the optimum while at the same time saving variable costs such as strikers' wages, materials, energy and so on. In such a situation, it may be to the employer's advantage to take a strike or even to provoke one. On the other hand, where stocks are low or non-existent, the fall in output rapidly translates into a fall in sales. A loss in profits results unless the fall in production and sales can be made up after the strike by utilizing excess capacity. Not all outputs can, of course, be stockpiled. Highly perishable products must, in the absence of special storage facilities, be marketed rapidly. Also, services cannot generally be stockpiled so that employers in service industries cannot use stocks to maintain sales in the face of a strike.

The effect of the fall in output may also depend on the size and nature of stocks of raw materials. In certain industries, for example food processing, the perishable nature of the raw materials demands rapid processing of the product. If production should cease or slow down because of a strike, raw materials awaiting processing may be damaged. The same may also apply to partly processed materials.

The effect of the output reduction is also influenced by the availability of satisfactory substitutes at acceptable prices. If such substitutes are available, consumers may, in the absence of supplies of the struck product, purchase these instead. If information was imperfect before the strike, the switch to substitutes, and so reduction in demand for the struck product, may be permanent. Another aspect of imperfect information is uncertainty. If a strike results in a reduction in quantity supplied, consumers' expectations may be upset. The desire to avoid uncertainty may be an added incentive to switch permanently to an alternative, if one exists. A strike may also lead to increased uncertainty for the employer and to dislocation of his planning decisions, which is likely to produce further costs.

Not all the fall in output is necessarily "lost". Some of it may not have been required had it been produced, a point alluded to in our discussion of stocks. Moreover, some may merely be postponed, being made up after the settlement of the strike. If workers are more productive after the strike than before, or if excess capacity can be utilized, production may be made up at little or no extra cost.¹ On the other hand, if extra overtime is necessary to recoup this production a net cost to the employer is involved even though total production may not have fallen. Of course if consumer demand patterns change as the result of a strike, the "lost" production will include not only part or all of the reduced output but also the extent to which future production is less than it would otherwise have been.

Future output may also be impaired if the strike causes damage to plant and equipment. An oft cited example of this possibility is damage to a steel furnace resulting from its being left unattended during a strike.² In many industries in

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1. For an example of temporary improvement in productivity after a strike see T.T. Paterson, *Glasgow Limited: A Case-Study in Industrial War and Peace* (Cambridge University Press, London, 1960) Ch. 20.
 2. See, for example, J.E.T. Eldridge, *Industrial Disputes: Essays in the Sociology of Industrial Relations* (Routledge and Kegan Paul, London, 1968) p. 84.

which the possibility of plant damage exists there are now agreed procedures designed to prevent such damage resulting from a strike,³ although these agreements may become a subject of negotiation in the event of conflict.

It may even be argued that the employer might not regret the loss of output during a strike because the strike may enable him to make improvements to plant layout, carry out maintenance and so on.⁴ Strikes may also foster technological change by prompting the employer to adopt a new mix of factors in an effort to reduce the future incidence of such expressions of industrial conflict.

The magnitude of most of the effects so far discussed is influenced by the economic situation of the enterprise. In recessionary conditions stocks may be large so that sales are little affected by a strike, despite the possible ready availability of substitutes. On the other hand, in inflationary conditions stocks may be low so that consumers will seek out alternatives even though stocks of these may not be large. Furthermore, the degree of competition faced by the enterprise will greatly influence the potential for changes in consumer preferences. Finally, the financial resources of the enterprise will determine to a large extent the effect on it of a given cost (or benefit) of a strike.⁵

As regards the effects on the worker, a strike involves a reduction in wages of those involved, the extent of which depends on duration. The longer the strike, the greater the wages foregone by the worker. The effect of the reduction in wages on the worker depends on the extent to which he receives offsetting social benefits from the State and disbursements from union strike funds. The greater the receipts from these

3. See Neil W. Chamberlain and James W. Kuhn, *Collective Bargaining* (McGraw-Hill, New York, 2nd ed., 1965) p. 400.

4. See Eldridge, *op.cit.*, p. 83.

5. In some places the cost to the employer may not be high because he can replace strikers by strikebreakers. This has not been important in the full employment situation of New Zealand since World War II and, in any case, has often been costly when attempted.

sources the more the cost of striking will be reduced to the worker. In some countries strikers are eligible for unemployment benefits and other social benefits although these generally amount to less than the wages foregone.⁶ State benefits to strikers are transfer payments and involve no direct cost to the strikers themselves. Union strike funds, on the other hand, are usually accumulated out of past dues (or met out of increased future dues) and so may involve some cost, the size of which is limited to the extent that non-strikers in the union are effectively subsidizing strikers. The cost of striking may also be reduced by earnings from temporary employment obtained by the striker during the strike. Some workers, however, refrain from seeking such employment because they have a preference for not working during the strike, union policy prohibits strikers from obtaining temporary employment, or because they wish to avoid giving the employer opportunity to claim that the employment relationship has been severed.

Not all the net reduction in wages is necessarily "lost". Some of it may be made up in the form of greater overtime earnings after the strike has ended. In seasonal industries the strike may merely extend the season and so only postpone the payment of wages not received during its occurrence (although annual earnings will be reduced unless the worker would otherwise have earned nothing over the period of the extension to the season). In industries where employment lasts just for the duration of a contract, a strike may similarly only prolong the period of the contract and postpone the payment of wages.

If, however, a strike results in a reduced demand for labour because of a permanently reduced demand for the product or a change in factor mix, future earnings and employment opportunities are likely to be detrimentally affected. This possibility depends, among other things, on the availability of satisfactory substitutes to the struck product and of satisfactory substitute factors at acceptable prices.

6. See Malcolm Fisher, *Measurement of Labour Disputes and their Economic Effects* (OECD, Paris, 1973) pp. 174-177.

So far we have considered only the effects of the strike itself on the parties. Strikes end on the basis of certain terms and it is the effect of these on the parties which we now consider.

Looking first at the employer, not all strike settlements involve employer concessions. In some situations the employer may be able to force the workers not only to drop their demands but also to meet certain conditions before being re-employed. In such cases the employer clearly benefits from the terms of settlement while the strikers suffer. In other settlements both employer and workers make concessions so that the net result to the employer is the difference between the cost of his concessions and the benefits derived from the workers' concessions. In yet other settlements the employer makes concessions while receiving none from the workers so that the employer normally suffers while the workers gain. In general, strikers make demands which are either accepted or rejected by the employer in the terms of settlement. The employer, for his part, may make demands over and above reactions to worker demands and these, in turn, are either accepted or rejected by the workers.

Most employer concessions involve an economic cost. For example, it is obvious that an increase in wages or an improvement in working conditions will, other things being equal, increase costs. The magnitude of the increase will depend on the share of labour costs in total costs of production. Other things aside, the increase will be larger the greater is labour's share in total costs. The effect of this increase on the employer depends on many factors, one of which is the extent to which he can pass the increase on in higher prices. The ability to increase prices is a function of the elasticity of demand for the product and so, among other things, of the extent to which substitutes are available. The more inelastic the demand, the more cost increases can be shifted forward in price increases.

The cost of the concession could also be shifted to the workers in the form of lower levels of employment. If demand

for labour is elastic, an increase in wages (or other employment costs) will reduce employment. A high elasticity of demand for the labour concerned implies the availability of substitute factors (or other types of labour) at acceptable prices. The use of these substitute factors is designed to reduce the cost of the strike settlement to the employer.

The increase in costs may be offset to the extent that worker concessions form part of the terms of settlement. Thus while, for example, the employer may concede a wage increase the workers may agree to a change in work patterns which increases output per head.

As regards the worker, he also gains, suffers or remains the same as the result of the terms of settlement depending on the balance of costs and benefits of concessions. The worker's gain from an employer concession will be greater the more the resultant cost increase can be passed on in price rises, i.e. the more inelastic the demand for the product. If demand is elastic, profits and so employment will fall and the worker's gain from settlement is therefore reduced.

The worker's gain will also be affected by the share of labour costs in total costs of production. If the share is low, even a relatively large increase in wages will not greatly increase total costs so that the price of the product will not rise appreciably and hence diminish the quantity demanded of the product.

Also the worker's gain will be greater the less the employer is able to switch production techniques to alternative sources of labour or other inputs, i.e. the more inelastic the demand for the labour involved in the strike.⁷

7. For a discussion of the conditions for the successful raising of wages by workers see Alfred Marshall, *Principles of Economics* (Macmillan, London, 8th ed., 1920) pp. 385-386. See also Malcolm R. Fisher, *The Economic Analysis of Labour* (Weidenfeld and Nicolson, London, 1971) p. 146; and *idem*, *Measurement of Labour Disputes*, pp. 48-9.

So far we have studied only the strike. The analysis, however, is also applicable to other types of work stoppages such as stop work meetings. Moreover, much of it applies to collective restrictions on output such as go slows, work to rules and bans, especially in respect of effects of the terms of settlement. The effects of the output restriction itself may, however, differ from those of the strike. An output restriction is obviously intended to cause a fall in production and this can be analyzed in similar fashion to one resulting from a strike. But an output restriction does not necessarily involve a reduction in wages, although it may do. For example, hourly-paid workers operating a ban may suffer no loss in wages (although they could conceivably suffer a reduction in future employment opportunities). In general, an output restriction in itself is, in the absence of employer retaliation, less costly to the worker than a strike. The effect of such an action on the employer is not only to reduce output but also to increase its unit cost. The employer may thus be worse off than if he were producing nothing at all (as during some strikes), in which case it would pay him to provoke a strike or impose a lockout. The potentially high cost of output restrictions explains why employers often react to them by forcing a stoppage of work.

As already indicated, the net benefit (positive or negative) of a collective action to a particular party is the sum of the net benefits of the terms of settlement and of the action itself. While a party normally will either incur a cost on both these accounts or incur a cost on one and a benefit on the other, it is possible for it to benefit from both the action itself and the terms of settlement. Whatever the situation, the rational party will attempt to reach a settlement when its expected net gains are maximised or its expected net losses minimised.

b. Effects on parties not directly involved

Third parties affected by strikes can be very numerous.⁸

8. See Fisher, *Measurement of Labour Disputes*, pp. 195-196; or Neil W. Chamberlain and Jane Metzger Schilling, *The* (Footnote 8 is continued on the next page.)

We shall group them under three broad headings: enterprises, workers and (non-business) consumers. Included among possible types of third party enterprises are producers of substitute or complementary products (or services) to the struck product (or service), producers of complementary or substitute inputs for the struck enterprise and users of the struck product.⁹ Workers in all these types of enterprises are also affected as are any non-striking workers in the struck firm. Possible types of consumers include those purchasing the struck product, substitute or complementary products, or complementary or substitute inputs.

Looking at the effect of the strike itself, a fall in output will not reduce the long term profits of the struck enterprise if stocks are excessive or if they are subsequently made up at no extra cost. Even when a fall in output does reduce the enterprise's profits, the total output of the economy need not fall for its loss may be another's gain. In this situation a strike is likely to benefit the producers of substitute products, the extent of their gain depending on their levels of stock and unutilized capacity. The effect on producers of complementary products is not clear. They tend to suffer through the fall in output of the struck product but may gain through the increased production of substitute products. On balance such producers probably suffer.

The effect on business users of the struck product thus depends on stock levels and availability of substitutes. These users may be little affected providing sufficient stocks are held by the struck enterprise and by themselves. If stocks are inadequate, the effect depends on the availability of satisfactory substitutes at competitive prices. As with all effects, considerations of time and space are important. The

(Footnote 8 continued):

Impact of Strikes: Their Social and Economic Costs
(Harper, New York, 1954).

9. Many other types of enterprise could, of course, be included. For example, enterprises which rely on the earnings of strikers for their sales. We will cover only some of those which appear to be among the more important. The same applies to other sorts of third parties.

longer the strike and greater the involvement, the less the adequacy of stocks and availability of satisfactory substitutes.

A strike may also result in the employer using substitute inputs and so benefit producers of these inputs. The effect on producers of complementary inputs is again ambiguous, although they probably suffer on balance. They suffer over the period of the strike but may gain through increased activity of the struck enterprise after the strike. Even the use of more substitute inputs by the enterprise may entail demand for these complementary inputs.

The effects on the workers indirectly involved generally reflect those on their employing enterprises. Workers in substitute product or input enterprises are likely to gain through increased employment opportunities and wages, while those in complementary product or input enterprises may suffer. The duration of these effects depends on the permanence or otherwise of the changes in product demand by consumers and in input demand by the struck enterprise. The effects on employees of the struck enterprise not involved in the strike are complex and depend on the availability of work. Where it is less than normal such workers will suffer (unless the employer bears the cost), but where it is greater they will gain. Either situation could conceivably result from a strike.

The effects of the strike itself on non-business consumers depends on similar variables to those applying to business users of the product. They may be little affected providing stocks held by the struck enterprise, themselves or the distribution system are sufficient. Where they are not, the effect depends on availability of satisfactory substitutes at competitive prices. At the extreme, where stocks and substitutes are non-existent the consumer will suffer an immediate, and possibly substantial, drop in welfare.

In so far as a strike exerts upward pressure on prices of substitute products and inputs, consumers of these will suffer. On the other hand, if downward pressure is exerted on prices of complementary products and inputs, consumers of these will

gain.

Turning now to the effects of the terms of settlement, we noted earlier that the employer may attempt to pass the net cost of settlement on in higher prices.¹⁰ Whether forms of industrial conflict can in practice lead to price increases is a matter of considerable debate, largely between two schools of thought.¹¹ On the one hand are those who argue that inflation is caused by excess demand in the goods' market and, consequently, that worker "militancy" is likely to have little independent effect. On the other are those who stress cost-push factors such as mark-up pricing and collective bargaining. A variant of this second school suggests that trade unions can push up wages and prices independently of the state of demand in the labour market.

The empirical literature on the question is voluminous but inconclusive. Hines, using the rate of change of the proportion of the labour force which is unionized as a proxy for trade union "militancy", found a significant and positive relationship between wage increases and "militancy".¹² Such

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10. It is also possible that after the strike the employer will attempt to pass on the net cost of the strike itself in higher prices.
 11. For recent reviews of the theoretical and empirical literature on this question see R. Ward and G. Zis, "Trade Union Militancy as an Explanation of Inflation: An International Comparison", *The Manchester School of Economic and Social Studies*, March 1974, pp. 46-65; Gottfried Haberler, Michael Parkin and Henry Smith, *Inflation and the Unions* (Institute of International Affairs, London, 1972); Dudley Jackson, H.A. Turner and Frank Wilkinson, *Do Trade Unions Cause Inflation?* (Cambridge University Press, London, 1972); John Burton, *Wage Inflation* (Macmillan, London, 1972); Harry G. Johnson and A.R. Nobay (eds.), *The Current Inflation* (Macmillan, London, 1971); and D. Laidler and D. Purdy (eds.), *Inflation and Labour Markets* (Manchester University Press, 1974).
 12. A.G. Hines, "Trade Unions and Wage Inflation in the United Kingdom 1893-1961", *Review of Economic Studies*, Vol. XXXI, Oct. 1964, pp. 221-252; and *idem*, "The Determinants of the Rate of Change of Money Wage Rates and the Effectiveness of Incomes Policy", in Johnson and Nobay, *op.cit.*, pp. 143-175.

a relationship was also discovered by Taylor¹³ and Godfrey¹⁴ who used measures of strike activity as proxies for union "militancy". In contrast, Ward and Zis, using a composite measure of strike activity as a proxy, found little evidence to support the "pushfulness" hypothesis in a study of six European countries.¹⁵ The findings of Johnston and Timbrell also failed to support the hypothesis.¹⁶ Given the lack of conclusiveness of the empirical evidence, any comments we might make on possible price effects of strikes must be treated with caution.

We noted earlier that the employer's ability to pass the net cost of settlement on in higher prices depends on the elasticity of demand for the product. If the elasticity is low then substitutes are few and the employer can increase the price without greatly reducing quantity demanded. In this case producers of complementary products are likely to be little affected, while the few, if any, producers of substitute products will enjoy some gain. If the elasticity is high, any price increase would significantly reduce quantity demanded and total revenue. In this situation the employer would be unable to sustain the higher price in the face of widespread switches in demand in favour of substitute products.

If the employer is unable to increase prices he may attempt to substitute other workers and inputs for the now more expensive labour that was involved in the strike. His ability to do this depends on the elasticity of demand for that labour. Where it is high, substitute inputs are available and

13. Jim Taylor, "Incomes Policy, the Structure of Unemployment and the Phillips Curve: The United Kingdom Experience, 1953-70", in Michael Parkin and Michael T. Sumner (eds.), *Incomes Policy and Inflation* (Manchester University Press, 1972) pp. 182-200.

14. Leslie Godfrey, "The Phillips Curve: Incomes Policy and Trade Union Effects" in Johnson and Nobay, *op.cit.*, pp. 99-124.

15. Ward and Zis, *op.cit.*

16. J. Johnston and M. Timbrell, "Empirical Tests of a Bargaining Theory of Wage Rate Determination", *The Manchester School of Economic and Social Studies*, June 1973, pp. 141-167.

their producers will gain. Where it is low, the employer is unable to maintain profits by changing the factor mix and may reduce employment and use of complementary inputs in the future. If unemployment results then not only will output of the struck enterprise and of producers of complementary inputs have declined but aggregate demand will be reduced. If the price of the struck product rises then business users of it will suffer unless they too are able to pass the cost on in higher prices.

As regards indirectly involved workers, an increase in price of the struck product may benefit workers in substitute product enterprises by increasing employment and wages, while marginally penalizing those in complementary product enterprises. Workers in enterprises using the struck product also probably stand to suffer. If the struck enterprise changes its factor mix then workers in substitute input enterprises and owners of substitute skills will gain. The effect on workers in complementary input enterprises is not clear but may be detrimental. If the struck enterprise reduces its scale of activities, workers in complementary input enterprises will suffer as will employees of the struck enterprise not involved in the strike.

If the elasticity of demand for the struck product is low, prices to consumers may rise. In this case the consumer suffers a drop in real income and a welfare loss, the extent of which is greater the larger the increase in prices. If the price of the struck product rises, prices of any substitute products are likely to rise and consumers of these will also suffer a welfare loss. Consumers of complementary products, on the other hand, will gain to the extent that prices of these fall as the result of switches of consumer demand away from the struck product. If the factor mix of the struck enterprise is changed, prices of substitute inputs may rise while those of complementary inputs may fall, with the result that consumers of substitute inputs will suffer and those of complementary inputs gain.

Our analysis of the effects on third parties has been in terms of the strike, but is also applicable to the other collective forms of industrial conflict including output restrictions

as well as work stoppages.

2. Individual Forms

Individual forms of industrial conflict normally involve no explicit or specific demands and consequently no terms of settlement. We shall therefore make no distinction between the effects of the action itself and those of the terms of settlement in studying the effects of these forms of conflict.

a. Effects on the parties to a conflict

We begin our analysis with the effects of labour turnover on the employer. The act of a worker leaving the enterprise may result in a fall in production, the extent of which depends on the nature of the relationship of the leaver's position to the level of output and on the length of time the vacancy so created remains unfilled. The effects of the fall in production depends on considerations similar to those applying to one resulting from a strike.

As with the strike, not all the fall in output is necessarily "lost". Some of this output may not have been required had it been produced, while some may be postponed, being made up later. If the remaining workers are more productive as a result of the worker leaving, or if the replacement is more efficient than the leaver, production may be made up at no extra cost. In such circumstances output could even be higher after the termination than before, in which case the employer benefits. If, however, extra overtime is necessary to maintain or recoup production the employer incurs a net cost even though total production may not have fallen. It is, of course, possible that the remaining workers are less productive after the separation and that the replacement is less efficient than the leaver, with the result that "lost" production exceeds the immediate reduction in output by the extent to which future production is less than it would otherwise have been. Even if output does fall due to a termination, the employer may not

suffer if he intended to reduce output and the number of workers employed in any case. Such may be the situation in a recession when demand for the product is falling.

In order to maintain output, the employer may employ workers who are additional to requirements in the absence of turnover and who can be used to replace leavers. The cost of this "contingent" labour is a cost of labour turnover, just as is the working of extra overtime in order to maintain output.

The employer may incur other expenses as the result of turnover, in addition to any resulting from the production effects. Such expenses include those relating to recruitment (advertising and employment agency fees, cost of recruitment drives, publicity material, and so on), to selection and to engagement. They may also include training although it is possible that the recruit is as well or better trained than workers already employed by the enterprise.¹⁷

The employer may react to labour turnover by attempting to reduce its future incidence. One measure might be to change the factor mix so as to reduce dependence on labour. Even if the number of workers is unchanged the employer may seek to change the nature of the work force by recruiting replacement workers who have a lower propensity to leave. This would involve higher recruitment, selection and engagement costs because of the greater time and effort necessary in all phases of the hiring operation. The employer may also increase the attractiveness of the job and so assist recruitment while also making it more costly for workers to leave. This would again involve additional costs for the employer, although it is difficult to identify them specifically with turnover as they may merely reflect a movement toward an equilibrium level of remuneration and so of numbers employed. He would presumably only incur such costs if he expected that they will be less than the benefits reaped through lower rates of turnover.

17. For a full discussion of costs associated with labour turnover see *Labour Turnover: A Practical Guide* (Department of Labour, Wellington, 1972) Ch. 2.

As already indicated the magnitude of the effects on the employer is influenced by the economic situation of the enterprise. In periods of excess demand for labour, production effects may be substantial and replacement costs high. In times of slack, the employer may not regret the loss of the worker or even of his output and consequently will incur no replacement costs. As with the strike, the impact of a given cost (or benefit) on the enterprise depends largely on its financial resources. Also as indicated, the magnitude of the effects depends in part on the nature of the leaver. The departure of some workers has a greater impact on output and so profits than of others. Also the costs involved in replacing leavers is greater for some than for others.

As regards the effects of turnover on the worker concerned, he will usually incur a cost of search consisting of foregone earnings and expenses such as transport costs, agency fees and so on.¹⁸ This cost will be lower the more readily identifiable are prospective employers to the leaver. Identifiability is largely established by the dissemination of job information by the employer through advertising etc. As such, it may be greater in periods of prosperity. The cost of search will also be lower the higher the probability that a given, identified employer is taking on workers. Again, this probability is likely to be higher in times of prosperity. Worker search costs should decline when general demand conditions improve.

On successful completion of search, i.e. on finding a new job, the worker may incur another class of expenses ("transfer costs") in taking up the new position. These costs may include moving expenses, new equipment and so on. Their effect on the worker is, of course, reduced to the extent that they are met by the employer.

18. The seminal work on the costs of search and on information in the labour market generally is George J. Stigler, "Information in the Labor Market", *Journal of Political Economy*, Vol. LXX, Supplement: Oct. 1962, pp. 94-105. For an example of more recent work in this area see Donald O. Parsons, "Quit Rates Over Time: A Search and Information Approach", *American Economic Review*, Vol. LXIII, June 1973, pp. 390-401.

The worker will presumably only leave a job if the expected benefits from so doing exceed the expected costs. The benefits result from the expected greater attractiveness of an alternative position to that presently occupied. The source of this greater attractiveness may be economic, e.g. higher wages, or non-economic, e.g. a hopefully more "agreeable" management. The costs of search and transfer may therefore be offset by the benefits of the new position.

Looking now at the effects of absence on the employer, we note that it too may result in a reduction of output, the size of which depends on the nature of the relationship of the absentee's position to the level of output and on the duration of the absence. Output may not fall, however, if the remaining workers compensate for the absentee by being more productive. The effects of a fall in production can be analyzed in an analogous fashion to the cases of the strike and labour turnover.

As with these two other conflict forms, not all the fall in output is necessarily "lost". A possibility with absence is that the worker on return to work will be more productive and so help to recoup production at no extra cost. If the source of the conflict is still present he may, however, be less productive with the opposite result. In order to maintain or recoup output extra overtime may be worked. Alternatively, output may be maintained by the use of contingent labour employed specifically to guard against the effects of absence. In either case, the unit cost of output is increased in relation to the no absence situation.

Absence involves other expenses in addition to any associated with the production effects. These may include the costs of record keeping, of devising absence pay schemes (such as those for sick pay) and so on. A further cost is incurred if the worker is paid a wage or other benefit during his absence.

Employers may react to absence by trying to reduce its future incidence. Some of the measures will parallel those used in relation to turnover, e.g. a change in factor mix,

recruitment of workers with lower propensities to be absent and an increase in the attractiveness of the job (although this may increase the ability to be absent). All these measures involve additional costs. The employer may also seek to penalize absentees by, for example, demotion or dismissal.

The most obvious effect of absence on the worker concerned is a foregoing of earnings. Not all these, however, are necessarily "lost". They may at least in part be made up through the working of extra overtime on return to work. In seasonal or contract-type industries the absence may merely extend the season or contract period and so only postpone the payment of wages. In any event not all absence involves a reduction in earnings. Some absentees, for example, receive their full wages in the form of sick pay. If, however, absence results in reduced demand for the product or in a change in factor mix, the worker's future earnings and employment opportunities may be adversely affected. In going absent though the worker presumably feels that the benefits of so doing will outweigh the costs.

As with other forms of conflict, the magnitude of the effects of absence on the parties involved depends greatly on economic conditions. For the employer, the effects may not be as severe in a recession as in a period of excess demand. But for the worker the reverse may be the case. Also, the effects on the employer will depend not only on the level of absence but also on the nature of absentee's job.

The production effects of accidents are in most respects analogous to those of absence. As opposed to absence, however, an accident may have a more unsettling effect on other workers and so on production. Furthermore, production may be adversely affected if materials or equipment are damaged as a result of the accident.

Accidents may also involve expenses to the employer over and above those normally associated with other types of absence. Unit cost of output may increase if workers are involved in assisting during or after the accident. Additional costs will

be incurred if medical personnel are employed or retained. Moreover, the employer generally contributes toward the worker's compensation payments, either directly or indirectly through insurance premiums and may also pay premiums for medical insurance.

As regards effects on the worker, he suffers a drop in remuneration only insofar as compensation payments are less than his normal earnings. If, however, the worker suffers a permanent disability his future earnings and employment opportunities may suffer. Other "income effects" of accidents have already been documented in respect of absence. Accidents may also involve a physical and psychic cost not usually associated with other forms of conflict. As even those accidents related to conflict are not necessarily consciously motivated, it is not possible to generalize about the balance of expected benefits and costs.

The effects of most of the other individual forms of industrial conflict on the parties involved can be analyzed in a similar way to those of turnover, absence and accidents.

b. Effects on parties not directly involved

Most of the third parties potentially affected by collective forms of conflict may also be affected by individual forms. Looking first at third party effects of labour turnover, we note that overall production need not fall because one employer's loss may be another's gain. As with the strike, a fall in output and sales by one enterprise may be offset by an increase for another and the effects are analogous to those traced out in respect of the strike. Turnover, however, has the added dimension of one employer losing a worker to another employer (assuming the leaver stays in the labour force). This is the source of a debate over the wider consequences of turnover.¹⁹ On the one hand are those who stress the cost aspect

19. See Margot Jefferys, *Mobility in the Labour Market: Employment Changes in Battersea and Dagenham* (Routledge and Kegan Paul, London, 1954) pp. 134-135.

of turnover and therefore regard it as wasteful and destructive. On the other, are those who emphasise the role of turnover in facilitating adjustments and growth in the economy. Because turnover may involve a loss to one employer and a gain to another, both arguments are partly right but the truth lies somewhere in between. While the divergent views on the subject have not been reconciled, their respective popularity has tended to change over time.²⁰

The indirect effects of absence are more clear-cut. The third party production effects can be analyzed in an analogous fashion to those of the strike, as can the effects of a change in factor mix. Also as with the strike, the effects on other workers of the enterprise concerned are ambiguous. They may suffer if the availability of work drops as the result of absence, but gain if it increases (the same applies in the turnover case). Absence, however, involves certain expenses not present with the strike. Enterprises supplying material and equipment connected with record keeping, devising of pay schemes and so on stand to gain from absence. But the greater the cost to the employer the more likely his workers will suffer relative to those in enterprises with lower absence rates.

Most of the indirect effects of absence also apply in the case of accidents. But, in addition, accidents involve a social cost in the provision of medical facilities and services. The economic situation of enterprises and workers engaged in providing these facilities and services is, however, a function of the level of accidents.

II. EMPLOYER-INITIATED FORMS OF INDUSTRIAL CONFLICT

Most employer-initiated forms of conflict have potential effects analogous to those of particular worker-initiated forms. The effects of the lockout, for example, are analogous to those

20. See Arthur M. Ross, "Do We Have a New Industrial Feudalism?", *American Economic Review*, Vol. XLVIII, Dec. 1958, p. 903.

of the strike. Also, should a mass notice of dismissal become effective its potential effects are the same as those of the lockout or strike. Priority designated work can also have the effect of a stoppage of work. Other employer actions could have the same effects as a collective restriction on output (e.g. unusually strict enforcement of rules) or a worker quitting the enterprise (e.g. a dismissal) and so on.

III. CONCLUSION

The economic effects of forms of industrial conflict are exceedingly complex and numerous. Those we have studied are but a few of the almost infinitely large number of possible ones. A particular action can result in a series of adjustments and counter-adjustments in the economy which spread further and further away from the original source of the conflict. The multiplicity of effects alone makes the task of assessing the net effect of an action on a party very difficult, a task further complicated by the fact that both costs and benefits are often involved. In most cases the apparent net effect on a party will differ markedly from the actual net effect.

An even more difficult task is to measure the overall net effect on all parties directly or indirectly involved. Normally some parties will be made "better off" and others "worse off". We could possibly adopt the Kaldor-Hicks approach and say that overall "welfare" or "well-being" is improved if the gainers can potentially more than compensate the losers.²¹ In practice, however, it is not possible to identify all the gainers and losers, let alone find out how much is required to compensate the losers.²²

Our discussion up until now has been at a general level and has provided the theoretical framework for subsequent chapters which will be concerned with three New Zealand

21. See I.M.D. Little, *A Critique of Welfare Economics* (Oxford University Press, London, 2nd ed., 1957) Ch. VI.

22. See *ibid.*, p. 95.

industries, namely, meat freezing, building and construction, and waterfront. In Part 2 the economic, technical and organizational environments of these industries are outlined. This information is necessary for an understanding of the nature of these industries and of the factors which influence conflict in them. In Part 3 the conflict patterns of the industries are first placed within a national perspective. Then for each industry the conflict pattern is analyzed in detail and possible factors shaping it are evaluated. Concluding observations are made in Part 4.

PART 2

THE ECONOMIC, TECHNICAL AND

ORGANISATIONAL ENVIRONMENTS

Chapter V

THE MEAT FREEZING INDUSTRYI. THE DEFINITION OF THE INDUSTRY

The meat freezing and preserving industry is defined for purposes of the industrial production statistics as follows:

Industry 200 - Meat Freezing and Preserving:

The industry comprises establishments primarily engaged in the slaughtering of cattle, sheep, lambs, pigs, calves, and other animals for export and for local consumption.¹

Of the 48 establishments in the industry in the 1972-73 production year,² 38 were meat export slaughterhouses (meat export works),³ three were abattoirs approved by the Minister of Agriculture and Fisheries to export certain classes of stock (export abattoirs) and the remaining ones were largely game packing houses. The industry does not include such slaughtering facilities as abattoirs (other than export abattoirs), rural slaughterhouses and custom killing premises. Nor are most meat packing houses included.

In this study we will concentrate largely on meat export works, although reference will be made to export abattoirs. As

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1. This definition is broadly according to the United Nations Standard Industrial Classification of All Economic Activities (Statistical Papers, Series M, No. 4, Rev. 1/Add. 1). At the time of writing it has not been brought into line with the revised New Zealand Standard Industrial Classification which, following UN Stat. Pap., Ser. M, No. 4, Rev. 2, defines the industry more broadly to include also abattoirs, rural slaughterhouses and poultry slaughterhouses among others (see NZSIC No. 3111).
 2. The production year for this industry in the main ends in September.
 3. One of these, Wellington Meat Export Co. Ltd., Ngauranga, ceased operations in 1973.

the name suggests, meat export works are concerned primarily with exports although they may also supply meat for the local market. They are generally integrated establishments carrying out a wide range of processing operations. Major products include various types of frozen meat, canned meats, meat extract, tallow, hides and pelts, slipe wool, manures and stock meals.

II. ASPECTS OF THE INDUSTRY

1. Output

The gross value of output for meat freezing and preserving in 1972-73 was \$844.7 million. This represented 12.0% of GNP⁴ and 18.3% of the total gross value of factory production. It has by far the largest value of output of any manufacturing industry and of industries generally, it is exceeded by only building and construction.⁵ The industry's value of output grew steadily during the decade ending 1972-73, except for 1966-67 when it fell. Over this decade it increased by about 187%. The volume, as opposed to value, of production has been fairly steady in recent years, the meat freezing and preserving volume of production index increasing by only 29.3% in the decade. The composition of gross value of output in 1972-73 was as shown in Table 1.

The numbers of stock slaughtered by the industry in 1972-73 were 25.9 million lambs, 8.6 million sheep, 1.6 million cattle, 1.0 million calves, 0.3 million pigs and 0.1 million goats. While abattoirs are expressly concerned with supplying the local market, the meat freezing industry in 1972-73 supplied 15.6% of the graded cattle killed for local consumption, 72.5% of calves, 47.6% of sheep. 70.6% of lambs, and 39.5% of pigs. With the exception of pigs, over 80% of the industry's kill of each stock category was exported. The meat freezing

4. The value of output figure is for the meat freezing production year, i.e. ending September, while the GNP figure is for the financial year, i.e. ending the previous March.

5. Not counting agriculture as a single industry.

TABLE 1
Value of Products, 1972-73
 \$(000)

<u>Meat -</u>		
	Lamb	209,415
	Mutton	104,170 ^a
	Beef	267,976
	Veal	11,219
	Pork	11,304
	Offals	37,754
	Other meat	7,621
		<hr/> 649,459
<u>By-products -</u>		
	Casings and bungs	13,289
	Pelts	63,239
	Hides and skins	26,658
	Wool	57,632
		<hr/> 160,818
<u>Boiling-down products -</u>		
	Fats and oils	13,222
	Manures	2,491
	Stock meals	13,163
	Other boiling-down products	282
		<hr/> 29,158
<u>Other products</u>		<hr/> 6,697
		<hr/> 846,132 ^b

Notes: a Includes mutton and lamb pieces.
 b Includes products from Industry 205
 - Ham and Bacon Curing amounting to
 \$1.425 million.

Source: Derived from *Monthly Abstract of Statistics*,
 Sept. 1974 (Department of Statistics,
 Wellington).

industry is by far New Zealand's largest earner of export receipts. In the year ended June 1973 its exports were \$714 million, or nearly 41% of the total value of New Zealand produce exports. The value of meat exports as a percentage of meat production for 1971, 1972 and 1973 was 95.8%, 89.6% and 83.1% respectively. Meat industry export receipts rose dramatically in the four years ended June 1973 but fell slightly in the June year 1974.

Establishments in the meat freezing and preserving industry are very large in terms of both value of production and net output (net value added). In 1970-71 nearly 70% of the industry's establishments had gross outputs of over \$5 million, as compared with only 0.9% for all manufacturing establishments. Of the 101 units in New Zealand with outputs of this size, 32 were in meat freezing. The pattern for net output is similar, with 56.5% of meat establishments having net outputs over \$2 million, as compared with only 3.2% of all manufacturing establishments. The 32 establishments with outputs over \$5 million produced 96.8% of the meat freezing and preserving industry's total value of production and 98.0% of its net output. By comparison, the 101 establishments of this size in all manufacturing industry produced only 34.2% and 27.5% of total manufacturing value of production and net output respectively.

Size distributions according to slaughterings of various stock categories are set out in Table 2.

2. Employment

The average labour force of the meat freezing and preserving industry in 1972-73 was 27,317, of which 26,048 were males and 1,269 were females. These figures represented 2.4% of the total labour force, 3.2% of the male labour force and 0.4% of the female labour force respectively. Its labour force is by far the largest in the manufacturing sector, accounting for 11.6% of the sector's employment. The next largest manufacturing labour force in 1971-72 was only 14,393 (in machinery n.e.i.). A number of non-manufacturing industries, e.g. construction, retail trade etc., however, have larger labour forces.

Employment in this industry grew in the decade ending 1972-73 at an annual compound rate of 3.6%, as compared with 1.7% for the manufacturing sector and 1.9% for the total labour force. Female employment in the industry increased at an annual rate of 5.2% as compared with only 2.4% for female employment in manufacturing generally. Employment of males in the industry grew at an annual rate of 3.5% over the decade in

TABLE 2

Size Distributions according to Export Slaughtering Figures,
1971-1972

SIZE GROUP	ESTABLISHMENTS		NUMBERS SLAUGHTERED	
<u>Lamb equivalents^a</u>	No.	%	(000)	%
200,000- 499,999	4	12.1	1,537	4.8
500,000- 599,999	1	3.0	558	1.7
600,000- 699,999	7	21.2	4,532	14.2
700,000- 799,999	2	6.1	1,533	4.8
800,000- 899,999	3	9.1	2,561	8.0
900,000- 999,999	4	12.1	3,819	12.0
1,000,000-1,499,999	9	27.3	11,333	35.5
1,500,000-1,999,999	1	3.0	1,752	5.5
2,000,000-2,500,000	2	6.1	4,265	13.4
Totals	33		31,889	
<u>Beef and vealers</u>				
0- 9,999	6	17.1	33	2.4
10,000- 19,999	8	22.9	125	9.3
20,000- 29,999	5	14.3	121	9.0
30,000- 49,999	7	20.0	278	20.7
50,000- 69,999	4	11.4	232	17.3
70,000- 99,999	2	5.7	189	14.1
100,000- 140,000	3	8.6	364	27.2
Totals	35		1,342	
<u>Bobby vealers</u>				
0- 19,999	9	52.9	57	6.6
20,000- 49,999	2	11.8	53	6.1
50,000- 99,999	3	17.6	257	29.8
100,000- 150,000	0	0	0	0
150,000- 200,000	3	17.6	495	57.5
Totals	17		862	

Notes: a One sheep is equivalent to 1.25 lambs.
Our figure for number of establishments killing bobby vealers is slightly less than that of the Ministry of Agriculture and Fisheries (see Table 6, p. 105).

Source: Derived from New Zealand Meat Producers' Board data.

contrast to only 1.4% for male employment in manufacturing as a whole.

TABLE 3
Average Number of Persons Employed in the Meat
Freezing Industry

	Males	%	Females	%	Total
1963-64	18,403	96.0	762	4.0	19,165
1964-65	18,893	96.1	764	3.9	19,657
1965-66	19,331	95.9	817	4.1	20,148
1966-67	20,055	96.2	801	3.8	20,856
1967-68	21,342	96.2	844	3.8	22,186
1968-69	22,744	96.3	866	3.7	23,630
1969-70	24,305	96.1	978	3.9	25,283
1970-71	24,975	96.0	1,031	4.0	26,006
1971-72	25,619	95.9	1,084	4.1	26,703
1972-73	26,048	95.4	1,269	4.6	27,317

Source: Derived from various *Statistics of Industrial Production* (Department of Statistics, Wellington) and *Monthly Abstract of Statistics*, Sept. 1974.

It can be seen from Table 3 that about 96% of the work-force is male and 4% female. This distribution changed little over the decade, except in 1972-73. The ratio of male to female employment is very high, compared with the manufacturing sector generally, where 27.0% of the labour force is female (1972-73), and with the total labour force in which 29.8% are females (October 1973). But it is not abnormally high when compared with other, not too dissimilar, large manufacturing industries such as butter and cheese and other milk products, brewing, pulp, paper and paperboard, and chemical fertilisers.

The broad occupational breakdown in Table 4 shows that most males in the industry are wage earning employees. Most females are also wage earning workers although a considerable number are in clerical occupations. The broad occupational distribution of female labour in the industry has not changed greatly in the last decade or so. In 1962-63, for example, 56.3% of female workers were wage earning, 42.6% clerical, 1.0% professional or technical and 0.1% managerial.

TABLE 4
Distribution of Employment by Broad Occupational Groupings, 1970-71

Occupational Grouping	Meat Freezing				All Manufacturing			
	Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%
Working proprietors	0		0		748	0.5	109	0.2
Managers, overseers	1,034	4.1	2	0.2	13,636	8.2	849	1.3
Accountants, clerks etc.	1,347	5.4	462	44.8	8,938	5.4	9,325	14.7
Professional, technical	212	0.8	25	2.4	4,354	2.6	441	0.7
Wage earning employees	22,382	89.6	542	52.6	137,908	83.3	52,816	83.1
TOTAL	24,975		1,031		165,584		63,540	

Note: The motor vehicle repair industry has been removed from the 'all manufacturing' figures but these do not incorporate the revisions of the Nov. 1973, *Monthly Abstract of Statistics*.

Source: Derived from *Statistics of Industrial Production, 1970-71*.

The broad occupational breakdown shown in Table 4 gives no indication of the wide range of occupations in the industry. Among the managerial group are works managers and other managers, foremen, boardwalkers and leading hands. Most types of clerical occupations are represented in the clerical group. The professional and technical group includes chemists, professional engineers, laboratory technicians and so on. Managerial, clerical and professional employees are salaried and have permanent status.

Most wage earning workers are either members of freezing workers' unions or are tradesmen belonging to their own unions. Among tradesmen, most of whom are permanent workers, are factory engineers, fitters, electricians, motor mechanics, carpenters, plumbers, bricklayers, engine drivers and painters. Other groups not represented by freezing workers' unions are shift engineers, canteen workers and retail shop butchers.

Meat export works and abattoirs are typically large employment units. In 1970-71, 34 (85%) of the 40 such plants had labour forces of more than 200 workers, and 27 (58.7%) employed over 500 workers. By comparison, only 2.2% of establishments in the manufacturing sector as a whole employed over 200 workers and only 0.8% more than 500. In that year, seven of the 11 manufacturing establishments employing over 1,000 workers were meat export plants, the largest of which is an Auckland plant employing an average of over 1,700 workers. Auckland has other large works, as does Hawkes Bay and Invercargill. The industry accounted in 1970-71 for 67% of all workers engaged in manufacturing establishments of over 1,000 people.

3. The Companies

There are 25 companies holding meat export slaughterhouse licences and a further three holding export abattoir licences.⁶ This suggests that the industry's ownership is widely held and

6. One company (Auckland Farmers' Freezing Co-operative Limited - AFFCO) holds both an export abattoir and export slaughterhouse licence.

that competition is high. The actual situation, however, is more complex and requires an analysis of ownership patterns. We will pursue this analysis on three fronts, namely, ownership of processing facilities, ownership of the meat and control of marketing channels.

a. Ownership of Processing Facilities

When subsidiary companies are consolidated with controlling companies the number of companies in the industry (including export abattoirs) falls to 19. Together they own 38 meat export works and 3 export abattoirs. The pattern is as shown in Table 5.

From the table we see that five companies own 21 plants or 51% of the total (including export abattoirs).⁷ The concentration of plant ownership, however, is complicated by inter-locks between companies and by the different outputs of the plants.

There are numerous ownership links between freezing companies. For example, Thos. Borthwick and Sons (A'asia) Ltd. own about 20% of the issued capital of Canterbury Frozen Meat Co. Ltd. (CFM) and have a seat on CFM's board of directors.⁸

7. Table 5 incorporates the following subsidiary companies:

<u>Controlling Company</u>	<u>Subsidiary Companies</u>
R. & W. Hellaby Ltd.	Hellaby Northland Ltd. Hellaby Shortland Ltd.
W. & R. Fletcher (N.Z.) Ltd.	Westfield Freezing Co. Ltd. Nelsons (N.Z.) Ltd. Patea Freezing Co. Ltd. Gisborne Refrigerating Co. Ltd. (50% owned by W. & R. Fletcher and 50% by New Zealand interests)
Co-operative Wholesale Ltd.	Ocean Beach Freezing Co. Ltd.
Waitaki Industries Ltd.	South Otago Freezing Co. Ltd. Swift New Zealand Co. Ltd. Nelson Freezing Co. Ltd.

8. For the pattern of interlocking directorates in the industry in 1970 see C.R. Laurent, "Interlocking Directorates in New Zealand", M.C.A. Thesis, Victoria University of Wellington, 1971, pp. 74-8.

TABLE 5

Meat Companies and Meat Export Works

Company	Works	ME No.	Company	Works	ME No.
Thos. Borthwick & Sons (A'asia) Ltd.	Waingawa	1	J.C. Hutton (N.Z.) Ltd.	Frankton	4
	Waitara	2		Eltham	43
	Fielding	32	Southland Frozen Meat & Produce Export Co. Ltd.	Mataura	21
Auckland Farmers' Freezing Co-op. Ltd.	Southdown	36		Makarewa	22
	Horotiu	23	Alliance Freezing Co. (Southland) Ltd.	Lorneville	50
	Moerewa	47			
	Rangiuru	AB48	Gear Meat Co. Ltd.	Petone	11
Canterbury Frozen Meat Co. Ltd.	Belfast	15			
	Canterbury	37	Hawkes Bay Farmers' Meat Co. Ltd.	Whakatu	29
	Fairfield	16			
	Pareora	34	NCF Kaiapoi Ltd.	Kaiapoi	41
N.Z. Refrigerating Co. Ltd.	Islington	14			
	Picton	13	Kiwi Bacon Co. Ltd.	Longburn	25
	Smithfield	17			
	Burnside	19	T.H. Walker & Sons Ltd.	Hawera	9
	Imlay	39			
Waitaki Industries Ltd.	Pukeuri	18	Pacific Freezing (N.Z.) Ltd.	Hastings	52
	Balclutha	26			
	Wairoa	42	Aotearoa Meats Ltd.	Cambridge	AB38
	Stoke	40			
R. & W. Hellaby Ltd.	Otahuhu	24	Fielding Borough Council	Fielding	AB19
	Whangarei	51			
W. & R. Fletcher (N.Z.) Ltd.	Westfield	35			
	Tomoana	10			
	Patea	3			
	Kaiti	8			
Co-operative Wholesale Society Ltd.	Longburn	6			
	Ocean Beach	20			

Note: ME No. denotes the meat export slaughterhouse licence number.
AB denotes export abattoir.

Another example concerns NCF Kaiapoi Ltd. which is largely owned by CFM and New Zealand Refrigerating Co. Ltd. A number of companies are also indirectly linked through common participation in the ownership of other companies. For example, Southland Frozen Meat and Produce Export Co. Ltd. (SFM), Waitaki Industries Ltd. and CFM are indirectly linked through ownership in the Slink Skins network of companies, as are SFM and N.Z. Refrigerating through G.L. Bowron & Co. Ltd. Companies are also linked in ways other than through ownership. Four South Island companies, for example, make use of N.Z. Refrigerating's computer and that company acts as convener in the joint purchasing of certain inputs.

In recent years there has been considerable takeover activity in the industry, most of which has involved Waitaki Industries. After unsuccessful involvement in takeovers and mergers in 1969 and 1971, Waitaki succeeded in 1973 in absorbing Swift New Zealand Co. Ltd. which was 49% owned by the foreign company Deltec International Ltd. In 1974 Waitaki also purchased the South Otago Freezing Co. Ltd., after a takeover battle with SFM. Later in the same year Waitaki and CFM both made bids for Nelson Freezing Co. Ltd. and Waitaki were again successful. In early 1975 SFM made a takeover offer for N.Z. Refrigerating which was rejected. N.Z. Refrigerating and Waitaki then established terms for a merger but, at the time of writing, no merger has taken place.

Four of the companies are overseas-owned, namely, Borthwicks, W. & R. Fletcher (N.Z.) Ltd., J.C. Hutton (N.Z.) Ltd. and the Co-operative Wholesale Society Ltd. (CWS). Together they own 11 works. The remaining companies, owning 30 works, are wholly or predominantly New Zealand-owned.

Thos. Borthwick & Sons (A'asia) Ltd. is a wholly owned subsidiary of Thos. Borthwick & Sons Ltd., a British private company owned by the Borthwick family. W. & R. Fletcher (N.Z.) Ltd. is owned by the Vestey Organisation, another large privately owned U.K. family company. J.C. Hutton (N.Z.) Ltd. is Australian-owned, while the Co-operative Wholesale Society Ltd. is owned by the Manchester-based organisation of the same name.

The overseas-owned firms are private companies as are T.H. Walker & Sons, Pacific Freezing, Aotearoa Meats and Kiwi Bacon. Nine of the remaining 11 New Zealand-owned companies are public ones. Two of these (Alliance Freezing Co., and Hawkes Bay Farmers' Meat Co.) are predominantly farmer-owned. Only one freezing company (AFFCO) is registered under the co-operative Freezing Companies Act 1960, its shareholding being almost entirely held by farmers. One export abattoir (Manawatu Combined Abattoir) is owned by a local authority, namely, the Fielding Borough Council.

Table 6 shows the stock categories killed by various works.

Three companies, owning 28.9% of the works, accounted for 27.8% of lamb equivalents⁹ killed for export in 1971-72, 54.3% of beef and vealers and 94.9% of bobby vealers. The three largest beef producers in 1971-72 also ranked the same in terms of bobby vealer production. But only one company was among the three largest producers of all three stock categories.

b. Ownership of Meat and Control of Marketing Channels

There are a number of methods of selling stock available to the farmer. He may sell it to export companies which are either freezing companies or "independent exporters" that do not own killing facilities. The export companies issue a weekly schedule of the prices they will pay for particular types and grades of meat. Prices are generally common to all exporters.¹⁰ It is estimated that about 70% of adult cattle,

9. One sheep is equivalent to 1.25 lambs.

10. The schedule of export prices is continuously reviewed by the New Zealand Meat Producers' Board (NZMPB) which, in extreme cases (e.g. October 1971 and 1974-75), has issued its own schedule. The Meat Board, consisting of six farmer and two government representatives, has the power to control all export meat and also has specific functions in relation to promotion, grading, shipping and the operation of the Meat Industry Reserve Account with the central bank. (See NZMPB Submission No. 1 to the Commission of Inquiry into the Meat Industry, 1973.)

TABLE 6

Categories of Stock Slaughtered at Various Export Slaughterhouses
1971-72

Export Slaughterhouse	ME Number	Lambs and Adult Sheep	Bobby Calves	Larger Calves	Cattle	Pigs	Goats
Moerewa (1922)	47	x	x	x	x	x	
Whangarei (1972)	51			x	x		
Shortland (1906)	24	x	x	x	x	x	
Southdown (1905)	36	x	x	x	x	x	x
Westfield (1916)	35	x	x	x	x		
Horotiu (1916)	23	x	x	x	x	x	
Frankton Jctn. (1915)	4					x	
Kaiti (1902)	8	x	x	x	x		
Wairoa (1917)	42	x		x	x		x
Tomoana (1884)	10	x	x	x	x	x	
Whakatu (1915)	29	x		x	x		
Waitara (1904)	2	x	x	x	x	x	x
Eltham (1916)	43			x	x	x	
Hawera (1908)	9				x	x	
Patea (1890)	3	x	x	x	x		
Imlay (1916)	39	x	x	x	x		
Fielding (1916)	32	x	x	x	x	x	x
Longburn (1890)	6	x		x	x		
Kiwi Bacon (part of Longburn until 1953)	25					x	
Waingawa (1910)	1	x	x	x	x	x	
Gear (1891)	11	x		x	x		
Ngauranga (1892)	12	x	x	x	x		
Picton (1900)	13	x	x	x	x		
Stoke (1909)	40	x	x	x	x	x	
Kaipoi (1916)	41	x					
Belfast CFM (1883)	15	x		x	x	x	
Belfast CFM ex Borthwicks (1916)	37	x	x	x	x	x	
Islington (1886)	14	x	x	x	x	x	
Fairfield (1899)	16	x					
Smithfield (1898)	17	x					
Pareora (1904)	34	x		x	x		
Pukeuri (1914)	18	x	x	x	x	x	
Burnside (1882)	19	x	x	x	x		
Finegand (1912)	26	x		x	x		
Mataura (1896)	21	x		x	x		
Alliance (1960)	50	x		x	x		
Makarewa (1912)	22	x	x	x	x	x	
Ocean Beach (1890)	20	x		x	x		

- Notes: 1. * denotes the category of stock slaughtered at the works listed. The date first established is in brackets.
2. Cambridge - larger calves and cattle; Rangiora - larger calves and cattle; Pacific - cattle (began production in 1974).
3. Shortland is labelled Otahuhu in Table 5, p. 102 and Finegand is labelled Balclutha.

Source: Ministry of Agriculture and Fisheries Submission No. 3 to the Commission of Inquiry into the Meat Industry, 1973 (other than notes 2 and 3).

50% of sheep, 70% of lambs and 10% of pigs are sold on schedule.¹¹ These companies also purchase a small proportion of stock on the hoof (i.e. a price per head as they stand on the farmer's property) or by auction at saleyards.

Farmers have the right under legislation to have stock killed by any export slaughterhouse and the meat, skins, pelts and hides sold to best advantage on the farmer's account. Little meat is sold in individual owner account lots but is pooled together into company pools. An estimated 6% of adult cattle, 15% of sheep and 10% of lambs are sold on owner's account or through company pools.¹² Farmers may also sell their stock through farmer co-operative exporting organisations.

While most freezing companies organise company pools, not all are export companies. Of the New Zealand firms, at least four are processors only, owning little or none of their throughput. An indication of the ownership of throughput is given in Table 7.

TABLE 7
Ownership of All Exported Meat, Excluding Offal, at Time of Slaughter, Seasons Ended 30 September, 1968-72
(percentages)

Type of Ownership	1968	1969	1970	1971	1972
Overseas companies	49.9	48.0	47.7	47.3	47.1
N.Z. owned companies with works	28.4	27.6	27.2	31.2	25.2
N.Z. owned companies with packing house	0.6	0.5	0.4	0.6	1.3
N.Z. owned companies without works or packing house	6.6	7.2	6.8	5.9	6.2
Co-operatives	7.5	8.7	8.9	8.0	8.7
Owner's Account and Company Pools	7.0	8.0	9.0	7.0	11.5
Total	100.0	100.0	100.0	100.0	100.0

Source: New Zealand Meat Producers' Board.

11. NZMPB Submission No. 2 to the Commission of Inquiry into the Meat Industry, 1973, p. 3. See also *ibid.*, pp. 1-5 for a good summary of methods of selling livestock.

12. NZMPB Submission No. 2, p. 4.

Overseas companies own 27% of all works (including export abattoirs) and process about 27% of lamb equivalents, 34% of cattle and vealers and 47% of bobby calves (on the basis of 1971-72 figures). But they tend to own about 47% of all export meat at time of slaughter. Clearly, overseas companies have owned-throughput killed not only at their works but at New Zealand-owned ones as well. The overseas companies with most stock killed at other works are W. & R. Fletcher and Borthwicks, the latter having it killed at 14 works in addition to the three it owns.

It is obvious that at some works not all the meat slaughtered belongs to the company owning the works. This particularly applies to New Zealand-owned companies which own 73% of works but only 25% of meat at time of slaughter. The overseas-owned companies and those New Zealand ones which export meat own a higher proportion of their throughputs than do the companies which are largely processors only.

While the above figures relate to ownership at time of slaughter and not at time of export, it seems that the overseas-owned companies control many of the major marketing channels. They certainly market well over 50% of all export meat. The spokesman for Gear Meat is correct in saying "the meat processing sector is largely controlled by New Zealand owned companies but the procurement of livestock and the final responsibility, if not ownership of the meat and by-products and its marketing, is largely controlled by companies whose ownership lies outside New Zealand".¹³ Members of the Lincoln College Department of Agricultural Economics and Marketing have argued that: "It [marketing of meat] is an area of highly concentrated ownership",¹⁴ and that control of marketing channels is a very important aspect of ownership because it confers on the companies concerned a great deal of power in setting the purchase price of stock bought for processing.

13. Gear Meat Company Limited Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 15.

14. Department of Agricultural Economics and Marketing, Lincoln College Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 42.

It is difficult for new competitors to enter the industry. Economic barriers include the high capital cost of becoming established, stock scarcities, lack of marketing knowledge and outlets, and competition from existing companies. There are also legal barriers, the most important of which is that export slaughterhouses must be licensed. Licences are issued by local authorities with the consent of the Minister of Agriculture and Fisheries. New licences are issued very infrequently, the most recent being to Pacific Freezing (N.Z.) Ltd. in 1972, Hellaby Northland Ltd. in 1969-70 (production began April 1972) and to Alliance Freezing Co. in the late 1950s (opened March 1960). Limited export abattoir licences were issued to Aotearoa Meats in 1969-70 and to AFFCO's Rangiora works in about 1968-69. The Minister's consent is also necessary for the transferal of an export slaughterhouse licence.

4. Capital Stock and Financial Aspects

In financial terms meat freezing companies are very large by New Zealand standards. The following table sets out financial information on the companies listed on the New Zealand stock exchange. They are ranked on each criterion according to their size relative to the 50 largest public companies (based on share market capitalisation on 4 January 1974).¹⁵

TABLE 8
Public Meat Freezing Companies' Financial Information, 1972-73

Company	Shareholders' Funds		Total Tangible Assets		Net Profit After Tax	
	(\$000)	Rank	(\$000)	Rank	(\$000)	Rank
SFM	19,900	17	30,345	25	2,163	20
N.Z. Refrigerating	19,283	18	33,772	22	3,288	14
CFM	12,933	25	21,706	32	2,223	18
R. & W. Hellaby	11,761	27	31,477	23	1,112	33
Waitaki Industries	10,446	32	30,547	24	963	41
Gear Meat	5,146	-	11,865	-	360	-
NCF Kaiapoi	1,376	-	1,831	-	255	-

Source: Derived from various company annual reports and *The New Zealand Economist*, Feb. 1974.

15. See *The New Zealand Economist*, February 1974, pp. 8-9.

Freezing companies are also characterised by marked variations in profits over time as the following table clearly shows.

TABLE 9
Net Profits, 1967-73
\$(000)

Year	Company							
	N.Z. Refrig.	CFM	SFM	Hellaby	Waitaki	Gear	NCF	Kaip.
1967	-260	-18	238	428	325	125		36
1968	1,278	1,059	832	757	431	224		33
1969	1,931	1,564	1,013	1,054	565	295		31
1970	773	373	875	912	522	270		32
1971	419	212	866	904	201	197		66
1972	1,841	1,121	1,640	769	781	275		164
1973	3,288	2,223	2,163	1,112	963	360		255

Source: Various company annual reports and *The New Zealand Economist*.

There are no recent estimates of the market value of capital in New Zealand manufacturing industry. In the absence of alternative measures, we are forced to use the value of capital data published in the *Report on Statistics of Industrial Production* (Department of Statistics, Wellington) which are in terms of book value and suffer from the well-known deficiencies of that valuation system.¹⁶ But they are not likely to be too misleading when used in a comparative fashion. Table 10 gives capital stock and measures of factor intensity for several major New Zealand manufacturing industries.

Meat freezing has by far the largest capital stock of any New Zealand manufacturing industry. The average capital stock per establishment is also very large, being exceeded only in the pulp, paper etc. industry. In 1970-71 the meat industry accounted for 12.5% of the total value of capital in manu-

16. See T.W. Francis, *Capital Formation in New Zealand Manufacturing Industry, 1910 to 1964* (Agricultural Economics Research Unit Technical Paper No. 6, Lincoln College, Canterbury, 1968) p. 4.

facturing generally. Despite this, it is not highly capital intensive, being about the same as manufacturing as a whole.

TABLE 10
Capital Stock and Factor Intensities, 1970-71

Industry	Capital stock ^a	Value of Capital stock per establishment	Value of capital stock per person employed	Rated horse power per person employed
	\$ (000)	\$ (000)	\$	No.
Meat freezing & preserving	154,798	3,365	5,952	6.9
Butter & cheese)				
Milk products)	63,764	311	13,639	16.1
other than)				
butter & cheese)				
Brewing of ale)				
& Stout)	18,455	1,230	12,444	11.9
Malting)				
Pulp, paper & paperboard	74,264	12,377	18,834	72.9
Job & general printing	39,341	108	5,482	2.0
Chemical fertilisers	22,067	1,471	18,812	35.8
Sheetmetal working	30,873	132	4,369	3.8
Motor vehicle assembly	19,225	1,202	3,875	2.5
All manufactur- ing industry	1,239,276	163	5,409	6.8

Notes: a Value of land and buildings, and of plant, machinery and equipment.

Figures for all manufacturing industry are adjusted to exclude the motor vehicle repair industry and incorporate revisions made subsequent to the publication of *Statistics of Industrial Production, 1970-71*. (See Supplement to the Nov. 1973, *Monthly Abstract of Statistics*.)

Source: Derived from *Statistics of Industrial Production, 1970-71*, and *Monthly Abstract of Statistics*, Nov. 1973.

As can be seen from Table 11, the book value of capital stock per worker has increased significantly in the last 15 years or so. When rising prices are taken into account the picture is different (Col. 2), although the ratio still displays a rising trend since 1967-68. This trend in large part reflects the increasing strictness of the standards for cleanliness imposed by the government in its hygiene regulations. The greater stringency of these largely result from requirements of overseas markets.

TABLE 11

Value of Capital Stock per Person Employed in
the Meat Freezing and Preserving Industry
1958-59 to 1972-73

	Col. 1 \$ (Current prices)	Col. 2 \$ (1958 prices)
1958-59	2,347	2,299
1959-60	2,917	2,821
1960-61	3,288	3,119
1961-62	3,335	3,137
1962-63	3,406	3,210
1963-64	3,621	3,334
1964-65	3,781	3,364
1965-66	4,091	3,560
1966-67	4,176	3,530
1967-68	4,054	3,205
1968-69	4,246	3,226
1969-70	5,408	3,724
1970-71	5,952	3,667
1971-72	6,628	3,860
1972-73	6,925	3,822

Note: Col. 2 is Col. 1 deflated by the building and construction wholesale price index with base 1958.

Source: Derived from various *Statistics of Industrial Production; Prices, Wages and Labour Statistics* (Department of Statistics, Wellington), and *Monthly Abstract of Statistics*.

5. Regional Patterns

There are quite distinct regional patterns in stock slaughtering figures. As a rule, South Island works kill more

mutton and lambs than do those in the North Island. Of the 13 works that slaughtered over 1 million lamb equivalents in 1971-72, 10 were in the South Island. The average mutton and lamb kill for South Island works slaughtering these stock categories was about 1,073,450 lamb equivalents in 1971-72, while the North Island average was about 865,550. The Alliance Freezing Co. has the largest lamb equivalent kill with a 1971-72 total of about 2.2 million. Table 12 shows recent regional slaughtering figures for sheep and lambs.¹⁷

17. The regional areas used in Table 12 are as follows:

<u>Auckland</u>	<u>No. of Works</u>	<u>Canterbury</u>	<u>No. of Works</u>
Moerewa		Nelson	
Whangarei		Picton	
Southdown		Kaiapoi	
Westfield		Belfast	
Otahuhu		Canterbury	
Horotiu		Islington	
Frankton (not included in table as processes pigs only)		Fairfield	
Cambridge		Smithfield	
Rangiuru	<u>9</u>	Pareora	
		Pukeuri	<u>10</u>
		<u>Southland</u>	
<u>Hawkes Bay</u>		Burnside	
Kaiti		Balclutha	
Wairoa		Mataura	
Whakatu		Makarewa	
Tomoana		Lorneville	
Hastings (Pacific)		Ocean Beach	<u>6</u>
(not included in table)	<u>5</u>		
<u>Taranaki-Wanganui</u>			
Waitara			
Eltham			
Hawera			
Patea			
Imlay	<u>5</u>		
<u>Wellington</u>			
Fielding ME 32			
Fielding AB 19 (not included in table)			
Longburn ME 6			
Longburn ME 25 (not included in table as processes pigs only)			
Waingawa			
Ngauranga (ceased operat- ions in 1973)			
Petone	<u>7</u>		
NORTH ISLAND	<u>26</u>	SOUTH ISLAND	<u>16</u>

TABLE 12

Regional Slaughtering of Sheep and Lambs for Export

	1971-72				1972-73	
	(000) lamb equiv- alents	%	No. of estab- lishments killing export sheep & lambs	%	(000) lamb equiv- alents	%
Auckland	4,007	(12.6)	5	(15.2)	4,187	(12.8)
Hawkes Bay	5,080	(15.9)	4	(12.1)	4,822	(14.7)
Taranaki)	2,016	(6.3)	3	(9.1)	2,340	(7.2)
Wanganui)	3,616	(11.3)	5	(15.2)	3,605	(11.0)
Wellington						
NORTH ISLAND	14,719	(46.1)	17	(51.5)	14,954	(45.7)
Canterbury	6,916	(21.7)	10	(30.3)	7,470	(22.8)
Southland	10,259	(32.2)	6	(18.2)	10,281	(31.4)
SOUTH ISLAND	17,175	(53.9)	16	(48.5)	17,751	(54.3)
NEW ZEALAND	31,894		33		32,705	

Note: The 1971-72 total differs slightly from that in Table 2.

Source: Derived from New Zealand Meat Producers' Board data and *Annual Reports of New Zealand Meat Producers' Board*.

The regional pattern for cattle and vealer slaughterings is the reverse of that for sheep and lambs. In 1971-72, 13 North Island works had beef kills larger than that of the largest in the South Island (which was about 30,000). The average cattle and vealer kill in 1971-72 for North Island works slaughtering beef was 53,150 and the South Island average only 13,275. An Auckland works has the largest beef kill of between 130 and 140 thousand cattle annually.

Slaughterings of bobby vealers are concentrated even more in the North Island, which accounted for 97.5% of the kill in 1971-72. North Island works killing bobby vealers averaged nearly 76,400 in 1971-72, while those in the South Island

TABLE 13

Regional Slaughterings of Cattle and Vealers for Export

	1971-72				1972-73	
	(000)	%	No. of establishments killing export beef	%	(000)	%
Auckland	635	(47.4)	8	(22.9)	683	(43.8)
Hawkes Bay	180	(13.4)	4	(11.4)	220	(14.1)
Taranaki)	195	(14.5)	5	(14.3)	220	(14.1)
Wanganui)	160	(11.9)	5	(14.3)	179	(11.5)
Wellington						
NORTH ISLAND	1,170	(87.2)	22	(62.9)	1,302	(83.5)
Canterbury	76	(5.7)	7	(20.0)	109	(7.0)
Southland	95	(7.1)	6	(17.1)	149	(9.6)
SOUTH ISLAND	171	(12.8)	13	(37.1)	258	(16.5)
NEW ZEALAND	1,341		35		1,560	

Source: Derived from New Zealand Meat Producers' Board data and *Annual Reports of New Zealand Meat Producers' Board*.

TABLE 14

Regional Slaughterings of Bobby Vealers for Export, 1971-72

	(000)	%	No. of establishments killing export bobby vealers	%
Auckland	574	(66.6)	5	(29.4)
Hawkes Bay	19	(2.2)	1	(5.9)
Taranaki)	200	(23.3)	3	(17.6)
Wanganui)	47	(5.5)	2	(11.8)
Wellington				
NORTH ISLAND	840	(97.5)	11	(64.7)
Canterbury	20	(2.3)	4	(23.5)
Southland	1	(0.1)	2	(11.8)
SOUTH ISLAND	21	(2.5)	6	(35.3)
NEW ZEALAND	862		17	

Source: Derived from New Zealand Meat Producers' Board data.

averaged 3,545. An Auckland province works has the largest bobby vealer kill with a total of over 180,000 in 1971-72.

As regards slaughtering capacity, the daily output of a mutton chain at the peak of the season is up to 3,200 lamb equivalents. The peak number of chains ranges from one for the smallest mutton works to six for the largest, giving an approximate range of daily capacities of 3,200 to 19,200 per works. Only about five works operate a peak of six chains. Whether the daily capacity is achieved depends on several factors and for many works it represents a generally unachieved possibility. The throughput of a beef chain is strongly influenced by the size of the chain, availability of stock and chain speed. A large beef plant has a maximum daily capacity of 900-950 cattle. The largest bobby vealer plants have daily maxima of 7,500-8,000 calves.

Table 15 gives weekly slaughtering capacities on a regional basis for the 1972-73 season.

6. Seasonality

Meat freezing is a seasonal industry and consequently its labour force fluctuates markedly during the production year. The total labour force is normally smallest in October and largest in January, although peaks and troughs tend to vary between regions. In 1970-71 the peak labour force exceeded the trough one by nearly 15,250 workers. (See Table 16)

It is clear that the total surge index displays no definite trend, although the seasonal surge has increased, reflecting the growing labour force. The surge index for males also has no trend, while that for females varies considerably from one year to the next. While the total labour force tends to peak in January, female employment does not peak until April, May or June coinciding with the peak of the beef season.¹⁸

18. Because male employment peaks at a different time from female employment, the male and female seasonal surges in Table 16 do not sum to the total seasonal surge.

TABLE 15

Regional Slaughtering Capacity of Licensed Export Establishments, 1972-73(Weekly capacity possible during peak killing period)
(000)

	Auckland	Hawkes Bay	Taranaki-Wanganui	Wellington	North Island	Canterbury	Southland	South Island	New Zealand
Lamb Equivalents	295.1	271.3	138.1	193.9	898.4	459.0	575.1	1,034.1	1,932.5
Cattle	32.0	11.2	10.0	11.9	65.1	4.3	10.9	15.2	80.3

Source: Annual Report of New Zealand Meat Producers' Board, 1973.

TABLE 16

Seasonal Variation in Meat Freezing Industry Employment

Year (Oct.-Sept.)	Total Employment		Male Employment		Female Employment	
	Seasonal surge No.	Surge index %	Seasonal surge No.	Surge index %	Seasonal surge No.	Surge index %
1961-62	11,930	45.6	11,909	47.3	117	11.1
1962-63	11,199	41.9	11,122	43.3	149	13.1
1963-64	11,306	42.2	11,199	43.5	199	16.7
1964-65	12,219	43.9	12,130	45.4	113	9.5
1965-66	11,799	42.7	11,604	44.1	267	19.6
1966-67	11,969	42.1	11,939	43.8	221	15.9
1967-68	12,903	43.2	12,716	44.7	330	21.1
1968-69	12,991	41.7	12,929	43.6	191	12.0
1969-70	13,392	41.4	13,241	43.0	279	16.6
1970-71	15,249	44.2	15,091	46.1	380	20.0

- Notes:
1. The seasonal surge is the numerical difference between peak and trough labour forces.
 2. The surge index is the seasonal surge expressed as a percentage of the peak labour force.
 3. Figures used in this table are from the Labour Department semi-annual survey of employment and differ from those in Table 3 because of the broader classification used. Since 1971 the revised New Zealand Standard Industrial Classification has been used by the Labour Department so that post-1971 figures are not comparable with those of earlier years.

Source: Derived from various *Statistics of Prices, Wages and Labour*.

The total length of the season at a particular works depends greatly on the categories of stock killed at the works and on its location. The lamb season in the North Island begins about November and is normally over by the following July. It peaks in December although January and February are also months of very high activity. The season follows a

similar pattern in the north of the South Island and in Canterbury province. In south Otago and Southland it is shorter, not picking up until December. There it peaks in March with activity being very high from January to April. The season is again finished by July.

The mutton (mature sheep - ewes, hoggets, wethers, rams) season in the North Island starts in October and peaks in January or February. Slaughtering fall dramatically in April and by May are at a fairly low level. The season in the South Island is generally shorter, getting under way in December or January, peaking in February or March and tapering off by May.

Beef and vealer slaughterings display less seasonal variation than other categories, especially in the North Island. In northern works the beef kill is at a fairly constant level from August to January. It increases in February and peaks in May or June. Plants specializing in beef export production tend to maintain a fairly steady level of slaughterings throughout the year. The beef season is shorter in the South Island, often not getting under way until March. It again generally peaks in May.

In view of the regional variation in slaughtering figures and in length of season, it is not surprising that surge indices also vary considerably between regions, generally being lower the more northern the region. This reflects the more diversified nature of the major northern works, the relatively greater emphasis on beef production and the relatively large number of works producing only beef. In 1971-72 the surge index for the North Island was 39.2%, while that for the South Island was 64.2%. North Island works employed, on average, a little over 500 workers at the trough and about 830 at the peak. South Island works averaged about 250 at the trough and 705 at the peak.

7. Internal Organisation

The internal organisation of freezing works is along

TABLE 17
Regional Surge Indices, 1971-72

Employment district	Peak labour force	Trough labour force	Surge Index
	No.	No.	%
Whangarei	1,036	722	30.3
Auckland	4,522	3,589	20.6
Hamilton	1,474	1,245	15.5
Tauranga	285	125	60.4
Gisborne	633	226	64.3
Napier	379	151	57.5
Hastings	3,001	1,605	46.5
Taranaki	1,205	850	29.5
Wanganui	1,456	806	44.6
Palmerston North	1,585	697	56.0
Masterton	833	560	32.8
Lower Hutt	897	446	50.3
Wellington	390	68	82.6
Nelson	239	182	23.8
Blenheim	305	134	56.1
Christchurch	3,178	1,130	64.4
Timaru	1,274	405	68.2
Dunedin	2,393	761	68.2
Invercargill	4,228	1,166	72.4

Source: Derived from Labour Department (Wellington) data.

departmental lines (see Table 18). Live animals are unloaded from transporters into stockyards. They then enter the mutton or beef slaughterhouse where they are killed, skinned, gutted, weighed and graded (and, in the case of beef, partly dismembered). The carcasses then enter the cooling floor where they are either bagged and despatched to the freezing chamber, or sent to the boning room for processing. Meat is loaded out of the freezers in either carcass or boned and processed form. The blood, gut, skins, etc. from the slaughterhouse are des-

TABLE 18
Example of a Freezing Works' Flow Chart for Mutton and Lamb

START HERE

Note: The CARCASS MEAT flow is the top line reading from left to right. The chain system is described below. The vertical lines show how all the by-products and offal are treated and give a good impression of the complications involved.

The chain system of killing lamb or mutton consists of a moving conveyor which carries the dead sheep, suspended by a hind leg, from the killing box through a trough (to collect the blood) into the main hall. The process is as follows: a man opens up the skin on the hind legs; others open up the skin right down the stomach, brisket and front legs; the shoulders are then cleared and the tongue and head removed; the skin is pulled off; pre-visceral wash and inspection; the carcass is opened up and the viscera removed with the exception of the pluck; the brisket is cut and the pluck removed; kidneys are removed and trimming performed; any defective carcasses go to detain rail; for other carcasses the neck is tied to front legs; they are weighed and graded and then pressure washed; the ticket hole is made. Each motion is carried out by one or more men as the carcass moves slowly along the conveyor chain from the slaughter floor away to the cooling room, being sorted according to grade and brand before being put in a stockinette wrapper and run into the freezing rooms.

Source: Godfrey Harrison, *Borthwicks: A Century in the Meat Trade, 1863-1963* (Hazell Watson & Viney, Aylesbury, Eng., 1963, slightly modified).

patched to various by-products departments, e.g. casings, fellmongery, small goods (edible offals), pelts and hides, manure etc., for processing into a wide range of items.

Stockmen yard and sort animals prior to slaughtering. The slaughtering, legging, skinning and gutting is generally performed by slaughtermen (or butchers). Slaughtermen's assistants or labourers sort the gut, hose and scrape, grade and bag the carcasses. Workers in the boning room are either boners, trimmers or packers. Freezing chambers are manned by freezing chamber hands. The major by-products groups are those in the fellmongery, pelts and hides, casings, small goods and rendering (tallow and manure) departments. Other groups include engine room staff (greasers, firemen, etc.), watchmen, and forklift truck drivers. The main areas of female employment are the boning room and the edible offals department. All of these groups belong to freezing workers' unions and include the seasonal element of the labour force. But not all freezing workers are seasonal employees, some being employed throughout the year even in southern works. Table 19 gives an occupational breakdown of peak and trough labour forces for two large works, one northern and one southern.

III. WORKER AND EMPLOYER ORGANISATIONS

1. Freezing Workers' Unions

Before the 1951 waterfront stoppage, freezing workers' unions were organised on a district basis. The district unions were affiliated to a national body, the New Zealand Freezing Workers' Association, which represented them in matters of national interest. At the height of the 1951 dispute 6,844 freezing workers at 21 works were involved.¹⁹ The freezing industry emerged from the 1951 dispute with 16 separately

19. See Don J. Turkington, "The Trend of Strikes in New Zealand 1946-70: Part II", *Journal of Industrial Relations*, Vol. 15, June 1973, p. 156. See also Michael Bassett, *Confrontation '51: The 1951 Waterfront Dispute* (Reed, Wellington, 1972).

TABLE 19
Plant Occupational Breakdown, 1972-73

Category	Northern works		Southern works	
	Peak of 72-73 season	Trough	Peak of 72-73 season	Trough
<u>Males</u>				
Slaughtermen	181	83	300	150
Slaughtermen's assistants	236	165	140	90
Gut/casings	69	45	68	35
	(Casings dept. only)			
Fellmongery	86	50	70	45
Freezing chamber	120	80	78	50
Smallgoods	138	93	33	20
	(offal & gut)			
Pelts & hides	26	20	18	10
Manure	30	26	14	10
Boning room	195	181	30	30
Stockyard	36	29	15	8
Others	59	42	0	0
<u>Freezing Workers sub-total</u>	1,176	814	766	448
Tradesmen	126	124	42	42
Shift engineers	10	10	6	6
Supervisory	77	77	40	40
Clerical	24	20	20	20
Managerial	10	10	8	8
Other	21	20	15	15
<u>Non-freezing Workers sub-total</u>	268	261	131	131
TOTAL MALES	1,444	1,075	897	579
<u>Females</u>				
Manual	37	30	45	35
Clerical	5	5	10	10
Other	3	3	0	0
TOTAL FEMALES	45	38	55	45
GRAND TOTAL	1,489	1,113	952	624

Source: Management questionnaire (see Chapter X).

registered freezing workers' unions. Through amalgamations the number had fallen to 10 by the early 1960s. There was a New Zealand Freezing Workers' Association comprised of the South Island unions, Taranaki, Whakatu and Gisborne and also a North Island Freezing Workers' Association consisting of the Auckland, Taranaki and Wellington district unions along with Patea, Wanganui (Imlay) and Tomoana.

This structure ended in 1971 with the formation of the New Zealand Meat Workers' and Related Trades Union (NZMWU).²⁰ There are now four freezing workers' unions: the NZMWU, the Auckland Freezing Works and Abattoir Employees' Union (AFWU), the Taranaki Freezing Works and Related Trades Employees' Union and the Tomoana Freezing Works Employees' Union. The last three of these comprise the North Island Freezing Workers' Federation (NIFWF).

a. The New Zealand Meat Workers' Union

Membership of the NZMWU consists of freezing workers and related trades workers. The related trades include abattoirs, bacon factories, meat packing plants, woolscourers and dry rendering plants, although coverage of some is limited to certain industrial districts and to where workers are not covered by the rules of other unions. The vast majority of members are freezing workers.

The national officers are the president, secretary, assistant secretary (all elected by the full membership every three years) and vice-president (elected annually by the national conference). Of these, only the secretary and assistant secretary are full-time officials. The governing authority of the union is the annual national conference, which consists of the national officers and up to four delegates per branch. Management authority between conferences is vested in a national management committee consisting of the national officers

20. Or, more fully, the New Zealand Meat Processors', Packers', Preservers', Freezing Works and Related Trades Union.

TABLE 20

Union Composition

Union	Member sheds	Number of members (Dec.1973)	Union	Member sheds	Number of members (Dec.1973)
<u>NZMWU</u>	1) <u>Wanganui branch</u> Imlay		<u>AFWU</u>	Moerewa	
	2) <u>East Coast-</u> <u>Hawkes Bay branch</u> Kaiti Wairoa Whakatu			Hellaby Northland	
	3) <u>Wellington branch</u> Fielding (Borth.) Fielding (FBC Ab.) Longburn (CWS) Longburn (Kiwi) Waingawa Petone			Hellaby Shortland	
	4) <u>Canterbury,</u> <u>Nelson and</u> <u>Marlborough</u> branch Nelson Picton Kaiapoi Belfast Canterbury Islington Fairfield Smithfield Pareora			Southdown	
	5) <u>Otago and South-</u> <u>land branch</u> Pukeuri Burnside Balclutha Mataura Lorneville Makarewa Ocean Beach			Westfield	
	Totals	<u>26^a</u> <u>17,121</u>		Horotiu	
				Cambridge	
				Frankton	
				Rangioru	
				= 9	<u>5,800</u>
				-	
			<u>Taranaki</u>	Waitara	
				Eltham	
				Hawera	
				Patea	
				= 4	<u>2,189</u>
				-	
			<u>Tomoana</u>	Tomoana	
				= 1	<u>1,335</u>
				-	
				Totals:	
				affiliates	<u>14</u>
				to NIFWF	<u>9,324</u>

Note: a A further shed, Pacific Freezing (N.Z.) Ltd. Hastings, began production in 1974.

Source: Union memberships from *Report of Department of Labour*, G. 1 (Government Printer, Wellington) 1974.

and one representative from each branch.

Each of the branches shown in Table 20 has a structure similar to that at the national level. Each branch has a president, secretary (both elected by the members) and one or more vice-presidents (elected by the branch executive committee). Some of the larger branches also have an organiser. The full-time branch officers are as follows: East Coast-Hawkes Bay secretary, Wellington secretary and president, Canterbury etc. secretary and organiser, Otago-Southland secretary and organiser. Each branch has a committee of management composed of the branch officers, one or more representatives from each meat industry sub-branch and one or more representatives from the related trades section. These committees meet as required, but generally not less than once every three months. Each branch also has a related trades council, composed of one representative from each related trades sub-branch. Unions amalgamating with the NZMWU become branches and continue to exercise the same rights in local administration and finance (within the bounds set by NZMWU rules). The powers and functions of branches, however, are determined by the national committee of management.

Each branch consists of a number of meat industry sub-branches which are the local shed union organisations. Each sub-branch has a president, vice-president and secretary. Sub-branch secretaries often spend a considerable proportion of their working time on union business, with some being full-time. The sub-branch or shed consists of a number of departments each of which elects one or more delegates. Its management committee is called the board of control and is made up of the sub-branch officers plus one delegate from each department. It normally consists of 14 to 19 members. The powers and functions of sub-branches are determined by the branch committees of management. Each branch also has a number of related trades sub-branches the management of which is vested in works committees, the related trades equivalent of boards of control.

b. The North Island Freezing Workers' Federation

The NIFWF is a federation of three autonomous unions. Representatives from each affiliated union meet at an annual meeting and at meetings held every two months. The president, secretary and vice-president are drawn from constituent unions, the president currently from the AFWU, the secretary from the Taranaki Freezing Workers' Union and the vice-president from the Tomoana Freezing Workers' Union.

- The Auckland Freezing Works and Abattoir
Employees' Union

Membership of the AFWU consists of freezing workers and workers in abattoirs and in related trades. The officers of the AFWU are a president, secretary, assistant secretary and southern area officer (all full-time). These officials are elected every five years. The management of the union is vested in an executive committee consisting of the four officials and 18 representatives of the branches.

The structure of the shed union organisations (branches) closely resembles that of the NZMWU sub-branches. Each shed has a president, vice-president and secretary and a board of control consisting of the shed officials and 12 to 18 delegates.

- The Taranaki Freezing Works and Related
Trades Employees' Union

Membership of the Taranaki union consists of freezing workers and workers in abattoirs and bacon factories in the Taranaki industrial district. The union is managed by an executive committee comprising a president and secretary-treasurer (the union officers) and three representatives from each of six branches (four meat works plus the Hawera and Stratford abattoirs). The officers are elected biennially and the secretary-treasurer is full-time.

Each branch has a board of control consisting of a president, a secretary and one delegate from each department (usually 18 members in total). Branches have considerable autonomy with management being vested in the board of control. But they cannot enter into an industrial agreement or submit working conditions to an employer without first obtaining the consent of the union executive committee.

- The Tomoana Freezing Works Employees' Union

The Tomoana union is an autonomous shed union representing freezing workers employed at Nelsons (N.Z.) Ltd. Tomoana works. It has a president (full-time), vice-president and secretary and 27 delegates. Scheduled meetings of the union are held quarterly.

All four unions are parties to the New Zealand Meat Processors', Packers' and Preservers' Freezing Works Award. In the negotiation of this award they combine to form an "action committee" consisting of seven national assessors plus the president of the NZMWU. While the action committee is intended as a "united front" against the New Zealand Freezing Companies' Association (NZFCA) in award negotiations, both the NZMWU and the NIFWF would like to see a different system of union organisation. It is NZMWU policy that all freezing workers' unions should amalgamate to form a single national union. One of the NZMWU's recommendations to the 1973 Meat Industry Commission of Inquiry was "that all Freezing Workers' Unions amalgamate to enable them to make National Agreements with the employers on an equal basis".²¹ In the text of that submission, it seemed to go further in suggesting one organisation to represent not only freezing workers but all workers in the industry.²² The NIFWF, on the other hand, prefers a North Island union and a South Island union, each with separate autonomy, and having a National Liaison Committee to control and advise on issues of national interest and importance. The

21. NZMWU Submission No. 1 to the Commission of Inquiry into the Meat Industry, 1973, p. 26.

22. *Ibid.*, p. 23.

island system of organisation is preferred largely because of differences in killing seasons and classes of stock between the two islands.²³ The 1973 Commission of Inquiry endorsed the NIFWF proposal,²⁴ although at the time of writing its recommendation has not been acted upon.

2. Other Unions

The New Zealand Meat Processors' Award covers the majority of workers in the industry, estimated at approximately 70% of the peak labour force.²⁵ As already indicated, however, there are numerous other occupational groups in the industry. Clerical workers are represented by the New Zealand Freezing and Related Industries Clerical Officers' Union (1,289 members in December 1973) and are covered by the New Zealand Freezing Companies' Clerical Workers' Award. Tradesmen are represented by their respective unions but are covered by a single agreement in respect of rates of pay, namely, the Freezing Industry Tradesmen's Wage Agreement. This agreement is negotiated between the Federation of Labour and the NZFCA and superimposes rates of pay over and above those contained in the respective tradesmen's awards, all other terms and conditions of which continue to apply. Tradesmen covered by the agreement are boilermakers, carpenters and joiners, electricians, motor mechanics, plumbers, bricklayers, engine drivers, factory engineers, plasterers and painters.

Shift engineers, who are in charge of the engine room and boilerhouse machinery and auxiliaries, belong to the New Zealand Institute of Marine and Power Engineers and are covered by the New Zealand Shift Engineers' (Freezing Works) Agreement. Other workers in the industry belong to unions of drivers, retail butchers, and hotel and restaurant workers and are employed

23. NIFWF Submission to the Commission of Inquiry into the Meat Industry, 1973, pp. 16-7.

24. *Report of the Commission of Inquiry into the Meat Industry*, H. 4 (Government Printer, Wellington, April 1974) p. 111.

25. See the Meat Industry Employers' Association Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 17.

under the terms and conditions of their respective principal awards.

An increasingly important group of workers are the meat inspectors, employed by the Ministry of Agriculture and Fisheries (MAF) rather than by freezing companies. Each works has a number of inspectors who enforce the export meat hygiene regulations. They are members of the Public Service Association. Approved MAF meat inspection staffing stood at 1,302 in 1972-73.

3. Employer Organisations

The organisation of employers in the meat industry has undergone substantial change in recent years. Prior to July 1971 employers were organised on an island basis in two associations: the South Island Freezing Companies' Association (SIFCA) and the North Island Freezing Companies' Association (NIFCA). Each association was autonomous, handling all matters of employer concern, including industrial relations. There was, however, an unofficial liaison body termed the "joint executive".

In 1971 one national body, referred to as the Meat Industry Employers' Association (MIEA), was established to handle industrial relations matters. Since 1948 a registered union of employers (the New Zealand Freezing Companies' Industrial Union of Employers) had existed. This title was not officially changed, but for practical purposes the new body discarded it in favour of MIEA. Both SIFCA and NIFCA maintained their own executives and continued to handle all matters other than industrial relations. At this time the joint executive was sometimes referred to as the New Zealand Freezing Companies' Associations.

Since 1 July 1974 the structure has been simplified with the formation of one association responsible for handling all matters of employer interest. The new organisation is the New Zealand Freezing Companies' Association Inc. (NZFCA) and

results from the merging of SIFCA, NIFCA and MIEA. SIFCA and NIFCA no longer exist as such and the MIEA became a division of NZFCA handling industrial relations matters.

Membership of MIEA was confined to employers operating meat export freezing works and/or casing factories and in August 1973 consisted of 21 companies operating 38 works. Its major policy-making body was an executive consisting of one representative from each member company. The executive was supplemented by an industrial committee comprised of members from the association's regions who were continuously engaged in industrial relations. This committee dealt with industrial relations matters as they arose in conformity with the policy laid down by the executive. Some members of the industrial committee were also conveners or chairmen of their respective regional industrial committees which consisted of the works manager and/or industrial officer from each of the works within the region. The association's central office was manned by full-time officers and its main functions included negotiation of principal industry agreements, provision of advice on the application and interpretation of legislation and awards, provision of advocacy for disputes hearings and for conciliation, mediation and arbitration proceedings, and making submissions on labour legislation to government.

4. Joint Bodies

There are few joint bodies of representatives of both worker and employer organisations in the meat industry. For many years the Meat Processors' Award has contained a disputes clause which, from 1963 until recently, made provision for local shed disputes committees and for a national Freezing Industry Disputes Committee (FIDC). The local committees comprised two representatives of the shed union and two of the employer concerned. Works disputes not resolved directly between the parties were to be referred to the local committee. But a party could refer a matter directly to the FIDC should the other refuse to refer it to the local committee. Similarly, either party could refer disputes not resolved locally to the

FIDC which comprised one union and one employer representative and a mutually agreed chairman. Decisions reached by a majority of the committee were binding on all parties to the dispute subject to a right of appeal to the Court of Arbitration.

The local committees were never used greatly and failed to become important features of the industrial relations pattern. Moreover, the NZMWU displayed a reluctance to refer disputes of the FIDC. In the 11 years ending 30 June 1973 branches now belonging to the NZMWU referred only 65 disputes to the national committee, while unions now affiliated to the NIFWF referred 297.²⁶ The national committee ceased to operate in 1973 when the NZMWU failed to agree with the employers on a new chairman. The 1973 Commission of Inquiry saw this failure to agree as probably being due to the union's desire to obtain a change in the disputes system.²⁷ In one of its submissions to that Commission the NZMWU argued for the formation of local disputes committees to decide on disputes of local significance, and of a national committee, to be appointed by the Minister of Labour, to decide on disputes of national interest. The Commission however recommended the formation of four regional disputes committees and a national committee. The Meat Processors' Award of October 1974 incorporates this recommendation.

26. See NZMWU Submission No. 1, p.7.

27. *Report of the Commission of Inquiry into the Meat Industry*, p. 105.

Chapter VI

THE BUILDING AND CONSTRUCTION INDUSTRYI. THE DEFINITION OF THE INDUSTRY

The highly diverse nature of the building and construction industry can be seen from the following New Zealand Industrial Standard Classification definition.¹

Code No. 5000 - Construction

Trade contracting and sub-contracting such as carpentry and joinery, plumbing, bricklaying, stone and tile setting, plastering, painting, paperhanging, floor-laying, electrical, roof tiling and fixing, drainlaying; others engaged in operations carried out on the site of any building and construction work; architectural, civil engineering, and other activities concerned with designing and planning where employed by building and construction firms; hire of construction equipment with drivers (e.g. earthmoving equipment) (without drivers, in Group 8330). Include: trade contracting such as, construction, altering, repair and maintenance, or demolition of buildings; constructing, altering and repairing railways, highways, roads, streets, bridges and viaducts; harbour works, wharves etc., waterways; airports; communication systems such as telephone and telegraph lines, radio, television and cable installations; dams, soil conservation, flood control, hydro-electric plants and other electrical generation plants; electric-power supply lines and electrical distribution; recreation areas, swimming pools, marine construction, pile-driving; land draining and reclamation, irrigation, land clearing, and preparation for farms or

1. This definition follows the United Nations Standard Industrial Classification of All Economic Activities (Statistical Pap., Ser. M, No. 4, Rev. 2) and replaces that in UN Stat. Pap., Ser. M, No. 4, Rev. 1/Add. 1. The two definitions are similar.

other industrial activities or land development; construction of water-supply, storm-water drainage, sewerage, and sanitation works, including well-sinking. Exclude: tree clearing, felling, stumping (in Group 1220); landscape gardening, with or without tree felling (in Group 1110 N.S.). Include businesses primarily engaged in performing mining services on a contract or fee basis, such as preparing and constructing mining sites and drilling crude oil and natural gas wells (but exclude firms engaged directly in such activities, not on a contract basis); petrol pump maintenance; heating and ventilating engineering.

It is clear that the industry includes vastly different activities and is far from homogeneous. In a sense it is a "super-industry" combining numerous activities, many of which might in other contexts be regarded as distinct industries in themselves. In this study we shall concentrate on large scale building and construction projects because it is on such projects that most of the industry's conflict, especially that of a collective nature, occurs.

II. ASPECTS OF THE INDUSTRY

1. Output

Value of output figures for this industry are not kept on a regular basis. The only recent figures are for 1963-64 and 1968-69, when censuses of the construction industry were undertaken by the Department of Statistics.² In 1968-69 its gross output³ was \$814.3 million or 22.1% of NNP.⁴ The value of

-
2. See *Census of Building and Construction*, 1963-64 and *Census of Building and Construction*, 1968-69, both published by the Department of Statistics, Wellington.
 3. Value of output or of work done is defined as the total value of output including purchases of materials and sub contract work and represents the value of work put in place.
 4. In 1968-69 gross values of output of other major industries included \$457.3 m. for meat freezing, \$183.4 m. for butter and cheese, \$121.9 m. for machinery n.e.i., \$86.4 m. for motor vehicle assembly and \$75.8 m. for pulp, paper and paperboard.

output net of subcontract work in 1968-69 was \$697.1 million. In terms of value of output it is the largest single industry in New Zealand (not counting agriculture as a single industry).

The significance of the industry arises not only from the value but also the nature of its output, a large part of which is capital formation. Between 60% and 65% of the annual value of domestic fixed capital formation is new capital works, the remainder being the value of new plant, equipment and motor vehicles. The contribution of the industry's activities to national investment is shown in Table 1.

TABLE 1
Estimates of Fixed Capital Formation in Building and Construction

Year ending 31 March	Building and Construction					Total as Proportion of National Income Fixed Capital Formation
			Civil Engineering + Land Development		Total	
	Buildings					
	\$m.	%FCF	\$m.	%FCF	\$m.	
1969	377.10	(41.2)	190.30	(20.8)	567.40	62.0
1970	434.70	(42.7)	194.10	(19.0)	628.80	61.7
1971	519.60	(43.2)	206.50	(17.1)	726.10	60.3
1972	545.00	(38.2)	295.00	(20.7)	840.00	59.0
1973	675.00	(40.7) ^a	344.90	(20.7) ^a	1020.90 ^a	61.5 ^a

Note: a Provisional.

Source: *Stability in the Building and Construction Industry: Report of the National Development Study Group* (Wellington, December 1973).

At a general level there are three producing sectors in the industry, namely, private enterprise, government departments and local authorities.⁵ Their relative contributions to output are shown in Table 2.

5. There is a fourth sector if owner builders are treated separately.

TABLE 2

Value of Work^a done by Producer

Producing Sector	Value of Work			
	1963-64		1968-69	
	\$(000)	Percent	\$(000)	Percent
Private Enterprise	398,472	65.1	521,808	74.8
Government Departments (with own employees)	120,538	19.7	101,118	14.5
Local Authorities (with own employees)	72,224	11.8	61,072	8.8
Owner Builders	20,516	3.4	13,137	1.9
TOTALS	611,750	100.0	697,135	100.0

Note: a Net of subcontract work in the private enterprise and owner builder sectors.

Source: *Building and Construction Census, 1968-69.*

It is clear that most building and construction work is undertaken by private sector producers. Moreover, the contribution of the private sector rose rapidly from 1963-64 to 1968-69, while that of government departments and local authorities fell. The relatively insignificant contribution of the owner builder sector also fell.

The distribution of types of construction work among the sectors for 1968-69 is presented in Table 3.

The most important category of private sector work is construction and alteration of buildings, which accounted for 78% of its gross output in 1968-69. The next most important category is roads, railways, bridges etc. The output of local authorities is also concentrated, the roads, railways, bridges etc. and land drainage, sewerage, river protection etc. categories together accounting for 80% of the sector's output in 1968-69. Government sector activity is concentrated in power development and in roads, railways, bridges etc.

TABLE 3

Value of Work^a done by Type, 1968-69

Type of work	Producing Sector								
	Private enterprise		Local authorities (own employees)		Government departments (own employees)		Owner builder		Total
	\$m.	%	\$m.	%	\$m.	%	\$m.	%	\$m.
Buildings	499.4	93.0	5.6	1.0	}15.4	2.9	15.2	2.8	}537.2
Demolitions	1.4	0.3	0.2	0.0					
Roads, railways, bridges, tunnels, dams, drains, wharves & jetties	60.1	43.6	39.0	28.3	38.8	28.1	0	0	137.9
Land drainage, sewerage, river protection, irrigation schemes, water supply, well drilling	16.3	60.3	9.8	36.3	0.9	3.4	0	0	27.1
Earth moving, reclamation, land development, aerodromes, airstrips	20.3	83.9	2.5	10.3	1.4	5.8	0	0	24.2
Removal of overburden for mines or quarries	1.5	70.6	0.01	0.3	0.6	29.1	0	0	2.2
Plant hire	5.5	90.8	0.5	9.0	0.01	0.2	0	0	6.1
Power, telephone and telegraph line erection, cable laying, electric power stations	14.9	18.7	}3.3	4.1	}43.9	55.2	0	0	}79.6
Other	17.4	21.9							
TOTALS	637.0	78.2	61.1	7.5	101.1	12.4	15.2	1.9	814.3

Note: a Including subcontract work in the private enterprise and owner builder sectors.

Source: Derived from *Census of Building and Construction*, 1968-69.

It is clear from Table 3 that the private sector in 1968-69 was predominant in buildings, earth moving etc., removal of overburden and plant hire. It was also of major importance in roads, etc. and land drainage, etc., as were, to a lesser extent, local authorities. The government was predominant in power construction but private sector construction in this area grew rapidly from 1963-64 to 1968-69.

Among the main types of construction work involving large scale projects are large industrial buildings, motorways and associated roading structures, tunnels and power construction. Project-type activity is undertaken mainly by the private sector and by government.

The size of construction units⁶ in output terms is available only for the private sector. It can be seen from Table 4 that a high proportion of private units had relatively small outputs in 1968-69.

Only 65 private sector units had gross outputs exceeding \$1 million in 1968-69, of which 38 were building contractors and 18 were civil engineering contractors. Similarly, very few units had net outputs of over \$1 million but of those that did, three were building contractors and seven civil engineering contractors. Units engaged in project-type activity are typically much larger in terms of output than those in the private sector generally. Many of the units in the largest size categories of Table 4 were undoubtedly engaged on large scale projects. The 65 units with gross outputs in excess of \$1 million accounted for 26.5% of private sector output and the seven with outputs over \$5 million for 8.9%. In terms of value added, the 10 largest units accounted for 13.7%. The private sector clearly exhibits a low level of concentration of output, although concentration is obviously much greater when only large projects are considered.

6. A unit is defined as a separately conducted activity and one firm may operate several such units.

TABLE 4

Size of Private Construction Units According
to Value of Output, 1968-69

Size Category \$	Gross Value of Output		Net Value Added ^a	
	No. of units	%	No. of units	%
Under 5,000	578	5.9	3,090	31.7
5,000- 9,999	1,553	15.9	2,883	29.6
10,000- 19,999	2,252	23.1	2,078	21.3
20,000- 29,999	1,477	15.2	637	6.5
30,000- 99,999	2,817	28.9	845	8.7
100,000- 199,999	598	6.1	125	1.3
200,000- 499,999	319	3.3	59	0.6
500,000- 999,999	87	0.9	19	0.2
1,000,000-1,999,999	37	0.4	5	0.1
2,000,000-4,999,999	21	0.2	} 5	0.1
5,000,000 and over	7	0.1		
TOTALS	9,746		9,746	

Note: a Consists of salaries and wages paid, interest paid and surplus generated, and represents net output.

Source: Derived from *Building and Construction Census*, 1968-69.

2. Employment

According to the April 1973 Department of Labour employment survey the industry consisted of 64,135 employees and 7,230 working proprietors, giving a total labour force of 71,365. This was the largest for any surveyed industry. Nonetheless, this figure understates the industry's total labour force because the survey covers only units in which at least two persons are engaged and only some "labour-only" contractors,⁷ and because of the lack of a clear dividing line between "on-site" activity and "off-site" process work (which is included in the manufacturing sector). The Labour Department's estimate

7. See *Stability in the Building and Construction Industry: Report of the National Development Study Group* (Wellington, December 1973), p. 34.

of the industry's total labour force at 15 April, 1973 was 89,200 (7.8% of the national labour force). The absolute labour force has been nearly constant for several years, so that as a proportion of national labour force it has been falling.

Employment on a sector basis is available from the *Building and Construction Census* for 1968-69 and can be derived from Department of Labour survey results for other periods. As can be seen from Table 5, the private sector accounts for most of the industry's employment, with government and local authorities following in that order.

TABLE 5

Building and Construction Employment by Sector

	Private		Government		Local Authorities		Total
	%		%		%		
1968-69	50,401	67.9	15,120	20.4	8,734	11.8	74,255
Apr. 1973	45,687	71.2	13,554	21.1	4,894	7.6	64,135 ^a

Note: a Excludes working proprietors.

Source: Derived from *Building and Construction Census*, 1968-69 and Department of Labour data, 1973.

Of those employed in the industry in October 1973 about 63% were engaged in work on buildings and a further 22% in civil and electrical engineering work. A detailed breakdown of employment by type of work is provided in Table 6.

The main types of work undertaken by those engaged on projects are the construction of commercial and industrial premises, civil and electrical engineering for government and other civil and electrical engineering. While projects are large employment units, the total number of workers employed on them is a small proportion of aggregate building and construction employment. In April 1972, for example, project employment was about 4,600 or only 7.4% of the April 1972 surveyed labour force of building and construction.

TABLE 6

Employment by Type of Work, October 1973

Type of work	No. employed	%
Houses and Flats	13,298	24.7
Hospitals, educational and other govt. buildings	5,613	10.4
Other local authority buildings	1,811	3.4
Commercial and industrial premises	12,402	23.1
Farm buildings	353	0.7
Civil and electrical engineering for government	7,096	13.2
Other civil and electrical engineering	4,684	8.7
Maintenance and small jobbing work	8,528	15.9
Sub-total	53,785	100.0
Occupations not available by type of work ^a	18,783	
TOTAL	72,568	

Note: a Includes surveyors and other professionals, clerical, executive etc. and working proprietors.

Source: Derived from *Employment Trends in the Construction Industry*, October 1973 (Department of Labour, Wellington).

Not only are there numerous types of work in the industry but also numerous occupations. An occupational breakdown of the surveyed labour force in October 1973 is presented in Table 7.

By far the largest occupational group is carpenters and joiners, followed by labourers, working proprietors and clerical workers in that order. Groups which have grown considerably over the last decade or so include welders and riveters, surveyors, etc., clerical workers, and lorry and other machine drivers. The proportion of working proprietors

TABLE 7

Occupational Distribution of the Surveyed
Labour Force, October 1973

Occupation	No.	%
Carpenters and joiners	17,500	24.1
Plumbers and drainlayers	3,527	4.9
Bricklayers	823	1.1
Plasterers	760	1.0
Painters and paperhangers	3,592	4.9
Electricians	3,480	4.8
Roof tilers and fixers	349	0.5
Welders, riveters etc.	1,504	2.1
Concrete workers	507	0.7
Bridge carpenters	278	0.4
Lorry drivers	2,476	3.4
Other machine drivers	3,752	5.2
Tunellers	244	0.3
Other skilled workers	3,756	5.2
Other semi-skilled workers	3,054	4.2
Labourers	8,183	11.3
Sub-total	53,785	
Surveyors and other professional	4,045	5.6
Clerical, executive etc.	7,054	9.7
Working proprietors	7,684	10.6
TOTAL	72,568	100.0

Source: Derived from *Employment Trends in the Construction Industry*, October 1973.

in the industry's labour force (10.6%) is considerably higher than in the total labour force (6.6%).

While the full range of occupations is represented on projects, the occupational distribution of the total project labour force differs from that of the industry generally. Projects have a higher proportion of welders and other

engineering workers, tunnellers and labourers than does the industry as a whole, and a lower proportion of carpenters and joiners, plumbers and drainlayers, painters, plasterers, bricklayers and working proprietors. The different occupational distribution reflects differences in the type of work and scale of operations as between projects and the rest of the industry.

New Zealand industry is characterised by small units. In April 1970, 87.1% of all units employed between two and 20 people and only 0.9% employed over 200. Table 8 shows that building and construction units are typically even smaller than those in industry generally. In April 1970, 91.9% of construction units employed between two and 20 people and only 0.4% employed over 200.

It is clear that labour force size distributions differ as among sectors. In the private sector small units are even more predominant than in the industry as a whole. The majority of workers (57.2%) were engaged in the 6,182 units (93.7% of private sector units) employing 20 workers or less. In April 1972, 46 private units employed over 100 persons, of which 26 were building contractors and 9 were civil engineering contractors. Units engaged on project-type activity normally have much larger labour forces than those in the sector generally. Eight of these 46 units were on projects. The largest private unit, employing 774, was a civil engineering one engaged on a project.

In contrast to the private sector, the government one is predominantly made up of large units. In April 1970, nearly 90% of the government labour force was employed in the 50% of units with over 100 persons. A high proportion of government units were engaged in project-type activity. The largest government unit employed 1,441 persons. In terms of size distribution, the local authorities' sector lies between the private and government ones. It is characterised by medium size units (21-100 persons) which accounted for 54.2% of local authority units and 65.2% of its labour force. The largest unit in this sector had 259 employees. Few local authorities'

TABLE 8
Surveyed Units in Building and Construction by Size Category
April 1970

Size Category (persons engaged)	Private		Government		Local Authorities		Total								
	No. units	No. persons	No. units	No. persons	No. units	No. persons	No. units	No. persons							
2- 5	4,503	68.3	7	8.7	31	0.3	16	12.2	60	1.2	4,526	66.5	13,404	19.6	
	1,136	17.2	8,442	16.4	7	8.7	58	0.5	12	9.2	97	2.0	1,155	17.0	
6- 10	543	8.2	7,752	15.0	4	5.0	63	0.5	25	19.1	389	7.8	572	8.4	
11- 20	290	4.4	8,818	17.1	11	13.7	358	3.0	45	34.4	1,431	28.9	346	5.1	
21- 50	79	1.2	5,347	10.4	11	13.7	757	6.3	26	19.8	1,802	36.3	116	1.7	
51-100	34	0.5	4,531	8.8	25	31.2	2,768	23.0	5	3.8	709	14.3	64	0.9	
101-200	10	0.2	2,530	4.9	10	12.5	3,137	26.0	2	1.5	474	9.6	22	0.3	
201-500	1	0.0	808	1.6	5	6.2	4,880	40.5	0	0	0	0	6	0.1	
Over 500															
TOTALS	6,596		51,541		80		12,052		131		4,962		6,807		68,555

Source: Derived from Department of Labour data.

units undertake project-type activity.

The labour force of building and construction is overwhelmingly male, females being only 3.5% of the total in April 1973. The only industrial group with a lower percentage of females is forestry, logging, mining and quarrying with 3.1%. By comparison, 29.2% of the total labour force was female in April 1973. Virtually all female workers in construction are engaged in clerical positions.

3. Employers

a. The Companies

The enterprises engaged in large scale project-type activity are few in number but typically very large in size. Included among them are the following:

- The Fletcher Construction Company Limited

The Fletcher Construction Company Ltd. is the largest construction company in New Zealand and a subsidiary of Fletcher Holdings Limited which, in turn, is one of New Zealand's largest companies. The Fletcher organisation began as a building partnership in 1909 and continued as a family-owned construction business until the formation of the holding company in 1940. This changeover to public company status marked the beginning of a diversification which has resulted in Fletcher participation in most sectors of the New Zealand economy. Nevertheless, construction remains the focus of the group's activities. The Fletcher Construction Company is engaged in both civil engineering and the construction of large industrial and commercial buildings. It operates nationally and has branches in the four main centres. Fletcher Construction's staff was about 1,395 in August 1973.

Major contracts of Fletcher Construction in recent years include the Marsden Point power station (Fletcher, Downer, Wilkins and Davies), the Tasman Pulp and Paper Co. Ltd. pulp

and paper mill (various contracts), the Kapuni natural gas pipeline, the Glenbrook steel mill (Clark, Craig, Fletcher, Coyle with others), intake structures at Tongariro power development, New Zealand Aluminium Smelters Ltd. structures (Tiwai Point) and the boilerhouse at the New Plymouth power project.

The other Fletcher subsidiary directly involved in construction is Fletcher Bernard-Smith which designs and fabricates heavy engineering products and also undertakes field installation and erection. Thus at Kinleith, Fletcher Bernard-Smith had a contract with New Zealand Forest Products Ltd. for mechanical installation work and the fabrication and erection of steel work. It also produces many of the engineering items installed by Fletcher Construction. For example, Fletcher Bernard-Smith produced the five condensers being installed by Fletcher Construction at the New Plymouth power station.

As indicated by the above list of major contracts, Fletchers have been engaged in a number of joint ventures. The joint venture is a common form of organisation in project-type construction, often being formed to undertake a single large contract.

An impression of the size of Fletcher's contracting activities⁸ can be gained by reference to financial and employment statistics. In 1973 these activities had operating assets of \$11.4 million, sales of \$49 million and a labour force of 2,513.

- Downer and Company Limited

Downer and Company is in many ways similar to Fletcher Construction and is the second largest construction company in

8. These include mechanical services, insulation and acoustics; engineering, fabrication and erection; and construction.

the country. It is a subsidiary of one of New Zealand's largest and most widely diversified companies (Cable Price Downer Ltd.) which traces its origins back to 1854. Downer & Co. did not become part of the CPD group until 1954.

The activities of Downer & Co. are wide-ranging and include civil engineering, building, earthworks and quarrying. It has three regional divisions - Northern, Central and Southern - each under the control of a general manager. Major contracts secured by the company in recent years include the Marsden Point power station (Fletcher, Downer, Wilkins & Davies), the western approach of the Kaimai railway deviation, the Tokaanu No. 2 tunnel at Tongariro power development (Downer & Associates), New Zealand Aluminium Smelters Ltd. structures (Downer-Comstock), the Tasman kraft pulp mill Kawerau (Downer-Comstock) and the Carter Oji Kokusaku pulp mill Whirinaki (Downer Pan-Pacific Constructors).

CPD's two engineering subsidiaries, William Cable Ltd. and A. & G. Price Ltd., are also constructors in their own right, engaging in on-site installation of steel structures and fabricated work. A good deal of A. & G. Price's steel installation is undertaken by its associate company, Price-Norsteel (Fabricators) Ltd.

Downer & Co. has been engaged in considerable joint venture work, especially in civil engineering. In the case of the Tokaanu No. 2 tunnel Downer, the sponsoring party, was associated with three overseas partners. It has also been associated in a number of major projects with Comstock International Ltd., a large Canadian construction firm, including the Tiwai Point smelter, the Tasman kraft mill and the Carter Oji Kokusaku mill. In the March year 1973, sales of CPD's construction operations were \$24.7 million and its engineering operations \$8.6 million.

- Wilkins and Davies Construction Company
Limited

Wilkins and Davies was founded in 1940 and, in contrast

to the two companies studied so far, it is relatively small. In 1973 it had net assets of \$2.0 million. Wilkins & Davies is not a subsidiary of a holding company and has few subsidiaries. Its construction activities are wide-ranging and include bridges, buildings and industrial developments, marine works, structural steelwork, general civil engineering and mechanical and electrical engineering. The company operates on a national basis through offices in Auckland, Wellington and Christchurch. Major contracts undertaken in recent years include the Thorndon overbridge Wellington (Wilkins & Davies, Taylor Woodrow), the Marsden Point power station (Fletcher, Downer, Wilkins & Davies), the Manapouri powerhouse (Wisner Becker, Wilkins & Davies), the aluminium smelter wharf Bluff (Wilkins & Davies, Taylor Woodrow), New Zealand Aluminium Smelters Ltd. structures, the Te Anau control structure, and the Shell Gully project Wellington.

Like most construction firms engaged in major projects, Wilkins & Davies have undertaken considerable joint venture work, most notably with Taylor Woodrow of London. This alliance began in 1964 by means of a share exchange and ended with the completion of the Bluff aluminium smelter wharf in 1971.

- Other Companies

Among other companies involved in project-type work is Hawkins Construction Ltd. which undertakes general construction and steel fabrication and manufacture. Its main civil engineering contracts have been at the Kinleith pulp and paper mill of New Zealand Forest Products. Another company is the Italian-owned Codelfa-Cogefar (N.Z.) Ltd. which has been involved in contracts on the Tongariro power development since 1967. The largest private contractor on the development, Codelfa almost exclusively employ Italian workers brought to New Zealand under contract.

b. The Government Sector

- The Ministry of Works and Development

The Ministry of Works and Development (MOW) is the only government department engaged predominantly in building and construction. It administers the State works programme, expenditure against which was \$400.4 million for the year ended 31 March 1973. The Ministry's actual expenditure totalled \$304.7 million and was channelled through eight departmental divisions: architectural; civil engineering; housing; mechanical and electrical engineering; power engineering; roading; town and country planning; water and soil.

There are two broad categories of MOW personnel; staff employees and wage workers. Staff employees are salaried and include virtually all professional, supervisory and administrative personnel and some tradesmen ("staff" tradesmen) and apprentices. Wage workers are paid on an hourly basis and, with the exception of a few "basic code" workers, are covered by the State Services Commission Wage Worker Determination No. 1083. At 31 March 1973 total departmental personnel numbered 13,054 of which 7,123 were staff members and 5,931 were wage workers. The following table shows a breakdown of staff members by occupational groups.

TABLE 9
Ministry of Works and Development Staff Members,
31 March 1973

Engineers	742
Architects	206
Town and country planning	36
Quantity surveyors	130
Scientists and specialist conservation staff	102
Draughtsmen	1,030
Technical support staff	1,056
Administration	1,553
Typists and machinists	238
Miscellaneous services	24
Field and other supervisory staff	1,314
Tradesmen	692
	<hr/>
	7,123
	<hr/>

Source: *Ministry of Works Statement, D. 1*
(Government Printer, Wellington) 1973.

The only available breakdown of wage workers is by type of work. It unfortunately includes 956 staff tradesmen and apprentices.

TABLE 10

Manpower^a employed by Ministry of Works and Development,
31 March 1973

Classification of Works	Departmental Employees	%	Contractors' Employees ^b	Total
Electrical construction projects	2,352	34.2	1,543	3,895
Housing construction	76	1.1	682	758
Public buildings	81	1.2	937	1,018
Railway construction	342	5.0	34	376
Defence construction and maintenance	601	8.7	116	717
Roads	46	0.7	21	67
Irrigation	105	1.5	20	125
Soil conservation and rivers control	52	0.8	9	61
Civil aviation and meteorological services	42	0.6	101	143
Education	56	0.8	680	736
National Roads Board works	1,754	25.5	980	2,734
Mechanical workshops	720	10.5	0	720
Architectural workshops	381	5.5	7	388
General: not included in above	167	2.4	96	263
Winter employment	112	1.6	0	112
TOTAL	6,887		5,226	12,113

Notes: a Includes wage workers, staff tradesmen and apprentices.

b Employees of contractors on works supervised by MOW.

Source: Derived from *Ministry of Works Statement*, D. 1, 1973.

In employment terms, electrical power construction projects are clearly the most important works classification. They accounted for 34.2% of departmental and 29.5% of contractors'

manpower. Such projects are typically very large, the three largest ones accounting for 94.8% of departmental and 68.4% of contractors' employees engaged in electrical construction at 31 March 1973. Since World War II, many of the major construction projects have been power generation ones.

The administration of the government's electrical construction programme is the responsibility of the Ministry's power engineering division which, in March 1973, comprised design office staff and five project establishments. The division designs and constructs power works for the New Zealand Electricity Department. Its head office employed a staff of 107 and the projects a staff of 790 and a work force of approximately 3,470 (of which about one-third were contractors' employees) at 31 March 1973. The five projects underway were the Tongariro power development, the Wairakei geothermal project, the New Plymouth power project, the Upper Waitaki development and the Te Anau control structure of the Manapouri power project. Approximate employment on these projects at 31 March 1973 was:

TABLE 11
Employment^a on Power Projects, 31 March 1973

Project	Departmental Employees	Contractors' Employees	Total
Tongariro	865	404	1,269
Wairakei	41	0	41
New Plymouth	464	481	945
Upper Waitaki	901	171	1,072
Te Anau	45	262	307
TOTAL	2,316	1,318	3,634

Note: a Includes only wage workers, staff tradesmen and apprentices. It is likely that differing treatments of staff members accounts for the slight discrepancies between this table and the previous one.

Source: Derived from Ministry of Works and Development data.

The other major MOW project at present under development is the Kaimai railway deviation. This project, being constructed for the Railways Department by the civil engineering division of the Ministry, is one of the largest undertaken in New Zealand, excluding hydro-electric works. At 31 March 1973 its "direct labour force" (wage workers, staff tradesmen etc.) was 374 of which 342 were departmental employees and 32 contractors' employees.

- Department of Electricity

All State electrical generation construction is undertaken for the New Zealand Electricity Department (NZED) which administers the power developments on completion. It also participates in their construction, but usually only insofar as the electrical engineering and installation of turbines, generators and other electrical equipment is concerned. In some projects, however, NZED involvement in construction is more extensive such as at the New Plymouth power project where it is responsible for designing the electrical switchgear and erecting all mechanical and electrical equipment except the main boilers. Of a total departmental personnel of 4,939 at 31 March 1972, 864 were engaged in new construction (of which about 650 were wage workers, the remainder being staff).

4. The Projects

From the viewpoint of large scale construction and of industrial conflict, the basic unit is the project. The major projects of recent years largely fall into three types, namely, hydro and thermal power developments, large industrial construction and motorway construction. There follows a brief description of those projects which are relevant to our analysis of conflict patterns.

a. Power Developments

- Waikato Power Development

This development consists of eight power stations downstream from Lake Taupo.⁹ Construction on the first of these began in 1920 and the last generating machine was installed in Maraetai II in 1971. All Waikato river stations were constructed mainly by MOW labour. Peak labour force for the whole development was 1,606 in March 1958, of which 1,382 were departmental workers and 224 were contractors' employees. The towns of Mangakino and Atiamuri were established specifically to house the development's workforce.

- The Waitaki Power Development

The other major hydro-electric development dating from the 1920s is on the Waitaki river in South Canterbury. The development consists of two major phases. The mid-Waitaki scheme incorporated Waitaki, Benmore and Aviemore power stations and, for the most part, was based on the hydro-town of Otematata. Construction on Waitaki station began in 1928 and on Aviemore finished in 1969. Peak labour force on the scheme was 1,262 (939 MOW workers and 323 contractors' employees) in June 1964. The Upper Waitaki development began in 1968 and will be completed in the early 1980s. It is based on the hydro-town of Twizel. The development will ultimately link up with the existing Tekapo power station which came into service in 1951. It involves the construction of five canals, four power stations, two dams and other smaller structures. The four new stations will nearly double the total output of stations on the Waitaki river. The labour force employed on the Upper Waitaki scheme numbered 1,108 (946 MOW workers and 162 contractors' employees) in June 1973.

9. Arapuni, Karapiro, Maraetai, Whakamaru, Atiamuri, Waipapa, Ohakuri and Aratiatia.

- Manapouri Power Project

This project arose out of agreements signed between the New Zealand Government and Comalco in 1960 and 1963, under which Comalco is entitled to 480,000 kW of continuous power. The Bechtel Pacific Corporation Ltd. of San Francisco designed the project and managed its construction. Following investigatory studies, work began in 1963. The first of seven generators was commissioned in 1969 and the last in 1971. The project consisted of several phases.

- Investigation shaft (1959-60). This contract was undertaken by Thies Brothers of Australia for Comalco under the supervision of Bechtel.
- Powerhouse access tunnel (1963-65). The powerhouse is 700 feet underground at West Arm, Manapouri, and access is by a 7,000 foot long spiral tunnel. This contract was carried out by the Morrison Knudsen, Downer, Fletcher consortium, the first member of which was an American firm.
- Tailrace tunnel and Wilmot Pass road. Work began on the tunnel in early 1964 and was completed in late 1968. Work on the Wilmot Pass road also started in early 1964 but was completed in early 1966. The contractor for construction of the tailrace tunnel was Utah-Williamson-Burnett a consortium of Utah Construction and Mining Company of the United States, and W. Williamson Construction Co. Ltd. and Burnett's Motors Ltd. of New Zealand. Men working on this phase lived on the liner *Wanganella* moored at Deep Cove.
- Powerhouse contract (1966-69). Construction of the underground powerhouse at West Arm was undertaken by Utah Construction.
- Powerhouse machines (1968-71). The first stage of the contract for installing the turbines, generators and electrical equipment was carried out by the Wismer Becker - Wilkins & Davies joint venture. The American firm of Wismer Becker was employed as

consultants by Bechtel, and as such did not employ any direct labour. The last three machines were installed by Wilkins & Davies alone.

Total project labour force peaked at 1,804 in June 1968. No MOW workers were employed. A development associated with the Manapouri project is the Te Anau control structures. Work began in 1972 and is scheduled to be finished in 1975. The main contractor is Wilkins & Davies and the labour force in June 1973 was 289 (58 MOW workers and 231 contractors' employees).

- Tongariro Power Development¹⁰

Work on this development began in 1964. Its stages are as follows:

- Western Diversion involved diverting the headwaters of the Wanganui River into Lake Roto Aira. The main source of diverted water is the Whakapapa River, which is diverted by means of the $6\frac{3}{4}$ mile long Whakapapa to Tawhitikuri tunnel. Two additional intakes collect further water and pass it to the tunnel which emerges at the Tawhitikuri intake. The water then flows into the Tawhitikuri to Wanganui tunnel. An additional intake collects water from the Mangatepopo River. The tunnels were driven by Codelfa-Cogefar. Work started in 1967 and was completed in late 1971. The Whakapapa intake was built by Fletcher Construction as subcontractors to Codelfa. The other intakes, along with the Te Whaiau and Otamangakau dams and the Otamangakau canal were constructed by New Zealand Roadmakers Ltd. in association with the MOW.
- Moawhango Diversion. The Moawhango River, which provides the major source of water for this diversion,

10. For a detailed description of this development see P.T. McCreight, "Tongariro Power Development", *New Zealand Engineering*, Vol. 28, Nov. 1973, pp. 311-316.

is augmented by the 5½ mile Wahianoa aqueduct. This MOW-constructed aqueduct merges into the Mangaio tunnel which was driven by the Ministry. To divert the water into the Tongariro tunnel the MOW is constructing a dam on the Moawhango River. The 12½ mile Tongariro tunnel is being driven by Codelfa-Cogefar. Construction began in May 1970 and is programmed for completion by the end of 1975.

- Tokaanu project. The Poutu intake is being built by the Ministry on the Tongariro River to collect the water diverted from the Moawhango reservoir. The diverted flow will pass into the Poutu tunnel, which was driven by the MOW, and will then pass along a concrete-lined canal to the Poutu River. At the end of the canal the Poutu dam has been built across the Poutu River. The canal and dam were again MOW projects. The waters diverted from the Tongariro River and from the Western diversion together with the natural outflow from Lake Roto Aira are led to the power station at Tokaanu through the 3¾ mile Tokaanu tunnel which was driven by Downer and Associates in 4½ years. The four penstocks and the powerhouse were constructed by the MOW. The first two generators were commissioned in July 1973.
- Rangipo project. The government has approved the construction of this fourth phase. The MOW will construct the intake structure, powerhouse and associated work, while construction of the headrace and tailrace tunnels will be put to contract.

Peak labour force on the development was 1,797 (909 MOW workers and 888 contractors' employees) in June 1971. The town of Turangi was built to house the workforce.

- Other Power Projects

- Wairakei geothermal power station. Construction began in 1954 and has continued ever since. The

main period of activity, however, was 1955-64. In addition to the MOW, three contractors have been involved - Wilkins & Davies, Waite Tileman and Holland, Hannen and Cubitts - two of which were British firms. Peak MOW labour force was 343 in March 1961, while the peak contractors' force was 405 in June 1957, at which date total project manpower was 636.

- Marsden oil-fired power station. This station was constructed by Fletcher, Downer, Wilkins & Davies under the supervision of Bechtel. Work began in May 1965 and the station was fully commissioned early in 1968. Peak labour force was 661 in June 1966. No MOW employees were engaged.
- Otahuhu gas-turbine power station. Construction began in 1967 and the fourth turbine was commissioned in mid-1970. The NZED, MOW and Milne Construction Co. Ltd. were involved in its construction.
- New Plymouth power project. This station, at present under construction, will be New Zealand's largest thermal one. The MOW is responsible for design and execution of all civil engineering works (with the exception of construction of the boilerhouse). The NZED is designing the electrical switchgear and erecting all mechanical and electrical equipment except the main boilers. The 650 ft. chimney was designed and constructed by Downer & Co., in association with Karrena Feuerungsbau of West Germany. The boilerhouse and main boilers are being erected by Fletcher Construction Co. as subcontractors to International Combustion Ltd., a firm with operations in Britain and the U.S.A. Peak project labour force was 945 in March 1973 (464 MOW workers and 481 contractors' employees). The station produced its first power in late 1973.

b. Industrial Projects

Among the largest industrial projects are those centred on

the pulp and paper mills at Kinleith and Kawerau. Construction began at Kinleith in 1949 and has been virtually continuous ever since. Construction at Kawerau began in 1953 and again has been virtually continuous. The most recent expansion is Project "Tane" which involved the construction of a new pulp mill by Downer-Comstock (1971-74) and of the No. 3 paper machine by Fletcher Construction (1973-75). Peak Downer-Comstock labour force was 1,249 (May 1973) and the peak Fletcher force 600 (October 1974). A further pulp and paper project was that undertaken by the Downer Pan-Pacific Constructors joint venture at Whirinaki over 1971-73.

Another major industrial project was the construction of the Bluff aluminium smelter (1969-71). The overall design and management was in the hands of Kaiser Engineers and Constructors Inc. of the United States but the employer was the New Zealand Construction Co. Ltd. which was established by Kaiser to handle industrial relations matters. Major contractors were Downer & Co., Fletcher Construction, Utah Construction and Wilkins & Davies. Peak project labour force was about 1,000.

The main contractor on the Glenbrook Steel Mill (1967-69) was Dillingham Stevenson, a consortium of Dillingham Corporation of the U.S. and William Stevenson of New Zealand. Among other contractors and subcontractors were Clark, Craig, Fletcher, Coyle; Robert Stone Co. Ltd.; Price-Norsteel and Fletcher Bernard-Smith. Peak project labour force was about 800.

A project which does not strictly fit any of our categories is the Kapuni gas pipeline (1967-70) which was constructed by Fletcher Construction and McConnell Dowell Constructors Ltd. Peak labour force was 492 (6 MOW employees and 486 contractors' employees) in June 1969.

c. Motorway Projects

Among major motorway projects are those associated with the Wellington urban motorway. The Thorndon overbridge and other early stages (1967-71) were constructed by Wilkins &

Davies, Taylor Woodrow and the Shell Gully project (1971-75) by Wilkins & Davies. Peak labour forces on these stages were between 100 and 150.

III. WORKER AND EMPLOYER ORGANISATIONS

1. Worker Organisations

a. The Government Sector

- The New Zealand Workers' Union

MOW and some NZED wage workers belong to the New Zealand Workers' Union (NZWU) which is a general union, its coverage extending to numerous rural occupations such as shearers and shepherds. Its membership in December 1973 was 14,382, a large proportion of whom were rural workers. Of the total, about 6,000 were MOW wage workers and a further several hundred were NZED wage workers. The number employed on project-type construction was about 3,300 (2,700 MOW and 600 NZED).

The union's national officers are the president, vice-president and general secretary, the first two of whom are elected. The general secretary is appointed by the annual conference which is the union's highest deliberative body. Each job with over 60 members has a local union committee consisting of a president (or chairman), vice-president, local secretary, one or two check inspectors and six to eight committeemen all of whom are elected except the secretary who is appointed. On large MOW projects the secretary is full-time and is the officer having most contact with the employer. The representative on the job is the delegate (who may be a committeeman) and the check inspector provides an intermediate level between delegate and secretary.

- The New Zealand Public Service Association

MOW and NZED project staff members may belong to the

Public Service Association.

b. The Private Sector

On private sector projects there may be many unions, among the largest of which are the following:

- The New Zealand Carpenters' Union

Membership of this union in December 1973 was 15,123 of which 13,272 were carpenters, joiners etc., 698 plasterers or tilers, 383 bricklayers, 501 painters, 126 roof tilers and 143 wallboard workers. This membership was spread over all types of construction activity and while significant numbers were employed on projects, the proportion there was fairly low.

The union's national officers are the president, vice-president and national secretary all of whom are elected. It has a branch and sub-branch structure and is represented on the job by a job delegate who is elected by the local members. On large projects the delegate may be the union representative having most contact with the employer.

- Labourers' Unions

The largest labourers' union until recently was the Northern and Taranaki one with a membership in December 1973 of 5,786. It covered a wide range of workers including local body labourers, nurserymen, greenkeepers and so on in addition to builders' labourers, concrete workers, reinforcing steel workers, scaffolders, riggers/steel erectors and tunnellers. Local body labourers formed the largest group. Again, the proportion of members on projects was relatively small with, for example, riggers numbering about 150 and scaffolders 80. The officers were president, vice-president (both elected), secretary, assistant secretary and seven organisers (all appointed by the executive committee). The on-the-job

representative was the delegate (or delegates) who was elected by the local members.

In December 1974 the Northern and Taranaki Union amalgamated with the other labourers' union with significant involvement in projects, namely, the Canterbury, Otago and Southland Labourers' Union which had a membership of 3,000 in December 1973. The other major labourers' union, the Wellington, Nelson, Westland and Marlborough one, remains distinct.

- The New Zealand Engineers' Union ¹¹

This union covers a wide range of workers most of whom are in manufacturing industry. A small proportion of its 43,051 members (December 1973) is engaged in project-type construction, despite the fact that most private sector projects employ a significant number of engineers. The union is a national one structured on a district basis. All three national officers are elected by the national conference, and the district officers elected by the membership of the area. The on-the-job representative is the shop steward (or delegate) who, on projects, is typically the representative most frequently in contact with the employer.

- Boilermakers' Unions

The four boilermakers' unions (Auckland, Wellington, Canterbury and Otago) again have members in manufacturing industry as well as in construction. They are federated into the New Zealand Boilermakers' Federation and had a combined membership of 1,682 in December 1973. They again have a system of delegates at project level.

11. The New Zealand Engineering, Coachbuilding, Aircraft, Motor and Related Trades' Industrial Union of Workers.

- Other Unions

The unions mentioned above are but a few of those represented on projects. Others include unions of electricians, storemen and packers, painters, drivers, plumbers, hotel and restaurant workers and clerical workers.

2. Employer Organisations

Most of the major companies engaging in project construction belong to one of the 18 district unions of employers affiliated to the New Zealand Federated Builders' and Contractors' Industrial Association of Employers (the industrial association of the New Zealand Master Builders' Federation Inc.). Many also belong to the New Zealand Contractors' Federation Inc. and to the New Zealand Employers' Federation Inc. While all three federations are, to varying degrees, involved in the negotiation of agreements and in industrial relations generally, they seldom act on behalf of the major companies in negotiations. This is because many project agreements involve only one employer who negotiates directly with the unions concerned. In some cases an employers' organisation will be represented. As a general rule, the companies handle most industrial relations matters themselves and there is little formal co-ordination between them.

Chapter VII

THE WATERFRONT INDUSTRYI. THE DEFINITION OF THE INDUSTRY

The New Zealand Standard Industrial Classification definition of the waterfront industry is as follows:

Code No. 71231 - Loading and discharge of vessels

Loading and discharge of vessels; stevedoring and wharfingering.

To elaborate, stevedoring involves the loading and unloading of ships and wharfingering the handling and storage of cargo on or in the immediate vicinity of the wharf. Both the stevedoring and wharfingering functions are the work of waterside workers whose employers are termed stevedoring companies, although they are generally wharfingers as well; i.e., they not only load and unload ships but also move cargo across the wharves.

The activities of harbour boards complicate the description of the industry. Control of New Zealand ports is within the jurisdiction of harbour boards which own land, wharves, transit sheds and other structures, and much of the movable equipment used on the wharves such as quayside cranes, fork hoists, mechanical loaders and tractors. Harbour board equipment is usually operated by harbour board employees so that, in practice, some of the work in the industry is performed by watersiders and some by harbour board employees.¹ In this study we are primarily concerned with watersiders, i.e. those

1. A second complicating factor concerns the decision of the former Minister of Labour (Mr. H. Watt) to designate two off-wharf container depots as places where members of the Wellington Waterside Workers' Union should work (see *Evening Post*, 29 November 1973). This designation was, however, subsequently declared invalid (see *Dominion*, 26 May 1975).

workers belonging to port unions affiliated to the New Zealand Waterside Workers' Federation and who are paid through the agency of the Waterfront Industry Commission.²

II. ASPECTS OF THE INDUSTRY

1. Output

The waterfront industry plays a vital part in the transportation of goods entering into both foreign and domestic trade. New Zealand's reliance on the industry is heightened by two factors. First, exports of goods are of greater importance to the economy than is the case for most other countries. In 1967, the value of New Zealand's exports of goods was about 18% of GNP as compared with 13%, 13% and 4% for the United Kingdom, Australia and the United States respectively. New Zealand is not only relatively dependent on exports of goods, but also relies heavily on imports, both for goods used in production and for those entering directly into consumption. She is separated by great distances from her major markets and suppliers so that there are no effective means of transporting goods other than by ship. Second, as the country comprises two main islands, much internal trade is also dependent on shipping.

In quantity terms, 29.26 million manifest tons³ of cargo were handled at New Zealand ports in the year ending 31 December 1972 of which 15.6 million tons were to or from overseas and 13.66 million tons were coastal. Cargo tonnage carried by aircraft, on the other hand, in the same year totalled only 79,640 tons, of which 15,400 tons were carried on international scheduled services and 64,240 tons on domestic scheduled services.

2. See pp.177-185.

3. "Manifest" tonnage expresses in one figure a combination of actual weights and measurements (tons of 40 cubic feet) and cannot be directly compared with "cargo" tonnage which is an expression solely of weight tons of 2,240 lbs. (See *New Zealand Transport Statistics*, 1972 (Department of Statistics, Wellington) p. 10.)

Not all cargo passing through New Zealand ports is handled by waterside workers. Oil, which accounts for one-third of total cargo tonnage, is unloaded by employees of the oil companies. The off-shore loading of ironsands carriers is also not carried out by watersiders. Most of the bulk cement carried by sea is in the same category, as is much of the tonnage carried on New Zealand Railways' inter-island ferries which is handled by Railways Department employees. In the year ended 30 September 1973, total cargo tonnage was 31.85 million manifest tons while tonnage handled by waterside workers was only 12.79 million tons.

New Zealand has 20 ports which employ watersiders. While it is often argued that there are too many ports, their number has fallen markedly since 1946 when there were 36, many minor ports having ceased to exist.

The 13 largest ports operate under "permanent conditions" and the remaining seven under "casual conditions". Under "permanent conditions" a minimum weekly wage covering 40 hours at ordinary time is paid whether work is available or not. At five of the seven ports operating under "casual conditions" men are paid two hours daily minimum for attendance at the engagement bureau when no work is available. In all seven cases their remuneration is made up to a weekly guaranteed payment if necessary. The guarantee has for many years been the money equivalent of 90% of 40 hours at ordinary time. "Permanent conditions" does not mean "permanent employment" where watersiders are permanently in the employment of a particular employer or belong to permanent gangs available for hire by any employer.

The 12.79 million tons of cargo handled by watersiders in 1973 consisted of 8.9 million tons of overseas cargo and 3.89 million tons of coastal and trans-Tasman cargo. Its distribution among ports is shown in Table 1.

The main New Zealand ports are clearly Auckland, Mount Maunganui, Wellington and Lyttelton (which together accounted for 67% of the tonnage handled by watersiders). All four

handle significant tonnages of both overseas and coastal goods. Less important but still significant are Napier, Taranaki, Nelson, Bluff and Dunedin - Port Chalmers which, except for the last, handle largely "overseas" cargoes. Whangarei and Timaru also handle substantial tonnages. The remaining ports are considerably smaller and mainly devoted to the coastal trade.

TABLE 1

Manifest Tonnage of Cargo Handled by Waterside Workers,
year ended 30 September, 1973

Port	Overseas tonnage	Coastal and Trans-Tasman tonnage	Total tonnage handled	%
Auckland	2,274,092	915,274	3,189,366	24.9
Mount Maunganui	1,988,604	379,868	2,368,472	18.5
Wellington	724,542	860,896	1,585,438	12.4
Lyttelton	609,629	852,000	1,461,629	11.4
Dunedin	217,134	162,707	379,841	3.0
Port Chalmers	148,625	1,873	150,498	1.2
Whangarei	196,203	115,267	311,470	2.4
Onehunga	0	124,901	124,901	1.0
Napier	656,607	26,512	683,119	5.3
Taranaki	505,743	9,389	515,132	4.0
Nelson	451,002	104,075	555,077	4.3
Bluff	744,534	48,517	793,051	6.2
Timaru	282,335	71,670	354,005	2.8
Opua	18,867	0	18,867	0.1
Gisborne	49,178	15,274	64,452	0.5
Wanganui	963	15,469	16,432	0.1
Raglan ^a	0	2,126	2,126	0.0
Picton	35,303	0	35,303	0.3
Oamaru	115	10,149	10,264	0.1
Greymouth	0	26,313	26,313	0.2
Westport	0	146,166	146,166	1.1
TOTAL	8,903,476	3,888,446	12,791,922	100.0

Note: a The port of Raglan is no longer operating.

Source: Derived from *Waterfront Industry Commission Annual Report*, G. 2 (Government Printer, Wellington), 1973.

TABLE 2
Tonnage of Cargo Handled by Waterside Workers for Selected Years
Manifest Tons (000)

	1946	1950	1955	1960	1965	1970	1973
Auckland	1,117	1,561	2,097	1,989	2,324	2,647	3,189
Mount Maunganui	0	0	0	71	116	2,001	2,368
Wellington	1,261	1,263	1,457	1,164	1,083	1,075	1,585
Lyttelton	403	565	710	837	902	1,065	1,462
Dunedin	254	300	390	371	388	343	380
Port Chalmers	48	79	82	77	66	86	150
Whangarei	0	0	0	0	141	253	311
Napier	184	201	292	336	459	679	683
Onehunga	0	0	0	0	0	184	125
Taranaki	113	286	326	323	398	456	515
Nelson	109	96	100	126	176	454	555
Timaru	134	134	169	200	186	243	354
Bluff	123	136	198	281	348	504	793
Gisborne	61	58	88	76	73	78	64
Wanganui	0	72	107	78	59	26	16
Picton	49	41	44	53	19	32	35
Oamaru	0	0	0	0	0	26	10
Westport	397	293	209	200	152	118	146
Greymouth	299	240	225	195	174	62	26
Opua	0	0	0	30	35	30	19
Raglan	0	0	0	0	0	8	2

Note: Figures for years other than 1970 and 1973 cover only tonnage handled by watersiders under the co-operative contract system. For 1970 and 1973 they cover cargo handled under all classes of contract.

Source: Derived from Waterfront Industry Commission Annual Reports.

From Table 2 it is clear there has been considerable change in tonnage handled at individual ports over time. Ports experiencing rapid growth include Mount Maunganui, Whangarei, Napier, Nelson and Bluff. Among ones experiencing a decline in tonnage are Wanganui and Greymouth.

While total tonnage grew by about 281% over the years 1946-72, the tonnage handled by watersiders grew by only about 155%. This disparity in growth rates was due to the increased importance of oil products in total tonnage handled, to the development of bulk methods of carrying cement and ironsands and to the introduction and expansion of the New Zealand Railways' inter-island ferry service.

2. Employment

The two largest groups of workers on the waterfront are those of watersiders and harbour board employees. The manual work between the ship's interior and the stack of cargo on the wharf is generally performed by watersiders. Likewise, mechanical equipment used aboard ship and furnished by the ship itself (like ship's gear) or by the stevedoring company (like fork hoist or bulldozers) is operated by watersiders. Furthermore, the operations of board-owned quayside cranes are normally directed by watersiders located on the deck of the ship (hatchmen). Such cranes are manned, however, by harbour board employees. To the extent that vehicles used on the wharf are harbour board owned and operated, harbour board employees are also involved in the wharfing function.⁴ At 30 September 1973 there were 6,661 registered waterside workers⁵ (0.6% of the total labour force), while in December of the same year membership of the New Zealand Harbour Boards' Employees' Union was 3,005. As the following table shows, the presence

4. At the container terminals at Auckland, Wellington and Port Chalmers waterside workers and harbour board employees work together in composite gangs of six watersiders to one harbour board employee.

5. This figure is the actual bureau register strength (actual number of waterside workers employed).

of other groups means that total wharf employment is at least 10,900.

TABLE 3
Union Membership on the Waterfront, December 1973

Union	Membership
Shipwrights	231
Tally Clerks	300
Waterside Workers	6,757
Master Stevedores	34
Foremen Stevedores, Timekeepers and Permanent Hands	540
Harbour Boards' Employees	3,005
	<hr/> 10,867

Source: *Report of the Department of Labour,*
G. 1 (Government Printer, Wellington)
1974.

Total employment is in excess of 10,900 because numerous workers engaged in moving cargo on or in the vicinity of the wharf are not covered in the table. These include some employees of stevedoring and shipping companies not members of the unions listed, some members of the storemen and packers' union engaged in loading refrigerated cargo from cool stores and employees of the Waterfront Industry Commission who are directly involved in the administration of waterfront work. (Commission staff was 359 at 30 September 1973.) Furthermore, some workers employed on New Zealand waterfronts are non-registered and do not belong to waterside workers' unions ('seagulls'). The size of the non-registered labour force varies according to the time of year and when registered workers take their holidays (or more generally, according to the availability of registered workers in relation to the tonnage requiring handling). The number of "equivalent" non-registered workers (all ports) for the year ended 30 September 1973 was 146.

The number of registered waterside workers in 1973 was similar to that in 1947. While registered employment displays no marked long term trend it has undergone cyclical variation. Employment peaks occurred in 1951, 1966 and 1972 and troughs in 1954 and 1970. In the immediate post-war years employment

grew considerably, peaking for the period in 1950-51. Following the 1951 stoppage fewer workers were admitted to the bureau registers and actual bureau register strength fell until 1954 when it reached its lowest post-war level. 1955 saw the beginning of a period of sustained growth which peaked in 1966. From 11 December 1967 to 16 September 1970 the Waterfront Conference held a series of meetings, during which it was agreed between the waterside workers' unions and the port employers that few, if any, admissions would be made to port bureau registers. As a result, over the period 31 December 1967 to 30 September 1970 removals from the registers exceeded admissions and the number of registered workers fell. Actual bureau register strength was again reviewed after the making of General Principal Order No. 305⁶ in August 1970 and substantial recruitment was undertaken from early 1971 to January 1972.

In times of labour shortage, non-registered workers may be employed, the number of which can be estimated on the basis of the percentage of total hours which is worked by non-registered workers (for 1947-59) and of total earnings paid to them (for 1960-73). The average number of "equivalent" non-registered workers so estimated for 1947-73 was 449.⁷ While the number fluctuated from year to year, it fell from 489 in 1971 to a post-war low of 146 in 1973.

The distribution of registered workers among ports is shown in Table 4.

The four main ports accounted for 62% of all ports' registered employment at 30 September 1973 and the ports termed "significant" in respect of cargo tonnage (Napier, Taranaki, Nelson, Bluff and Dunedin - Port Chalmers) accounted for a further 26%. As with the volume of cargo, there has been in

6. The general principal order (GPO) is the national agreement covering wages, conditions, hours and so on and is the waterfront equivalent of an award of the Industrial Commission.

7. Combining registered workers with equivalent non-registered workers gives an average total employment for 1947-73 of 7,012.

TABLE 4
Registered Waterside Workers by Ports for Selected Years

	As at 31 December 1946	As at 14 February 1951	As at 31 March 1955	As at 31 December 1960	As at 31 December 1965	At at 30 September 1970	As at 30 September 1973	%
Auckland	1,794	2,198	1,563	1,664	1,741	1,567	1,613	24.2
Mount Maunganui	17	21	40	260	395	541	687	10.3
Wellington	1,777	2,104	1,628	1,548	1,489	1,042	1,163	17.5
Lyttelton	689	750	671	724	742	597	683	10.3
Dunedin	375	350	313	325	323	238	211	3.2
Port Chalmers	234	224	200	225	216	126	133	2.0
Whangarei	15	53	50	56	63	79	102	1.5
Napier	171	275	291	307	331	422	522	7.8
Onehunga	34	40	56	55	98	94	81	1.2
Taranaki	173	289	304	316	312	286	317	4.8
Nelson	75	85	78	100	101	99	118	1.8
Timaru	124	117	129	167	223	231	274	4.1
Bluff	222	250	249	313	393	373	434	6.5
Gisborne	96	80	119	119	122	92	96	1.4
Wanganui	78	74	83	70	58	38	35	0.5
Picton	43	42	47	46	32	29	31	0.5
Oamaru	54	48	45	45	46	43	39	0.6
Westport	84	59	48	50	49	35	31	0.5
Greymouth	127	108	80	55	42	33	25	0.4
Minor Ports	288	268	90	121	165	117	66	1.0
TOTAL ALL PORTS	6,470	7,435	6,044	6,533	6,941	6,082	6,661	100.0

- Notes: 1. The figures for 1946 and 1951 are for union membership (as register strength is not available by ports prior to 1952), and consequently are not strictly comparable with those in the rest of the table.
2. In 1946, 1951 and 1955, Mount Maunganui (Tauranga) was a minor port, as was Whangarei in 1946 and 1951. In those years the figures for these two ports were separated from the minor ports' totals.

Source: Derived from Waterfront Industry Commission Annual Reports.

some cases a considerable change in registered employment. Ports experiencing rapid growth include Mount Maunganui, Whangarei, Napier and Bluff. Among those which have experienced a significant decline in employment are Wellington, Dunedin, Port Chalmers, Wanganui, Oamaru, Westport and Greymouth.

In the early 1960s the minor ports relied heavily on non-registered workers, but most of them have ceased to exist. The only ports in recent years consistently employing a significant proportion of non-registered workers have been Whangarei, Opua, Nelson and Picton. Auckland and Wellington have also employed significant numbers of such workers.

3. The Companies

Firms employing waterside workers are called stevedores.⁸ Some are engaged solely in stevedoring and wharfing (e.g. Leonard and Dingley Ltd. or New Zealand Stevedoring and Wharfing Co. Ltd.), some are shipping or transport companies with a stevedoring function (e.g. Union Steam Ship Co. of N.Z. Ltd.) and others have only a minor and indirect involvement in stevedoring work (e.g. Fletcher Industries Ltd., Newton King Ltd.). In the year ending 30 September 1972, 109 firms or organisations paid wages to waterside workers through the Waterfront Industry Commission.

There are few criteria whereby the size of firms can be measured. It is not possible to categorize firms on the basis of numbers of watersiders employed, as watersiders are not permanently in the employ of any company. One measure that is available is wages payable to waterside workers by the Waterfront Industry Commission on behalf of stevedoring companies, shipping companies, etc. On this basis many firms in the

8. The word stevedore has several meanings, including the firm itself, the firm's representative in charge of the loading or unloading of a ship (or the superintendent), the foreman of a gang, or even the waterside worker. The last meaning is not commonly used in New Zealand.

TABLE 5

Wages Payable by Waterfront Industry Commission
on Behalf of Selected Shipping Companies, Agents etc.,
year ending 30 September 1972

Company	No. of Companies	Wages Payable (\$)	Percentage of Total Wages Payable
Blue Star Port Line (Management) Ltd.		2,354,924	
Mt. Maunganui & Tauranga Stevedores Ltd.		664,198	
N.Z. Stevedoring & Wharfingering Co. Ltd.		836,327	
P. & O. (N.Z.) Ltd.		2,708,277	
Seatrans Consolidated (N.Z.) Ltd.		827,487	
Shaw Savill & Albion Co. Ltd.		1,402,778	
Union Steam Ship Co. of N.Z. Ltd.		3,767,623	
Sub-total - companies with payrolls over \$500,000	7	12,561,614	(58.0)
British Phosphate Commission		442,096	
Holm Shipping Co. Ltd.		316,967	
Japan Line Ltd.		386,621	
Northern Steamship Co. Ltd.		307,199	
Puflett & Smith		401,784	
Russell & Somers Ltd.		412,671	
Waitemata Stevedoring Co. Ltd.		489,704	
Sub-total - companies with payrolls of \$300,000- \$500,000	7	2,757,042	(12.7)
Auckland Stevedoring Co. Ltd.		280,009	
Bay of Plenty Stevedores Ltd.		235,292	
Comalco Ltd.		206,344	
Crusader Shipping Co. Ltd.		202,956	
Gannaway & Co. Ltd.		232,919	
A.R. Guthrey Travel & Shipping Ltd.		277,173	
Leonard & Dingley Ltd.		295,193	
Maritime Container Terminals Ltd.		287,659	
Maritime Services Ltd.		267,991	
National Mortgage Agency Co. of N.Z. Ltd.		277,773	
Receiving & Delivery Services Ltd.		258,663	
Russell & Somers Wellington Ltd.		203,860	
Wellington Stevedoring Co. Ltd.		264,477	
Sub-total - companies with payrolls of \$200,000 -\$300,000	13	3,290,309	(15.2)
Total wages payable - all ports		21,667,194	

Note: Wages covered in this table include only the "waterfront wages" component of the Port Unions' Stevedoring Fund (see later section on the WIC's fund administration function).

Source: Derived from *Waterfront Industry Commission Annual Report, 1972*.

industry are of minor importance. The seven firms with wage bills in excess of \$500,000 together accounted for 58.0% of total wages payable in the September year 1972.

Table 5 shows that overseas shipping companies dominate the industry. But it does not reveal the full extent of their dominance.⁹ First, generally only the shipping companies carry out stevedoring operations in a large number of ports.¹⁰ Most other firms operate at only one or a few ports. Second, the industry is characterised by an elaborate structure of subsidiary and associated companies.

Many of the shipping companies are associated through shipping conferences, the best known of which is the British Conference (also known as the Overseas Shipowners' Committee), composed of P. & O. Steam Navigation Co. Ltd., Shaw Savill and Albion Co. Ltd., Port Line Ltd., and Blue Star Line Ltd.¹¹

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9. In a sense though, the table may overstate wages paid by shipping companies in that it depends on company time-keepers recording their employer's name correctly. Often stevedoring companies will be attributed with only the wharf handling content of the operation and the shipping companies with the ship stevedoring content, even though both aspects are directed by the stevedores on behalf of the shipping companies.
 10. In the year ended 30 September 1972, Blue Star Port Line paid wages at 14 ports, P. & O. at 14, Shaw Savill at 13 and Union Steam Ship Co. at 15.
 11. For a discussion of shipping conferences see B.M. Deakin, *Shipping Conferences: A Study of their Origins, Development and Economic Practices* (Cambridge University Press, London, Department of Applied Economics Occasional Paper 37, 1973). Deakin describes shipping conferences as "associations of owners of freight liners which are suitable for the carriage of 'general' i.e. non-bulk cargo. These owners act together to make common prices for the carriage of goods over the defined routes on which the conference operates. They also act in combination to admit or exclude applicants to conference membership, to share the trade in various ways amongst themselves, to make a common policy on such matters as setting the level of shippers' discounts and rebates..., combating competition from non-members, pooling and sharing earnings, and enforcing these and other agreements which conference members have made with each other." (p. 1) (This description is of a "closed" conference. There are also "open" conferences which may be joined by any shipowner without the consent of existing members. The "closed" variety is more common.)

These lines, along with certain European lines form another conference, the New Zealand European Shipping Association. A third major conference is the New Zealand Eastern Shipping Committee, composed of Crusader Shipping Co. Ltd., Japan Line Ltd., Mitsui O.S.K. Lines Ltd., Royal Inter-ocean Lines and the China Navigation Co. Ltd.¹² While these conferences are primarily concerned with fixing freight rates, obtaining and sharing cargoes etc., their influence extends into stevedoring operations in the form of co-operation among member lines.

Shaw Savill and Albion Co. Ltd.¹³ and P. & O. (N.Z.) Ltd. are both British-owned. Blue Star Port Lines (Management) Ltd. administers Blue Star Line (N.Z.) Ltd. and Port Line (N.Z.) Ltd, which are wholly owned subsidiaries of British parent companies. Union Steam Ship Company of N.Z. Ltd. was purchased by Tasman Union Ltd. from P. & O. on 31 December 1971. Ownership of Tasman Union Ltd. is equally divided between TNT Shipping (N.Z.) Ltd. and New Zealand Maritime Holdings Ltd. TNT Shipping is, in turn, a wholly owned subsidiary of Bulk-ships Ltd. of Melbourne. New Zealand Maritime Holdings is owned by a large number of New Zealand companies and organisations, including several transport companies, e.g. R.A.O. Holdings Ltd., Maritime Services Ltd., Mogal Transportation Ltd., Container Freights Ltd., and Freightways Express Ltd.¹⁴

The major shipping companies own a substantial number of stevedoring and shipping companies. The four members of the British Conference each own a 25% share of New Zealand Stevedoring & Wharfingering Co. Ltd. They also own equal shares of the Crusader Shipping Co. Ltd., although the administration of

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12. In addition to these three major conferences are the Trans-Tasman Freight Conference (members: Union Steam Ship Co., H.C.S. Coasters Pty. Ltd., and Tucker Shipping Pty. Ltd.) and the Trans-Tasman Passenger Conference (members: Pacific Far East Line, Inc., P. & O., Shaw Savill and Union Steam Ship Co.).
 13. Shaw Savill has recently appointed the New Zealand Shipping Corporation as its freight agent. These two companies own 25% and 75% respectively of the New Zealand Line.
 14. Some of these companies are not wholly New Zealand-owned. For example, both Mogal Transportation and Freightways Express are partly owned by Australian companies.

Crusader Shipping's various trades is divided among the principal companies. Furthermore, P. & O. and Shaw Savill each own 50% of Wellington Stevedoring Co. Ltd. and share the ownership of Waitemata Stevedoring Co. Ltd. (now called North Island Stevedoring Co. Ltd.).¹⁵ The stevedoring firm Gannaway and Co. Ltd. was owned by Blue Star Line and Port Line but was recently sold to the New Zealand-owned Owens Group. Subsidiary companies of Union Steam Ship Co. include Holm Shipping Co. Ltd., Anchor Shipping and Foundry Co. Ltd. and H.C.S. Coasters Pty. Ltd.

Of the 27 enterprises listed in Table 5, 10 were, in 1972, either major overseas shipping companies or subsidiaries of these companies. Of the remaining 17, at least three were also foreign owned (British Phosphate Commission, Japan Line Ltd., Comalco Ltd.) and others were partly foreign owned (e.g. Maritime Container Terminals Ltd. was about one-quarter owned by Farrell Lines of America and Columbus Lines of Germany).¹⁶ Of the New Zealand-owned companies, Mount Maunganui and Tauranga Stevedores Ltd. and Seatrans Consolidated (N.Z.) Ltd. were the largest in terms of wages payable. Both companies belonged to the Owens Group, which has recently consolidated its stevedoring activities under the name of United Stevedores N.Z. Ltd. With the exception of United Stevedores, most New Zealand stevedoring companies operate at only one or a few ports.

The "independent" New Zealand stevedoring firms are unlikely to possess true independence from the overseas shipping companies because they depend on the overseas lines for their existence and the lines can withdraw their business if they disagree with the operators' policy. This particularly applies in New Zealand's case because of the high proportion of total tonnage handled which is overseas cargo and because New Zealand,

15. Wellington Stevedoring Company's stevedoring operations are now undertaken by North Island Stevedoring.

16. The Wellington container terminal, which was operated by Maritime Container Terminals, has been acquired by the New Zealand Shipping Corporation which has a 51% share in the new operating company. The remaining shares will be held by container service operators which are mainly overseas shipping companies.

throughout its recent history until the last few years, has had no domestically-owned international shipping company.

III. THE ORGANISATION OF THE INDUSTRY AND EMPLOYER AND WORKER ORGANISATIONS

The waterfront industry is characterised by a complex web of institutional rules and by a diversity of organisations which make, administer or operate under these rules. It has not always been so organised. Waterfront work lends itself to casual employment as the flow of cargo requiring handling fluctuates markedly over time. From the employer's viewpoint the optimum situation is where the amount of labour available is just sufficient to do the work in hand. As the work fluctuates from day to day, so the demand for labour also fluctuates. The resulting tendency was for labour to be casual, being "bought" on a day-to-day basis. The system of employment was that of the "auction block", where employers selected men from those offering themselves for work.¹⁷ The potential for abuse of such a system is obvious. As the supply of labour often exceeded the demand, for a worker to be assured of regular employment he had to in some way ingratiate himself with the employer, usually by demonstrating his ability to work hard over long hours. As a result, fairly regular gangs of physically strong men developed ("bull gangs") which set the pace for other workers. When there was surplus labour, those meeting the employer's arbitrary standards received work, while the rest missed out. The employer depended, however, on the availability of this surplus labour as the amount of shipping, and so the demand for labour, could increase quickly. In busy periods employers would change their selection standards and most or all labour would temporarily be assured of work.

The present institutional structure of the industry is largely a result of the movement away from the "auction block" to a more regular and organised system of employment. A major

17. See *Report of Royal Commission of Inquiry into the Waterfront Industry*, H. 50 (Government Printer, Wellington, 1952) p. 15.

step in that direction occurred with the formation of the Waterfront Industry Commission in 1940. To understand the operation of the industry it is necessary to study this body and other major waterfront organisations and institutions.

1. The Waterfront Industry Commission

The waterfront industry is unique among New Zealand industries in being to a large extent administered by a statutory commission - the Waterfront Industry Commission (WIC).¹⁸ The "commission" form of control dates back to July 1940 when the first commission was formed because of the inability of waterfront employers' and workers' organisations to reach agreement on wages and conditions following the expiration of the award on 30 June 1938 and because of the urgency which the outbreak of war gave to the need for quick turnaround of vessels. The first commission, appointed under War Emergency Regulations, comprised three members on a full-time basis but not representative of either employers or workers.¹⁹ This commission had wide powers of both a judicial and administrative nature. It had the power, for example, to control any wharf, to direct the loading etc. of cargo, to prescribe the conditions upon which any person may be employed in handling cargo, to direct the continuation of any existing methods of employing labour or vary them and so on.

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18. There is a good deal of material on the Waterfront Industry Commission including Waterfront Industry Commission, *The Waterfront Industry Act* (Wellington, 1963); A.E. Bockett, "Administrative Functions and Responsibilities of the Waterfront Industry Commission", address to the Wellington Section of the Institute of Transport, 7 September 1967; Alexander Szakats, *Trade Unions and the Law* (Sweet and Maxwell, Wellington, 1967); and Waterfront Industry Commission, Submission on "Administrative Functions of the Waterfront Industry Commission" to the Royal Commission on Containers, August 1971.
 19. Although its membership was in fact tripartite with the chairman being an ex-conciliation commissioner, a member being a marine superintendent for the Union Steam Ship Co., and the other an ex-secretary of the New Zealand Waterside Workers' Union. (See B.W. Fernandez, "Trade Union Policy and Practice in the New Zealand Waterfront Industry", M.Com. thesis, University of Otago, 1969, pp. 92-3.)

A second commission was appointed on a part-time basis with a chairman and two representatives each of employers and workers. This one operated only from July 1946 to February 1947 when the chairman resigned because of its failure to reach any measure of agreement and because of the refusal of the workers to carry out its decisions. Three more commissions were appointed prior to the present one which dates from the 1953 Waterfront Industry Act. In 1948 there was a partial severance between judicial and administrative functions and in 1951, following the waterfront stoppage, a complete severance between judicial and administrative functions - the Waterfront Industry Tribunal carrying out the former and the Waterfront Industry Commission the latter.

The main functions of the WIC are set out in the 1953 Act as:

a. Engagement of Waterside Labour

The WIC is responsible for the engagement of all registered and non-registered workers and operates labour engagement bureaux at most ports. For every port it keeps a bureau register containing the names of waterside workers as directed by the New Zealand Port Employers' Association (subject to representations from the watersiders' union regarding the men to be enrolled). In practice there is generally close co-operation between employers and unions on the recruitment of workers, with the names of potential recruits often being referred by the Port Employers to the union for perusal. In some ports there are joint employer-union committees to review applications for employment and it is not unknown for the initiative to recruit further labour to come from the union. Each registered worker has a bureau register number and the actual engagement of the worker is effected by exhibiting the numbered bureau discs on engagement boards which indicate the ship, berth, hatch and position in gang to which each worker has been allocated. The worker signifies his acceptance of the engagement by lifting his disc and placing it in a box at the foot of the engagement board, or by reversing his disc on the board. The worker has no choice of job and if he does not

lift his disc he suffers a penalty - usually two working days.²⁰ The period of penalties is laid down in the bureau rules which have been agreed to by the parties in the local port conciliation committee (PCC).

Employers requiring labour lodge a requisition with the bureau stating the number of gangs or men required for a ship or job, the class of work and the time the men are required to start. Labour is allocated in accordance with the bureau rules and in order of priority as agreed by all waterfront employers at the port (where agreement is not forthcoming, the commission has power to determine priority). Subject to priorities for perishable cargoes and passenger vessels, labour is allocated according to time of arrival of vessel in port. The engagement bureau is charged with ensuring so far as is practicable that there is an equalisation of hours for each waterside worker within his classification. The bureau staff maintain a register of hours worked by each man and the customary procedure is for men with the lowest hours to receive the first available job.

Waterfront employers have the right of "hire and fire" in that workers are enrolled on the local bureau register as directed by the New Zealand Port Employers' Association (NZPEA) and the NZPEA is permitted to remove a worker's name from the register. The latter action has the effect of dismissing the worker from the industry. The worker has a right of appeal to the PCC and to the Tribunal. In the five years ending 30 September 1973 the names of 400 men were withdrawn from bureau registers for disciplinary reasons,²¹ of which number 55 submitted appeals to port conciliation committees. Twenty-nine appeals were allowed, 13 were allowed conditionally (such as

20. Notification of the worker is often made by telephone, radio etc. to avoid unnecessary attendance at the labour engagement bureau. Also workers may take special leave under the provisions of Clause 30 of GPO 357. Furthermore, most bureau rules allow a worker to "sign off until further notice". In so doing he must notify the engaging authority of his non-availability before a given time of the day.

21. These include removals because of physical incapacity or medical reasons.

subject to a period of penalty) and 13 were disallowed. One appeal was taken by a worker to the Tribunal and allowed.

Once labour has been allocated to an employer, the men come under the direct control of the employer who, through his superintendents and foremen stevedores, is responsible for supervision. The men are allocated to a gang, the size of which varies according to the type of cargo being handled. A particular gang exists only for the duration of a job. No watersiders are permanently in the employ of a particular employer (unlike superintendents and foremen stevedores who are stevedoring company employees).²² The employer must accept the men allocated to him.

b. Administration of the Central Pay Office and Incentive Contract System

The commission is responsible for the payment of wages to waterside workers and operates central pay offices at the ports to which employers submit time sheets showing hours of employment for each worker and special cargo rates. The time sheet is an authorisation to make payment.

The commission also carries out all administrative work in connection with the incentive contract system, as it did under the now superseded co-operative contract system. Under this latter system, cargo handling was classified according to both the type of vessel and the class of cargo, and contract rates were fixed accordingly.²³ Contract rates were set on a per unit of cargo basis (e.g. tons, bales etc.). The total contract charge for a vessel was fixed as the contract rates were given and the quantity of cargo to be handled at a port is also usually given. Contract rates covered only the

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22. The longest period waterside workers are employed by a particular employer is three months in the case of those working in container and roll on/roll off terminals.
23. See Waterfront Industry Commission, "Co-operative Contracting System: Brief Explanation of Stevedoring Account - Overseas Vessels", mimeographed paper, Wellington, 1961; and Waterfront Industry Commission, *Waterfront Industry Act*, p. 37.

actual cargo working time or "winch time". When cargo was not being handled men were paid on a wage basis. This period was referred to as "delays" or "non-productive time". In arriving at the bonus rate, wages paid for cargo working or winch time were deducted from the total contract charge to give the gang profit. The bonus rate per hour was simply the gang profit divided by total labour hours (winch time and delays). The gang profit, and so bonus rate, was therefore higher, the lower the winch time. The co-operative contract system, intended as a system of payment by results, aimed at providing an incentive to waterside workers to increase the rate of cargo handling and so reduce winch time. But in practice it acted as a disincentive to workers to reduce non-productive time (which was paid on a wage basis) and as an incentive for the check time-keeper, who is a waterside worker keeping cargo working records, to meticulously record non-productive time which reduced the cargo working or winch time and had the effect of increasing the bonus rate.

The deficiencies of the co-operative contract system as an incentive system led to its replacement in General Principal Order No. 305 (1970) by the incentive contract system. The main difference with the new system is that now all hours (both winch time and delays) are paid on a wages basis while the contract charge on a vessel is divided by the total or gross number of hours worked. The result is that the bonus per hour falls as the gross time increases. Since the introduction of the incentive contract system, however, aspects of the former system have returned in the form of certain delays which are deductible from gross time in arriving at the denominator used in calculating the bonus rate.²⁴ Bonus earnings from all vessels are pooled at each port and usually distributed monthly on a pro rata basis.

c. The Provision of Amenities

The 1953 Waterfront Industry Act provides for the appoint-

24. The rationale being that waterside workers should not be penalised for delays which are unavoidable or beyond their control, such as machinery breakdowns.

ment of a National Amenities Committee representing port employers, workers' organisations and harbour boards with the Waterfront Industry Commissioner as chairman. The committee's main function is to authorise the WIC to provide amenities for waterside workers (including waiting rooms, restaurants, canteens and first aid rooms). It also approves expenditure for maintenance of amenities. It has the power to appoint for any port a port amenities committee, consisting of a chairman and such representatives of the interested parties as it determines. The main function of the port committees is to prepare schemes for providing amenities for waterside workers for submission to the national committee. It is the WIC's function to furnish, equip, operate and manage these amenities.

d. First Aid

A further function of the WIC is to train or arrange for the training of waterside workers in first aid. The waterfront has a wide-ranging first aid organisation covering the training in first aid of watersiders, the provision of clinics at the larger ports and the holding of annual inter-port first aid competitions.

e. Statistical Records

The WIC also obtains and compiles information on the waterfront industry, much of which is published in its annual report to Parliament (Appendix to the Journal of the House of Representatives, G. 2). This report includes a survey of the operation of the industry during the year as well as extensive statistical information. The waterfront industry is one of the best documented industries in the country.

f. Fund Administration

The WIC administers several funds, among the most important

of which is the National Administration Fund. A summary of income and expenditure for this fund is shown in Table 6.

TABLE 6
National Administration Fund: Statement of
Income and Expenditure, year ending
30 September 1973

	\$	%
<u>INCOME</u>		
Administrative assessment on Port Unions' Stevedoring Fund	170,568	1.4
National Administration Fund Levy	12,265,842	98.4
Sundry receipts	25,708	0.2
	<u>12,462,118</u>	<u>100.0</u>
<u>EXPENDITURE</u>		
Waterside workers' wages:		
Guaranteed payments -		
Permanent weekly wage ports	4,298,947	34.5
Daily and weekly minimum ports	618,132	5.0
Holiday pay -		
Annual	1,885,399	15.1
Statutory	921,626	7.4
Long-service leave	60,973	0.5
Sundries	528,888	4.2
Payroll tax	159,087	1.3
	<u>8,473,052</u>	
Services and amenities for waterside workers	592,660	4.8
Administration costs	1,832,979	14.7
	<u>10,898,691</u>	<u>87.5</u>
Transferred to Appropriation Account	1,563,427	12.5

Source: Derived from *Waterfront Industry Commission Annual Report, 1973.*

The major source of income to the fund is the National

Administration Fund Levy. This levy, of \$1.50 per worked hour, is payable by employers of waterfront labour to the commission for the purpose of carrying out its functions prescribed in the Waterfront Industry Act 1953.

The waterside worker's income comes from two primary sources: the Port Unions' Stevedoring Fund, and the National Administration Fund. The Port Unions' Stevedoring Fund is the fund through which watersiders are paid when working. Payments from this fund are either in respect of wages (labour wages payable through the WIC on behalf of shipping companies etc.) or bonus payments. In addition, the watersider receives a number of payments when not actually at work - these being paid from the National Administration Fund. The largest of these payments are holiday pay and guaranteed payments.

The other major expenditure of the National Administration Fund is the administration costs of the WIC which is a substantial organisation employing 359 people at 30 September 1973 (of which number, 44 were at head office and 315 at the commission's 15 port offices).

Other funds involving the WIC include:

- (1) Group Endowment Assurance (Employers' Subsidies) Account. A group endowment assurance plan is in operation at all ports administered by the commission. To meet the cost of employers' subsidies, a levy of 2½ cents per paid-hour is payable by all waterfront employers.
- (2) Modernisation Fund Account. This fund is essentially a "co-operation bargain", involving the provision of payments by employers to watersiders in return for their co-operation in implementing not only the letter but also the spirit of general principal orders.²⁵ It provides for payments in respect of

25. V.P. Blakeley describes it as a fund "given in return for the Union's co-operation in a modern approach to waterfront work, which amongst other matters, will enable the employers to introduce new methods of work without feather-bedding on 'manning'". (V.P. Blakeley, "Industrial Relations on the New Zealand Waterfront", mimeographed paper, New Zealand Port Employers' Association, Wellington, 1966, p. 23.)

long-service retirement, retirement on account of sickness or injury, and personal welfare and hardship and is administered by trustees representing the New Zealand Waterside Workers' Federation [3], the New Zealand Port Employers' Association [3] and the Harbours' Association of New Zealand [1]. All payments are made by the NZPEA and the required sum is contributed by all employers through a levy determined by the NZPEA. The WIC collects the levy and pays it over to the trustees. The present levy is 7½ cents per paid-hour.

- (3) Port Unions' Stevedoring Fund. The chief sources of income to this fund are payments by employers in respect of incentive contracts and waterfront wages. Expenditure comprises waterfront wages, wages of check time-keepers and fund administration charge. The difference between income and expenditure (\$10,630,759 in the September year 1973) is termed "net profit" and is largely distributed to workers as bonus payments.

2. The Waterfront Industry Tribunal

The Waterfront Industry Tribunal (WIT) is the waterfront's equivalent of the Industrial Court and Industrial Commission. But unlike these last two bodies, the WIT is not truly tripartite. While it consists of a judge and two appointed members, there is no requirement in the Waterfront Industry Act that the two members must represent employers and workers respectively.

A major function of the WIT is to make principal orders. It may of its own motion or on application by any interested party make principal orders prescribing the conditions upon which any person may be employed for waterside work and the terms of employment including provision for holidays, a guaranteed minimum payment, and for fixing remuneration.²⁶ Many of

26. See W.I. Act, s. 11.

the orders made by the Tribunal are either wholly or in part orders by consent. The parties may, through negotiation, agree on the terms and conditions of employment and apply to the WIT to incorporate the agreement in the order. Most of the contents of recent general principal orders have been the result of settlements made by the parties in the National Conciliation Committee.

Another function of the Tribunal is to decide any disputes that arise in relation to waterside workers and to take such action as it thinks fit to prevent or settle disputes. In practice, disputes referred to it are either local ones not settled at the port conciliation committee level or ones of more than local significance.

The Tribunal is also charged with controlling and directing the activities of port conciliation committees and with determining appeals from any decisions of the National Amenities Committee. It has the responsibility of investigating any matter which in its opinion is likely to cause delays to waterfront work. Another function is to determine appeals from any decisions or orders of the WIC imposing levies or charges. It is also empowered to hear appeals against decisions of port conciliation committees in respect of the removal of a man's name from the bureau register.

In recent years the WIT has played a much reduced role. In the year ended 30 March 1973 it made 10 decisions.

3. The New Zealand Port Employers' Association

Almost all employers of waterfront labour belong to the New Zealand Port Employers' Association (Inc.) - NZPEA. This industrial association of employers was established in 1950, replacing an organisation (the New Zealand Waterside Employers' Association) which had largely served as a co-ordinating unit for autonomous port associations. Its administrative head is the general secretary, who is an appointed employee. The management of the association is vested in a management committee,

the members of which are elected at the annual general meeting. The management committee, in turn, appoints a chairman.

In addition to the national association there are 16 port branches, the structure of which follows that of the national organisation, with a branch secretary (not necessarily full-time), a branch committee of management, a chairman and so on. The degree of autonomy exercised by branch offices is limited. They are bound by any decision or direction of an annual or general meeting of the association or by any decision of the national management committee (Rule 24(a), NZPEA). Furthermore, a branch committee is not able to enter into negotiation on matters of other than local significance, nor can it do so in respect of wages and conditions of waterfront employees unless such negotiations are approved by the national management committee (Rule 24(b), NZPEA).

The main functions of the association, either at national or branch level, are: (a) negotiation of general principal orders, supplementary principal orders and bureau rules; (b) the handling of disputes either directly with unions or through membership on port conciliation committees and the National Conciliation Committee; (c) administration of various funds; (d) promotion of accident prevention through funding the operations of the National Port Safety Council and through the employment of safety officers and of part-time lecturers and consultants; (e) membership on joint bodies representative of waterfront interests. The national association is funded by a general levy on all members which is computed on the basis of wages paid to waterside workers. Local levies are applied at ports to meet the cost of branch operations.

4. The New Zealand Waterside Workers' Federation

The New Zealand Waterside Workers' Federation (NZWWF) is an association of port unions, and is the national union body in an industry with a long history of trade unionism.²⁷ The

27. The first wharf lumpers' society was formed in Wellington in 1870. For the early history of the waterfront unions and other unions see Fernandez, *op.cit.*, Chs. 1 and 2.

early unions in the waterfront industry were local ones. They were autonomous and, following the passing of the Industrial Conciliation and Arbitration Act in 1894, could negotiate separate local industrial agreements. But they were affiliated to an association of the same name as the present one which was registered in 1906. By 1936 31 unions were affiliated to this association. After the amendment of the IC & A Act in that year a ballot was taken on the question of establishing a New Zealand Union of Waterside Workers. An overwhelming vote in favour of cancelling the separate registrations of the port unions resulted in a national union in February 1937. It continued in existence until it was deregistered on 28 February 1951, soon after the beginning of the waterfront stoppage of that year. After the stoppage individual port unions were established which later affiliated to separate North Island and South Island Associations formed in August 1952. These two associations amalgamated in 1967 as the New Zealand Waterside Workers' Federation.

The management of the federation is vested in a council and an executive. The council meets in conference once every two years and is composed of the officers (president, vice-president, general secretary and assistant general secretary) and between one and four delegates from each port depending on size (the total number of delegates is between 31 and 38). Special council meetings are held as required. The council is the chief policy making body of the association.

At its biennial conference the council elects a vice-president and up to eight executive members who, together with the other three officers of the association, constitute the national executive. The president, general secretary and assistant general secretary are elected biennially by national ballot of the membership of all port unions. The latter two are full-time officers.

The affiliated port unions are largely autonomous. Each union conducts its own local business and can make its own rules providing they are not inconsistent with the rules of the federation (Rule 27(a), NZWWF). Except in the election of

the president, general secretary and assistant general secretary, the officers and executive of the association are not entitled to intervene in the business or affairs of an affiliated union unless requested to do so (Rule 27(b), NZWWF), although there is provision for the national executive to submit matters of sufficient importance to affiliated unions (Rule 27(c), NZWWF). In practice, the links between the port unions and the federation are close, with ports looking to the federation for guidance and assistance on many matters.

All port unions have annual elections for president, vice-president, secretary, treasurer (in some cases these last two functions are combined) and other members of the committee of management ("the executive"). The larger unions have at least one full-time officer (usually the secretary) and the largest has three (secretary-treasurer, walking delegate and bureau officer).²⁸ Most ports have a delegate system, although the system varies. At some ports there are two delegates on a job (one on the ship and one on the wharf), while at others there is only one. In some cases he is a union executive member but in others a rank and file worker. At small ports there may be no delegates, with union officials performing that role. At several ports there is also a walking delegate who has coverage of all ships. Regular (generally unpaid) union meetings are held on the second Monday of each month during the first two hours of the working day and are usually well attended, with a turnout of 75% or more of the membership being not uncommon.

The federation represents waterfront workers in the negotiation of general principal orders. Also, disputes unsettled at port level may be referred to the federation with the request that the matter be taken up with the national office of the NZPEA. It is also represented on numerous joint bodies including the National Conciliation Committee, boards of trustees of funds, the National Port Safety Council, and so on.

28. The walking delegate (or disputes officer) polices the principal orders and other regulations and may handle, on the union's behalf, a dispute at any ship in port. The bureau officer invigilates labour engagement and transfers of labour from one job to another.

5. Joint Bodies

Both employers and workers are represented on numerous joint bodies at port and national levels. A unique feature of the waterfront industry are the conciliation committees established under the Waterfront Industry Act. At the port level are port conciliation committees consisting of equal numbers of employers' and workers' representatives and an independent chairman appointed by the Minister of Labour.

A PCC has both conciliation and administrative functions.

- Conciliation functions

Applications to the Tribunal for a principal order may be lodged with the chairman of the PCC by any interested party, providing they relate to one port. Upon receiving an application the committee is under a duty to assist the parties in reaching agreement. At the conclusion of the proceedings or when the committee is satisfied that further progress is unlikely, it reports to the Tribunal on the result of the proceedings and on matters upon which agreement has been reached.²⁹

A further conciliation function is to decide any local disputes arising in relation to waterside workers and take such action as it thinks fit to prevent or settle local disputes. Unsettled local disputes may be referred to the PCC, in which case the decision is usually that of the chairman. But some may be referred to the national associations of the parties. Meetings of the PCC can be very informal, with the chairman not infrequently coming onto the wharf to decide on a matter under dispute. Chairmen are generally available at very short notice.

- Administrative functions

The first such function set out in the Waterfront Industry

29. W.I. Act, s. 18.

Act is to ensure the supply of sufficient labour for the efficient working of the port. The PCC determines the number of workers to be entered on the bureau register for the port (the bureau register strength limitation). The actual bureau register strength (the actual number of waterside workers employed) can deviate from the limitation by five percent. The committee also classifies waterside workers. (The two major classifications are "A" grade and "B" grade workers. "A" grade workers undertake to accept all classes of waterfront work - with some exceptions as regards deck work, freezer work and work with dusty cargoes, while "B" grade workers are permitted at the discretion of the NZPEA to restrict the work they are available to perform.)

Port conciliation committees also make and enforce bureau rules for the engagement and penalising of workers engaged through labour engagement bureaus. A typical set of bureau rules covers the following matters: time off when employed on a job; signing on or off at the bureau when not employed on a job; penalties arising out of engagement of labour, misconduct on a job and assaults on a job; and labour engagement. Penalties are peculiar to the waterfront industry. The philosophy behind them is that regularity of employment and equalisation of hours should be linked with an attempt to ensure a just rotation of jobs and "proper" performance of work. Typical penalties include the following: (i) if a man fails to accept engagement in accordance with his classification he will receive a penalty of two working days. (ii) a man who accepts

The PCC also has power to make rules for the removal of a worker's name from the bureau register and to determine appeals against any such removal. A further function is to co-ordinate the activities of any persons or bodies concerned in waterside work. Finally, it is charged with performing and exercising such other duties and powers as may be allocated to it by the Tribunal.

The number of meetings of port conciliation committees for the 14 years ended 31 March 1973 and the number of meetings held at the various ports in 1973 are set out in the following table.

TABLE 7
Number of Meetings of Port Conciliation Committees
at all Ports, 1960-73 and the number
of Meetings Held at the Various Ports, 1973

Number of meetings (all ports) Year ended 31 March		Number of meetings at various ports Year ended 31 March 1973	
1960	138	Auckland	29
1961	166	Wellington	15
1962	165	Lyttelton	5
1963	146	Dunedin	0
1964	140	Port Chalmers	2
1965	149	Gisborne	1
1966	157	Napier	6
1967	132	Onehunga	1
1968	143	New Plymouth	12
1969	134	Nelson	3
1970	113	Picton	1
1971	119	Timaru	4
1972	111	Oamaru	0
1973	93	Bluff	6
		Westport	2
		Whangarei	0
		Wanganui	0
		Tauranga (Mount Maunganui)	6
		Greymouth	0
			<u>93</u>

Source: NZPEA.

While applications for principal orders relating to one port are made to the chairman of the PCC, applications relating to two or more ports are made to the Tribunal which refers them to a national conciliation committee. The National Conciliation Committee consists of seven members nominated by the NZPEA, one by the Harbours' Association of New Zealand, eight by the NZWWF and a chairman appointed by the Minister of Labour. Its function is to conduct conciliation proceedings on multi-port applications in a similar fashion to port committees in the case of single port applications.

A joint body established by agreement between the parties is the National Joint Interpretation Committee (NJIC). This committee was established at the time of making GPO No. 24 (August 1953) to interpret the agreement in the light of the negotiations. While its activities are now much reduced, the parties have agreed to retain it and it has been credited with continuing to provide a useful medium for the determination of difficult issues.

Another joint body is the National Port Safety Council established in 1964 following a Port Safety Conference. The council, which has the responsibility for accident prevention in the industry, operates as an industrial group under the wing of the National Safety Association. It comprises one representative of the NZPEA, the N.Z. Shipowners' Federation, the Overseas Shipowners' Committee, the Harbours' Association of New Zealand, the N.Z. Harbour Boards' Employees' Union, the N.Z. Federated Foremen Stevedores', Timekeepers' and Permanent Hands' Industrial Association of Workers and of the WIC, and two representatives of the NZWWF (there are also co-opted members from the Ministry of Transport (Marine Division), the N.Z. Railways Department and the National Safety Association). The council promotes general interest in accident prevention and has sponsored lecture tours by safety specialists. Supplementing its work at port level are port safety advisory committees which are generally even more representative than the national council, the Auckland committee, for example, having representatives of the drivers', seamen's and railway servants' unions in addition to the bodies represented on the

national council. The port safety committees act as consultative and advisory bodies on safety matters.

The industry has a highly developed training facility in the form of the Waterfront Training Organisation (WTO) which was established in 1968. All sections of the industry are given a voice in the operation of the WTO through the training consultative committee which comprises representatives of the NZPEA, NZWWF, N.Z. Federation of Labour, stevedoring companies, N.Z. Foremen Stevedores' Association and N.Z. Shipwrights' Union. The committee meets regularly to receive reports from the organisation's director and to formulate policy. The WTO has been supported by all sections of the industry and is accepted as neutral from the point of view of industrial relations. Principal courses offered include deck training, fork hoist training, crane operator training, bulldozer operator training, management courses, foremen stevedores' courses, shipwrights' courses and harbour board courses. Up until 25 August 1973, 4,720 people had passed through WTO courses. It is financed by waterfront employers through a training levy on wages paid to waterside workers.

6. Other Waterfront Unions

There are numerous types of workers other than watersiders employed on the waterfront, the wages and conditions of which are established under the machinery of the Industrial Relations Act. The work of operating mechanical equipment owned by harbour boards is usually performed by harbour board employees who are members of the New Zealand Harbour Boards' Employees' Union. When the loading or discharging operation in the ship's hold requires carpentry, this work has generally been performed by members of the New Zealand Shipwrights' Union.³⁰ At Auckland, however, it is done by the cargo carpenters' section of the Auckland Waterside Workers' Union and at several other ports shipwrights have recently amalgamated with waterside

30. The New Zealand (except Northern and Westland) Shipwrights, Boatbuilders and Related Trades Union.

workers' unions. At many smaller ports no permanent shipwrights are employed but casual shipwrights or members of the waterside workers' union are available when required. Shipwrights covered by the shipwrights' award are permanent employees of the shipping and stevedoring companies. At Auckland cargo carpenters are paid through the NZPEA's pay office, the cost of payment being met by a levy on employers of carpenters. When cargo is tallied, this is usually carried out by members of unions affiliated to the New Zealand Federated Tally Clerks' Association, except at ports such as Wellington and Lyttelton where tally clerks have amalgamated with waterside workers' unions, and at Napier where they have a separate union. Most tally clerks are casual workers, i.e. engaged at an hourly rate with a daily and weekly minimum, and their wages are paid through the NZPEA's pay offices. Again, the cost of these payments is met by a levy on employers of tally clerks. When there is a shortage of regular tally clerks, they are usually supplemented by non-union clerks. At smaller ports the work of tally clerks is performed either by casual workers or by members of the waterside workers' union.

At Auckland and Onehunga the NZPEA is responsible for cargo checking at the wharf gates and its Auckland branch maintains a force of toll clerks for this purpose. The cost of the toll clerks' service is met by a levy. Supervision of waterside workers on the ship and on the wharf is carried out by foremen stevedores who belong to port unions affiliated to the New Zealand Federated Foremen Stevedores', Timekeepers' and Permanent Hands' Association, as do other permanent workers such as foremen shipwrights and mechanics.

P A R T 3

EMPIRICAL INVESTIGATION:

AN ANALYSIS OF CONFLICT

Chapter VIII

THE INDUSTRIAL DISTRIBUTION OF CONFLICTI. COLLECTIVE FORMS OF INDUSTRIAL CONFLICT

In the 15 or so years following World War II, the meat freezing, waterfront and building and construction industries together with coal mining accounted for the majority of total conflict activity in its collective forms. We shall not be concerned with coal mining as it is no longer important as a "conflict centre" and is, in any case, well documented elsewhere.¹ Nor shall we be concerned with the early post-war period, which is also well documented,² but rather only with the decade 1964-73.

The tendency for a few industries to account for a disproportionately large share of stoppage activity³ is not confined to New Zealand but is widespread among Western countries.⁴ Thus while the details of the pattern to be described are peculiar to New Zealand the general pattern itself is undoubtedly replicated elsewhere.

Our analysis will be based on the official industrial stoppage statistics, the definition of which was noted in Chapter II. As well as problems of definition, one is always confronted with a measurement problem in analyzing stoppage statistics. Stoppage activity can be measured in at least

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1. See, for example, Don J. Turkington, "The Trend of Strikes in New Zealand 1946-70: Part II", *Journal of Industrial Relations*, Vol. 15, June 1973, pp. 143-157.
 2. See Don J. Turkington, *ibid.*, and *idem*, "The Trend of Strikes in New Zealand 1946-70: Part I", *Journal of Industrial Relations*, Vol. 15, March 1973, pp. 41-63; and John M. Howells, "Causes and Frequency of Strikes in New Zealand", *Industrial and Labor Relations Review*, Vol. 25, July 1972, pp. 524-532.
 3. In this and subsequent chapters the term "stoppage" covers all collective forms of industrial conflict.
 4. See Chapter III, p. 52.

three alternative ways, namely, number of stoppages (S), number of workers involved (W) or number of man-days lost (L). The correlation between pairs of these measures, at the national level, is close but not perfect as illustrated in Table 1.⁵ This suggests the desirability of using all three measures in analyzing stoppages, as does the fact that each alternative measure highlights a different aspect of stoppage activity.

TABLE 1
Correlation Coefficients for Pairs of Measures of
Aggregate Stoppage Activity, 1964-73

Variables	Correlation Coefficient		
	(r)		
W,S	0.959	(significant	0.001)
W,L	0.919	("	0.001)
S,L	0.837	("	0.005)

Source: Derived from various *Monthly Abstracts of Statistics* (Department of Statistics, Wellington).

1. Frequency

The existence of a stoppage, and so frequency, is a useful indicator of the inclination and ability of workers to engage in stoppages. In the decade ending 1973, meat freezing, building and construction and waterfront together accounted for 44.9% of the total number of stoppages, and individually contributed 24.2%, 13.9% and 6.8%, respectively. The figure of 44.9% is the same as the average proportion of total stoppages occurring in these industries over the 25 years 1946-70.⁶ Table 2 shows for each industry the number of stoppages, a

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5. Kendall's coefficient of concordance can be used to test the association between the three series. For the years 1964-73 it was found to be 0.817 which is significant at the 0.01 level and suggests there is a strong association between the relative rankings of these three series.
 6. See Turkington, "Part II", p. 151. Some of the figures in this paper have since been revised. Details of the revisions are available from the author.

TABLE 2
Stoppage Frequency, 1964-73

	Meat freezing				Waterfront				Building and Construction				N.Z. Total	
	No.	Index	%	Rank	No.	Index	%	Rank	No.	Index	%	Rank	No.	Index
1964	22	100	23.7	1	17	100	18.3	2	15	100	16.1	3	93	100
1965	29	132	27.6	1	3	18	2.9	8	16	107	15.2	2	105	113
1966	24	109	16.6	2	13	76	9.0	4	23	153	15.9	3	145	156
1967	26	118	29.2	1	2	12	2.2	7=	10	67	11.2	3	89	96
1968	40	182	26.1	1	0	0	0	23=	26	173	17.0	3	153	165
1969	37	168	21.9	1	12	71	7.1	5	30	200	17.8	2	169	182
1970	91	414	28.2	1	31	182	9.6	3	32	213	9.9	2	323	347
1971	68	309	21.7	1	33	194	10.5	4	35	233	11.2	3	313	337
1972	62	282	23.3	1	13 ^a	76	4.9	4	30	200	11.3	2	266 ^a	286
1973	98	445	24.9	1	15	88	3.8	6	68	453	17.3	2	394	424
av. 1964-73	50		24.2		14		6.8		29		13.9		205	

Notes: a Excludes Waitangi Day stoppages (as do subsequent stoppage tables in this chapter).

The extent to which the building and construction industry is subdivided in the official statistics varies over time. Component categories we have included in the building and construction figures are as follows: 1969 pipeline construction, hydroelectric construction, painting, plumbing; 1970 other construction; 1971 tunnel construction, other construction; 1972 electrical installation, etc., bridge construction, tunnel construction; 1973 painting and decorating, electrical installation, etc., road construction, electric power construction. The resultant figures for 1967 and 1969 vary slightly from Turkington, "Part II".

Source: Derived from various *Monthly Abstracts of Statistics*.

series indexing changes in frequency relative to 1964, the percentage contribution to total frequency, and the rank of the industry's stoppage frequency relative to all other industries.

Stoppage frequency in meat freezing and building and construction has followed an upward trend similar to that of total frequency over the years 1964-73 and consequently the proportionate contribution of these two industries to the total has been fairly stable. The waterfront series, on the other hand, is highly erratic with no obvious trend. Meat freezing consistently has had the largest number of stoppages of any New Zealand industry, while construction ranks either second or third and waterfront also tends to rank highly.

The extent to which collective actions are categorised in the official statistics is limited. Actions involving a stoppage of work (except penalties) are classified as either "direct" or "sympathetic" strikes. Those involving a reduction of the customary rate of output, e.g., go slows, work to rules, bans, etc., are grouped as "partial" strikes. Of the 42 sympathy strikes occurring in the decade 1964-73, 15 (35.7%) were in building and construction, 7 (16.7%) in meat freezing and 2 (4.8%) in waterfront. Of the 117 partial strikes, 30 (25.6%) were in meat freezing and 7 (6.0%) in construction. Stopwork meetings are included as direct strikes and statistics on them are not usually presented separately. But frequency figures are available for three years of our period (10 stop work meetings in 1964, 19 in 1965 and 40 in 1966) although they are not broken down on an industry basis. As penalties apply only to the waterfront industry, the 13 in the period obviously occurred there.

2. Worker Involvement

The number of workers involved in stoppages is an indicator of the participation of workers in collective forms of conflict.⁷ The New Zealand statistics include not only strikers

7. For reservations about the sensitivity of worker involvement (Footnote 7 is continued on the next page.)

but also workers indirectly involved, i.e. those thrown out of work as a result of stoppages occurring at their place of work but in which they are not directly involved. Of the total number of workers involved in stoppages over 1964-73, 71.7% came from the three industries under study with meat freezing accounting for 47.7%, waterfront 17.2% and construction 6.8%. This is despite the fact that these industries together employ only 10.5% of all wage and salary earners. Table 3 consists of worker involvement series analogous to those for frequency in Table 2.

Worker involvement in meat freezing, and to a lesser extent in building and construction, tended to increase more rapidly than involvement in industry generally. As with frequency the series for the waterfront industry is highly erratic. Meat freezing again consistently accounts for the largest number of workers involved in stoppages and in recent years waterfront and construction have tended to rank either second or third on this measure. Worker involvement figures as such, however, may give a misleading impression of the relative magnitude of stoppage activity in an industry unless they are related to the number of workers employed there. Dividing the involvement figures for an industry by the number of workers there gives the percentage of workers engaging in collective forms of conflict,⁸ except that the percentage is overstated insofar as some workers may strike, etc., more than once in a given period.

Table 4 indicates that a high, and possibly growing, proportion of meat freezing workers engage in collective forms of conflict. In recent years the number so engaged has considerably exceeded the number of workers employed in the industry. It will be shown in a later chapter, however, that stoppage activity is not spread evenly among its plants, some

(Footnote 7 continued):

as an indicator of workers' participation in conflict see Michael Silver, "Recent British Strike Trends: A Factual Analysis", *British Journal of Industrial Relations*, Vol. XI, March 1973, pp. 81-2.

8. The "worker involvement ratio". See Turkington, "Part I", p. 42.

TABLE 3

Worker Involvement, 1964-73

	Meat Freezing			Waterfront			Building and Construction			N.Z. Total				
	No.	Index	% Rank	No.	Index	% Rank	No.	Index	% Rank	No.	Index			
1964	8420	100	24.2	2	15165	100	43.6	1	1316	100	3.8	5	34779	100
1965	6631	79	43.4	1	745	5	4.9	7	1191	91	7.8	3	15267	44
1966	10025	119	30.3	1	5119	34	15.5	3	3710	282	11.2	4	33132	95
1967	13027	155	45.7	1	346	2	1.2	9	1346	102	4.7	4	28490	82
1968	21954	261	58.6	1	0	0	0	23=	4209	320	11.2	2	37458	108
1969	22040	262	50.0	1	10961	72	24.9	2	3744	285	8.5	3	44041	127
1970	45333	538	41.2	1	23018	152	20.9	2	2523	192	2.3	6	110096	317
1971	33992	404	39.5	1	28826	190	33.5	2	4455	339	5.2	3	86009	247
1972	35199	418	58.2	1	6052	40	10.0	3	6115	465	10.1	2	60429	174
1973	73085	868	63.1	1	7310	48	6.3	3	9994	759	8.6	2	115865	333
Av. 1964-73	26971		47.7		9754		17.2		3860		6.8		56557	

Source: Derived from various *Monthly Abstracts of Statistics*.

TABLE 4

Workers Involved as a Percentage of Workers Employed
(Worker Involvement Ratios), 1964-73

(percentages)

	Meat freezing	Waterfront	Building & Construction	Total Wage & Salary Earners
1964	43.9	224.3	2.2	4.3
1965	33.7	10.7	1.9	1.8
1966	49.8	72.4	5.7	3.8
1967	62.5	5.1	2.1	3.3
1968	99.0	0	7.1	4.3
1969	93.3	1.8	6.2	4.9
1970	179.3	378.5	4.1	11.9
1971	130.7	421.8	7.2	9.2
1972	132.8	87.2	9.8	6.4
1973	267.5	109.7	15.6	12.4
Av. 1964- 73	109.2	131.1	6.2	6.2

Notes and sources: Employment figures for meat freezing and building and construction are annual averages and are from various *Statistics of Industrial Production* (Department of Statistics, Wellington), *Statistics of Prices, Wages and Labour* (Department of Statistics) and *Monthly Abstracts of Statistics*. Those for the waterfront industry are the actual bureau register strength (all ports) and are from *Annual Reports of the Waterfront Industry Commission*, G. 2 (Government Printer, Wellington). Total wage and salary earners figures are from the *New Zealand Official Yearbook*, 1974 (Department of Statistics).

accounting for a much higher proportion than others. In certain years a very high proportion of waterside workers has also been involved in collective actions. In both these industries the average worker involvement ratios for 1964-73 exceeded 100%, contrasting sharply with the relatively low level of involvement of wage and salary earners generally. Worker involvement in building and construction over the same period was not significantly different from the average for all wage and salary earners. But the use of industry averages for an industry as diverse as construction can be misleading as such

averages disguise high levels of stoppage activity in particular sectors of it.

3. Man-days lost

The number of man-days lost is often used as an indicator of the economic cost of stoppages. Our analysis of the effects of industrial conflict suggests, however, that it is at best an imperfect indicator and that it should be used in association with other statistics.⁹ Of the three common measures of stoppage activity it, nonetheless, comes closest to expressing the economic impact of stoppages.

The three industries under study together accounted for 59.1% of man-days lost over the decade ended 1973, with meat freezing accounting for 43.4%, building and construction 8.3% and waterfront 7.4%. In the 25 years 1946-70 these industries contributed 56.1% of total man-days lost.¹⁰ Table 5 contains man-days lost series analogous to those presented for frequency and involvement in Tables 2 and 3 respectively.

Duplicating patterns already seen for frequency and worker involvement, meat freezing accounts for more time lost than any other industry. Building and construction and waterfront also consistently rank highly as contributors to total time lost. Despite the tendency for more industries to be involved in stoppage activity, the three under study show no decline in recent years in their joint contribution to total time lost.

In order to make valid comparisons between industries, man-days lost should also be related to employment. The worker loss ratio for New Zealand as a whole, or man-days lost per wage and salary earner, is traditionally low. Over the years

9. See also E.W. Evans and P. Galambos, "Work Stoppages in the United Kingdom 1965-70: A Quantitative Study", *Bulletin of Economic Research*, Vol. 25, May 1973, pp. 22-4 and H.A. Turner, *Is Britain Really Strike-Prone? A Review of the Incidence, Character and Costs of Industrial Conflict* (Cambridge University Press, London, Department of Applied Economics Occasional Paper 20, 1969) Ch. 5.

10. See Turkington, "Part II", p. 145.

TABLE 5
Man-Days Lost, 1964-73

	Meat freezing				Waterfront				Building and Construction				N.Z. Total	
	No.	Index	%	Rank	No.	Index	%	Rank	No.	Index	%	Rank	No.	Index
1964	18935	100	28.3	1	15736	100	23.5	3	5091	100	7.6	4	66834	100
1965	11897	63	54.5	1	768	5	3.5	5	1958	38	9.0	3	21814	33
1966	22410	119	22.6	2	18408	117	18.6	3	11467	225	11.6	4	99095	148
1967	50435	266	36.2	2	999	6	0.7	8	3000	59	2.2	5	139490	209
1968	79702	421	61.2	1	0	0	0	23=	8037	158	6.2	3	130267	195
1969	69551	367	50.2	1	8913	57	6.4	4	12440	244	9.0	3	138675	207
1970	109633	579	39.5	1	17944	114	6.5	4	12130	238	4.4	6	277348	415
1971	43126	228	26.5	1	28040	178	17.2	3	20453	402	12.6	4	162563	243
1972	788645	417	58.6	1	5654	36	4.2	5	14380	282	10.7	2	134505	201
1973	141738	749	52.2	1	10453	66	3.8	6	30605	601	11.3	2	271706	407
Av. 1964 - 73	62629		43.4		10691		7.4		11956		8.3		144230	

Source: Derived from various *Monthly Abstracts of Statistics*.

1947-70, this ratio averaged 0.20¹¹ and in the decade ending 1973, 0.16. In contrast, over the same decade the worker loss ratio averaged in meat freezing 2.58, in waterfront 1.65 and in building and construction 0.19. The construction figure is subject to the same proviso as that made with respect to its involvement figure. Annual data are presented in the following table.

TABLE 6

Man-Days Lost per Worker (Worker Loss Ratios), 1964-73

	Meat freezing	Waterfront	Building & Construction	Total Wage & Salary Earners
1964	0.99	2.33	0.09	0.08
1965	0.61	0.11	0.03	0.03
1966	1.11	2.60	0.18	0.11
1967	2.42	0.15	0.05	0.16
1968	3.59	0	0.14	0.15
1969	2.94	1.43	0.21	0.15
1970	4.34	2.95	0.20	0.30
1971	1.66	4.10	0.33	0.17
1972	2.95	0.81	0.23	0.14
1973	5.19	1.57	0.48	0.29
Av. 1964- 73	2.58	1.65	0.19	0.16

Source: Employment figures are those used in Table 4, p. 202, and the time lost figures are those of Table 5, p. 204.

4. Overview

The industries have been considered in terms of three basic dimensions of stoppages and it appears that the relative position of an industry is roughly the same in all three. This can be tested by using Spearman's coefficient of rank correlation (r_s). Using the rankings in Tables 2, 3 and 5 we

11. See Turkington, "Part I", p. 53.

derive the following results which clearly show that for each industry the association between pairs of rankings and between the three series is very strong.

TABLE 7
The Association between an Industry's Ranking in Terms of
Frequency, Involvement and Time Lost, 1964-73

Industry	Variables	Spearman's r_s
Meat freezing	W,S	0.988
	L,S	0.994
	L,W	0.982
Waterfront	W,S	0.812
	L,S	0.903
	L,W	0.812
Building and Construction	W,S	0.848
	L,S	0.848
	L,W	0.976

- Notes:
1. S = frequency, W = number of workers involved, and L = number of man-days lost.
 2. All coefficients are significant at the 0.01 level.

Source: See Tables 2, 3 and 5 of this chapter.

While the three industries together accounted for 44.9% of stoppages, 71.7% of workers involved and 59.1% of man-days lost over the decade 1964-73, we have not intended to imply that other industries do not also account for significant amounts of stoppage activity. In terms of frequency, road transport, engineering and shipping services were significant in a number of years in that decade. Engineering was also quite often significant in terms of involvement and of time lost, as were pulp and paper and motor vehicle assembly. Our earlier analysis has shown, however, that none of these industries are as consistently as important as those under study, the relative stoppage proneness of which remained remarkably constant over the years 1964-73.

5. Duration

Among measures of stoppage activity that can be derived from the three basic ones so far considered is the time lost by the "average" worker involved ("man-days lost per striker") or the "average duration" of stoppages which is obviously the number of man-days lost divided by the number of workers involved. Time lost per worker involved in meat freezing and especially in waterfront tends to be lower than the national average. In the decade ending 1973 the average duration of stoppages in meat freezing was 2.48 days, in waterfront 1.35, in construction 3.09 and in industry generally 2.69.

TABLE 8

Duration (Man-Days Lost Per Worker Involved), 1964-73

	Meat freezing	Waterfront	Building & Construction	Total Wage & Salary Earners
	(days)			
1964	2.25	1.04	3.87	1.92
1965	1.79	1.03	1.64	1.43
1966	2.24	3.60	3.09	2.99
1967	3.87	2.89	2.23	4.90
1968	3.63	0	1.91	3.48
1969	3.16	0.81	3.32	3.15
1970	2.42	0.78	4.81	2.52
1971	1.27	0.97	4.59	1.89
1972	2.24	0.93	2.35	2.23
1973	1.94	1.43	3.06	2.35
Av. 1964- 73	2.48	1.35	3.09	2.69

Source: Derived from various *Monthly Abstracts of Statistics*.

Duration of stoppages may also be presented as length in terms of either calendar or working days. Duration figures of the Department of Statistics prior to 1973 were based on calendar days but are now expressed in terms of working days.

Again the pattern is for stoppages to be shorter than the national average in meat freezing and waterfront but longer in construction. For the years 1964-72 the average number of calendar days lost per stoppage was 4.41 in meat freezing, 1.94 in waterfront, 6.80 in building and construction and 5.35 in industry generally. A similar pattern is also revealed by a breakdown of stoppage frequency by working days duration.

TABLE 9
Number of Stoppages According to Working Days
Duration, 1970-73

	Up to 1 day		More than 1 day & up to 3 days		More than 3 days & up to 10 days		Over 10 days		Total
		%		%		%		%	
Meat Freezing	164	51.4	59	18.5	65	20.4	31	9.7	319
Waterfront	61	66.3	15	16.3	14	15.2	2	2.2	92
Building & Construction	47	32.4	34	23.4	38	26.2	26	17.9	145
N.Z. Total	533	41.1	294	22.7	293	22.6	176	13.6	1296

- Notes:
1. This table is limited to four years as separate data for waterfront is unavailable prior to 1970.
 2. Building and construction frequencies in this table are smaller than those in Table 2 due to the fewer component categories included in the source data.

Source: Derived from various *Reports of the Department of Labour*, G. 1 (Government Printer, Wellington).

II. EMPLOYER-INITIATED FORMS OF INDUSTRIAL CONFLICT

As mentioned in Chapter II, the only employer-initiated form explicitly referred to in the official statistics is the lockout and then only within the context of industrial stoppages generally. The only lockout figures that can be separated out

from the stoppage data already presented relate to frequency and worker involvement. Of the 11 actions officially classified as lockouts over the decade 1964-73, four occurred in meat freezing, one in building and construction and none in the waterfront industry. Involvement figures for lockouts are not broken down on an industry basis.

III. INDIVIDUAL FORMS OF INDUSTRIAL CONFLICT

For our purposes there are very significant gaps in the official statistics on individual forms of industrial conflict. There are no statistics on absence (except for those published by the Waterfront Industry Commission for the waterfront industry). Also, labour turnover statistics are not available for meat freezing and building and construction and the ones for waterfront are again those of the Waterfront Industry Commission. The only individual form for which comprehensive statistics for all three industries are published is industrial accidents.

1. Industrial Accidents

As mentioned in Chapter II, industrial accidents are not invariably expressions of industrial conflict. Their level is influenced by many factors other than conflict such as the nature of and degree of exposure to hazard. The three industries under study intuitively seem "more dangerous" to workers than industry in general. But it is impossible to separate from the statistics accidents not resulting from conflict so that the series to be presented are imperfect indicators of conflict and the degree of imperfection is unknown. We shall only consider 1968-70 as there are no official accident statistics for 1967 and a new system of collection and classification of industrial injuries was introduced in 1968. Our period ends in 1970 because this was the latest year for which statistics were available at the time of writing. The two basic measures of accidents are frequency and time lost, which are related to man-hours worked to produce the "frequency rate" in

the case of frequency, and the "severity rate" in that of time lost.

In 1968-70 the three industries together accounted for 27.9% of all industrial accidents, with building and construction accounting for 14.7%, meat freezing 11.4% and waterfront 1.8%. Their percentage contribution to calendar days lost (constant age basis - Table 10) due to accidents over the same period was 29.7%, the individual figures being 18.6% for construction, 6.6% for meat freezing and 4.5% for waterfront. This is despite the fact that these industries accounted for only 12.1% of total man-hours worked over the three years in question (8.3% being in construction, 3.0% in meat freezing and 0.8% in waterfront). It follows that their frequency and severity rates significantly exceed those for industry in general. Table 10 presents statistics on frequency, days lost, frequency rates and severity rates. The frequency and time lost figures are ranked relative to those of about 250 other industries and frequency and severity rates relative to those of 46 other industrial groups.

Over the years in question, building and construction had the largest, and meat freezing the second largest, number of accidents of any New Zealand industry. Moreover construction, meat freezing and waterfront ranked first, second and third respectively in terms of time lost due to accidents. The picture is changed somewhat, however, when these series are related to man-hours lost. The frequency rate for meat freezing was the third highest of any industrial group but that for waterfront was about fifth and for building and construction only about twelfth. Rankings in terms of injury and economic severity rates are different again. These rates for waterfront were about third highest, for construction about tenth and for meat freezing ranged between seventh and fourteenth. In all cases, though, the frequency and severity rates were very much larger than for industry in general.

Because the economic severity rate takes account of the ages of workers injured permanently or fatally it provides an estimate of actual time lost due to accidents. But for reasons

TABLE 10

Industrial Accident Statistics, 1968-70

	No. of accidents			Calendar days lost (constant age basis)			Frequency rate		Injury severity rate		Economic severity rate	
	No.	%	Rank	No.	%	Rank	Rate	Rank	Rate	Rank	Rate	Rank
<u>Meat Freezing</u>												
1968	6738	11.1	2	253634	6.4	2	13.68	3	2978	11	2652	14
1969	7266	11.5	2	280844	7.6	2	14.02	3	3175	7	3315	7
1970	7773	11.5	2	224251	5.8	2	14.26	3	2409	13	2228	13
Av. 1968-70	7259	11.4		252910	6.6		13.99		2854		2732	
<u>Waterfront</u>												
1968	1266	2.1	10	217898	5.5	3	9.06	5	9796	2	8004	3
1969	1140	1.8	10	144004	5.9	3	8.60	5	6749	3	6140	3
1970	1122	1.7	12	159635	4.1	3	8.36	6	7565	3	6539	3
Av. 1968-70	1176	1.8		173846	4.5		8.67		8037		6894	
<u>Building and Construction</u>												
1968	8820	14.6	1	765588	19.4	1	6.43	13	3430	8	3239	11
1969	9567	15.2	1	707313	19.1	1	6.72	11	3121	9	3122	10
1970	9695	14.3	1	681751	17.5	1	6.74	11	2980	10	2975	10
Av. 1968-70	9361	14.7		718217	18.6		6.63		3177		3112	
<u>N.Z. Totals</u>												
1968	60484			3952080			3.64		1418		1349	
1969	62952			3707743			3.70		1307		1314	
1970	67831			3896146			3.88		1333		1335	
Av. 1968-70	63756			3851990			3.74		1353		1333	

- Notes:
1. Calendar days lost on a constant age basis are calculated as follows: days lost through temporary disabilities are scaled by the factor 0.9086 to allow for the different age distribution of workers suffering such accidents, to which is added a constant allowance of 9,263 calendar days for each fatality or an appropriate percentage thereof for each permanent disability. Calendar days lost may also be calculated on an actual age basis in the following way: days lost due to temporary disabilities are added to the expected number of calendar days lost for each fatality and permanent disability (see *Report on Industrial Injuries, 1970* (Department of Statistics, Wellington), p. 5).
 2. The injury severity rate is the number of man-hours lost (on a constant age basis) per 100,000 man-hours worked, while the economic severity rate is the number of man-hours lost (on an actual age basis) per 100,000 man-hours worked.
 3. The frequency rate is the number of accidents per 100,000 man-hours worked.
 4. "No time lost" accidents are excluded from these statistics (and those in Table 12) which relate only to injuries where the worker was absent from work beyond the day (or shift) in which the injury-producing accident occurred.

Source: Derived from various *Reports on Industrial Injuries*.

alluded to in Chapter IV, and despite a suggestion to the contrary in the *Report of Industrial Injuries*,¹² it is at best an imperfect indicator of the economic cost of accidents. As with man-days lost in the case of stoppages, it should be used in association with other indicators. The injury severity rate, by making a constant allowance for fatalities and disabilities, eliminates age variations between industries, and so helps facilitate a comparison of relative accident hazard between industries.

As regards duration of absences resulting from accidents, the waterfront industry has a higher proportion of long-term accident absences than does industry in general. The duration pattern in construction is similar to that for industry generally, while meat freezing has a higher proportion of short-term accident absences. Detailed figures are presented in Table 11. On average over 1968-70, 147.8 calendar days (constant age basis) were lost per accident in waterfront as compared with 76.7 in construction, 34.8 in meat freezing and 60.4 in industry as a whole.

It is clear that many more days are lost due to industrial accidents than to stoppages. Calendar days lost on a constant age basis due to accidents (with actual age basis in brackets) exceeded man-days lost due to stoppages by an average of 66.1 (64.7) times in building and construction, 19.4 (16.6) in waterfront, 2.9 (2.8) in meat freezing and by 21.2 (20.8) times in total industry over the years 1968-70. Each worker in building and construction lost annually an average of 11.93 (11.69) calendar days due to accidents over 1968-70 as compared with only 0.18 man-days due to stoppages, while in the waterfront industry accidents caused an annual average loss of 27.84 (23.86) calendar days per worker as compared with one of 1.43 man-days for stoppages. In meat freezing an average of 10.67 (10.22) calendar days were lost annually due to accidents per worker over the same three years and 3.64 man-days due to stoppages. Wage and salary earners in general lost annually an average of 4.27 (4.19) calendar days due to accidents as opposed to only 0.20 man-days due to stoppages.

12. See, for example, *Report on Industrial Injuries*, 1970, p. 5.

TABLE 11

Duration of Accident Absences, Averages for 1968-70

Immediate Fatalities	1 or 2 days	Over 2 days up to 1 week	Over 1 wk up to 2 wks	Over 2 wks up to 4 wks	Over 4 wks up to 6 wks	Over 6 weeks up to 3 months	Over 3 mths. up to 6 months	Over 6 mths. up to 1 year	Over 1 year	Not specified	Total
<u>Meat freezing</u>											
No. 1	426	2594	2518	1133	265	237	51	19	12	2	7259
% 0.0	5.9	35.7	34.7	15.6	3.7	3.3	0.7	0.3	0.2	0.0	
<u>Water-front</u>											
No. 1	57	324	315	239	87	93	34	13	12	1	1176
% 0.1	4.8	27.6	26.8	20.3	7.4	7.9	2.9	1.1	1.0	0.1	
<u>Building & Construction</u>											
No. 13	1258	3391	2245	1281	456	479	149	51	29	9	9361
% 0.1	13.4	36.2	24.0	13.7	4.9	5.1	1.6	0.5	0.3	0.1	
<u>N.Z. Total</u>											
No. 65	7037	22224	16620	9692	3345	3298	948	303	154	70	63756
% 0.1	11.0	34.9	26.1	15.2	5.2	5.2	1.5	0.5	0.2	0.1	

Source: Derived from various Reports on Industrial Injuries.

IV. CONCLUSION

Three industries, employing only 10.5% of all wage and salary earners, account for a preponderance of total conflict activity in its collective forms. Meat freezing, waterfront and building and construction together accounted for 71.7% of workers involved in stoppages, 59.1% of man-days lost and 44.9% of stoppages by number over the decade 1964-73. In all cases meat freezing predominated. Moreover, of the few lock-outs reported in the same decade, 45% occurred in these industries with meat freezing again the most important. As regards the only individual form of conflict comprehensively documented, i.e., industrial accidents, these industries were also of considerable, but somewhat less, importance. Over the years 1968-70 they accounted for 27.9% of all industrial accidents and for 29.7% of calendar days lost (constant age basis) due to accidents.

Chapter IX

THE MEAT FREEZING INDUSTRY PATTERN OF CONFLICT

The inter-industry analysis of the previous chapter placed the industries under study within a national perspective but said nothing of the situation within an industry. To understand why a certain pattern of conflict has developed in a particular industry it is necessary to know what that pattern is and in this respect industry-wide figures are of little help. We consequently turn to an investigation of the conflict pattern within each of the three industries, starting with meat freezing. The natural unit to deal with first is the establishment, which can be aggregated into companies and regions. Later the situation within the establishment will be studied.

Any intra-industry study of conflict in New Zealand is severely hampered by the absence of official stoppage statistics covering levels of aggregation below that of the industry. To understand the nature of many of the statistics which follow it is necessary to outline briefly the process whereby stoppage statistics are collected and collated. The process starts when a stoppage comes to the notice of a district office of the Department of Labour. (The reporting of stoppages is not a legal obligation.) The district office records the details of the stoppage on a standard form, that we shall call the "strike return", which is forwarded to the head office of the department (possibly with supplementary material). It is possible that head office will decide that the action does not constitute an industrial stoppage and so it is not recorded and the process ends. The vast majority of forms, however, are forwarded after processing to the Department of Statistics which collates and further processes the information contained therein and eventually publishes it as the official industrial stoppage statistics. The bulk of the statistics which follow have been extracted from the final forms forwarded by the Department of Labour to the Department of Statistics.¹ It should be noted

1. Access to these forms on a confidential basis was granted by the Department of Labour. Department of Statistics processing documents are not normally available.

though that the Department of Statistics makes the final decision on what is included in the official statistics and so Labour Department-based figures can sometimes differ from those published (see Appendix). It was possible, however, to reconcile differences between figures derived by the author and those published for years for which some Department of Statistics worksheets were available.

I. THE ESTABLISHMENT LEVEL

The importance of intra-industry investigation is attested to by the fact that while meat freezing has by far the highest level of conflict in its collective forms of any industry, it contains plants which have very few stoppages. In 1967, for example, only 15 meat works out of a total of 38 were affected by any form of collective action. Over the period for which we have statistics, i.e. the calendar years 1967 to 1973 inclusive, an average of 25 plants experienced collective forms each year.² Some works were involved in stoppage activity only two or three times over the entire period, while others experienced stoppages in each of the seven years. Table 1 presents stoppage statistics for establishments in the industry. In order to preserve anonymity, works are not named but rather numbered on the basis of their rank on a stoppage frequency scale.

This table reinforces our contention that stoppage activity is spread unevenly among establishments in the industry. While the annual average number of stoppages per works over 1967-73 was 2.08, individual establishment figures ranged from a low of 0.29 a year to a high of 10.14. The five works with highest stoppage frequencies together accounted for 46.7% of all meat industry stoppages (45.6% if the "Others" category is included) over this period. Moreover, 14 works experienced stoppages in six or all of these seven years, while an equal number of works were involved in stoppages in only one, two or

2. This figure includes wool scourers, export cool stores, meat packers, game packers and so on which are included in the meat freezing stoppage statistics. If these are excluded, the figure is 24.

TABLE 1

Meat Freezing Industry Stoppage Statistics on a Works Basis, 1967-73

Works No.	No. of stoppages per year	No. years in which stoppage action occurred	No. of man-days lost per year	No. of man-days lost per worker per year	No. of workers involved per year	No. of workers involved per year as % of No. employed	No. of man-days lost per worker involved per year
1	0.29	2	64.6	0.33	24	12.4	2.69
2	0.29	2	295.7	0.59	26	5.2	11.56
3	0.29	1	495.3	0.96	331	64.3	1.50
4	0.29	1	361.4	1.17	16	5.2	23.00
5	0.43	2	76.7	0.60	23	18.1	3.29
6	0.43	2	1,219.6	3.81	100	31.2	12.20
7	0.57	4	86.3	0.11	120	15.6	0.72
8	0.57	3	86.3	0.39	107	48.2	0.80
9	0.57	2	279.4	0.55	92	18.1	3.04
10	0.67	1	247.7	1.22	103	50.7	2.40
11	0.71	4	280.9	0.85	178	53.9	1.58
12	0.71	3	3,281.7	2.49	846	64.1	3.88
13	0.86	4	137.6	0.22	126	19.8	1.09
14	0.86	3	118.6	0.23	64	12.5	1.86
15	1.00	3	335.6	0.68	216	43.5	1.56
16	1.14	5	376.9	0.71	315	59.7	1.20
17	1.14	5	242.4	1.08	157	70.1	1.55
18	1.14	3	738.3	2.15	204	59.5	3.62
19	1.14	3	608.9	2.91	118	56.5	5.17
20	1.29	5	1,704.2	1.36	997	79.8	1.71
21	1.29	5	2,089.0	1.71	606	49.6	3.45
22	1.43	5	1,061.1	1.86	400	69.9	2.65
23	1.43	5	2,100.6	6.44	344	105.5	6.10
24	2.00	7	3,110.7	6.37	1,115	228.5	2.79
25	2.14	6	651.8	1.17	799	143.7	0.82
26	2.14	6	2,213.0	2.88	1,279	166.5	1.73
27	2.43	6	2,124.3	3.88	1,059	193.6	2.01
28	2.43	6	2,119.1	4.26	580	116.7	3.65
29	2.57	7	2,948.0	3.15	694	74.1	4.25
30	2.57	7	2,462.8	4.10	1,254	208.7	1.96
31	2.86	6	4,082.2	5.47	1,351	214.1	3.02
32	3.86	6	1,215.1	1.23	1,586	167.3	0.77
33	4.14	7	3,088.6	3.78	1,520	185.8	2.03
34	5.43	7	4,828.3	6.83	1,759	248.8	2.75
35	7.29	7	14,515.7	7.29	6,212	312.0	2.34
36	8.86	7	15,053.4	10.68	6,779	481.1	2.22
37	10.14	7	6,951.4	5.09	3,535	259.0	1.97
Others	1.86	6	338.6				

- Notes:
1. Frequency statistics in sections I. to IV. of this chapter treat a stoppage of each individual works as a single stoppage irrespective of whether actions took place in other works over the same issue. In the official statistics one stoppage can consist of several actions provided they relate to the same issue (see *New Zealand Official Yearbook* (Department of Statistics, Wellington) 1974, p. 918).
 2. The "Others" category includes wool scourers, freezing company-owned export cool stores, game packers and meat packers which are included in the industry for purposes of the stoppage statistics. It also includes a few abattoirs wrongly assigned to this industry.
 3. Employment figures used are largely monthly averages for 1971 (1972 for female employment) and have their source in Labour Department six-monthly surveys of employment. Any gaps in this data were filled using figures from companies.

Source: Derived from Department of Labour strike returns and six-monthly surveys of employment.

three of them.

The pattern is similar with respect to time lost. The average loss per works was 2,203 man-days a year over the period, but while one works lost an average of only 65 man-days a year, another lost 15,053. The five works with greatest loss of time accounted for 55.7% of all man-days lost in the industry (55.5% if "Others" is included) during 1967-73. Over this period each meat industry worker, on the basis of the above figures, lost an average of 3.41 man-days a year due to stoppages (3.42 if "Others" is included).³ Again, the situation varies greatly between works. While workers in 12 plants lost an average of less than one man-day each, those in seven others each lost an average of over five man-days.

The number of workers engaging in stoppages as a percentage of the number employed is traditionally high for the meat industry as a whole. Over 1967-73, involvement averaged 146.3% (146.8% if "Others" is included).⁴ The industry average again masks great diversity among works. Two plants, for example, had an annual average involvement of only five per cent, which is a tiny fraction of the highest involvement of 481%. The five plants with highest number of workers involved in stoppages accounted for 56.8% of the total number so involved in the industry (56.6% if "Others" is included).

Inspection of the duration figures (man-days lost per worker involved) in the above table also reveals considerable diversity although the pattern tends not to conform to those of the three basic measures of stoppage activity. Some of the most highly stoppage prone works on these measures had fairly brief stoppages, while other works experienced fewer but longer ones.

From the foregoing it appears that plants in the industry rank in similar order irrespective of the measure of stoppage

3. The average of works' worker loss ratios (man-days lost per worker employed) was 2.69.

4. The average of works' worker involvement ratios (number of workers involved as a percentage of the number employed) was 108.5%.

activity used (with the exception of duration). The three highest ranking plants on the involvement criterion also ranked in the top three in terms of frequency and of man-days lost. The proposition that there is an association between the rankings of plants in terms of frequency, time lost and involvement can be tested through Spearman's coefficient of rank correlation. Results in Table 2 reveal that the association between each pair of plant rankings and between the three sets of ranks taken together is strong.

TABLE 2
The Association Between Rankings of Plants in
Terms of Three Stoppage Measures, 1967-73

Variables	Spearman's coefficient (r_s)
S,W	0.902
L,W	0.833
L,S	0.764

- Notes: 1. S = average number of stoppages;
L = average number of man-days lost per worker;
W = average number of workers involved as a percentage of those employed.
2. All coefficients are significant at the 0.01 level.

Source: See Table 1, p. 217.

Over the seven years under study, few works displayed marked changes in stoppage proneness. At least one, however, showed a tendency toward reduced stoppage activity while about four others exhibited the reverse tendency.

It is interesting to note that most works managements and shed unions view their plants as having low stoppage propensities relative to other plants in the country. In answer to the question:⁵ "In relation to other meat freezing works in New Zealand generally, do you consider that strike activity

5. The questionnaires are described in Chapter X.

in your works is high, about the same, or low?", 18 works managements (66.7% of respondents to the management questionnaire) and 11 shed unions (68.7% of respondents to the union questionnaire) said "low", while eight (29.6%) and four (25%) respectively said "about the same" and only one in each case (3.7% and 6.2% respectively) said "high". Both managements and unions tended to underestimate relative strike proneness. Of the eight managements and nine unions which incorrectly perceived their works' positions, seven underestimated in both cases. When asked to compare the level of strikes at their works with those at others in the region, the pattern of union responses was almost unchanged but far more managements now answered "about the same" (17 or 63.0% of respondents) although still only one answered "high". Again, both groups tended to underestimate. This tendency was much less marked when the parties evaluated meat freezing strike activity in relation to other New Zealand industries. Twenty-five managements (92.6%) and 10 unions (62.5%) rated it as "high", two (7.4%) and four (25%) respectively as "medium" and only two unions (12.5%) rated it as "low". The parties tend to underestimate the strike proneness of their works relative to others in the region and country generally but to be far more accurate in assessing the strike proneness of the industry as a whole.

The only individual form of conflict for which we have statistics at the establishment level is industrial accidents. These statistics are based on accident returns forwarded by freezing companies to their employers' organisation and cover the years 1964-69 for all New Zealand works and 1964-73 for South Island works only. They again reveal considerable diversity among works. Over 1964-69 the average plant had an accident frequency rate of 12.1 but rates for individual plants ranged from a low of 3 to a high of 23.3. Detailed figures are presented in Table 3. The works' numbering system in this table is not the same as that in Table 1.

As regards perceptions of accident levels, most works managements and shed unions taking part in the questionnaires viewed their works as having levels about the same as or lower than those of other works. Thirteen managements (48.1% of

TABLE 3

Meat Freezing Industry
Accident Frequency and Frequency Rates on a Works Basis

Works No.	Frequency rate, average 1964-69	No. of accidents, average 1970-73	Frequency rate, average 1970-73
1	23.3		
2	19.6		
3	19.1		
4	18.7		
5	18.6		
6	16.7		
7	16.2		
8	15.9		
9	15.6		
10	15.4		
11	15.1		
12	14.6	168	12.6
13	14.5		
14	14.3		
15	13.8		
16	12.9		
17	11.2	106	9.4
18	11.0	166	7.0
19	10.7	112	7.5
20	10.6	43	7.4
21	10.6	143	11.5
22	10.5		
23	9.5		
24	9.1		
25	8.9	109	11.1
26	8.8	99	8.1
27	8.5	61	5.6
28	7.8	46	10.6
29	6.6	71	6.4
30	6.3	66	7.2
31	5.8	49	7.2
32	5.4	28	5.4
33	4.5	68	5.7
34	3.0	23	3.0

- Notes: 1. Years are from April to March.
 2. The frequency rate is the number of accidents per 100,000 man-hours worked.

Source: Derived from South Island Freezing Companies' Association (SIFCA) data.

respondents) and three unions (20.0%) rated their plants as "low", while eight (29.6%) and nine (60.0%) respectively saw theirs as being "about the same" and only three (11.1%) and two (13.3%) respectively answered "high" (in both cases some

also answered "don't know"). Of the four managements and nine unions which incorrectly perceived their works' positions, all but one union underestimated. As with stoppages, when asked to compare the level of accidents at their works with those of others in the region, the pattern of union responses was unchanged but more managements now answered "about the same" (14 or 51.9%). Again, both parties tended to underestimate. This tendency was strongly evident in evaluations of meat freezing accident levels in relation to other New Zealand industries. Twelve managements (44.4%) and five unions (33.3%) incorrectly rated them as either "about the same" or lower than those of other industries.

It was noted in Chapter II that we have no *a priori* expectations about the statistical relationship which might exist between collective and individual forms of conflict. It was therefore with some interest that we tested the relationship between plant stoppage frequencies and accident frequency rates. Correlating accident frequency rates by works for year ending March 1968 with the number of stoppages by works for the 1967 calendar year gave a simple correlation coefficient of 0.424 (significant 0.02) which indicates a reasonably strong positive association between the two series. Using the same series but for years ending March 1969 and December 1968 respectively, a positive association was again found ($r = 0.314$) but the coefficient was significant only at the 0.10 level. To see if a high stoppage year makes any difference to the results, 1970 stoppage frequencies in South Island works were correlated with 1970-71 accident frequencies for the same works. A weak positive correlation ($r = 0.337$, insignificant) was again found. When accident frequency rates were used in place of actual frequencies the coefficient increased somewhat ($r = 0.409$) but was again not significant. These simple correlations suggest there is a weak but positive relationship between the number of stoppages in a works and either the number of accidents or accident frequency rate there.

II. THE COMPANY LEVEL

As noted in Chapter V, there are several meat freezing companies owning more than one works. It is necessary therefore also to study company patterns of conflict. Table 4 indicates that some companies experience much higher levels of stoppage activity than do others. Among multi-plant companies (those with two or more works), three experienced over 20 stoppages per works in the seven years 1967-73, while three others experienced less than 10 per works. Also, while the works of one multi-plant company averaged an annual loss of 4.14 man-days per worker, those of another had an average annual loss of only 0.81 man-days per worker. Similar diversity exists with respect to worker involvement. The average plant worker involvement ratio ranged from 240.5% for one multi-plant company to 18.0% for another. As indicated by company averages, almost all of the highly stoppage prone works are owned by the multi-plant companies. Four such companies (owning a total of 10 works and employing 50% of the industry's labour force) accounted for 61.9% of all meat industry stoppages, 67.9% of man-days lost and 69.0% of workers involved over 1967-73.

It is apparent from the standard deviations in the table that several multi-plant companies defy description as uniformly low-stoppage or high-stoppage firms in that they contain works with widely different stoppage levels. Companies A, C, D and I are cases in point. In company C, for example, one works experienced 52 stoppages over 1967-73 as compared with nine in its next highest frequency works. This company has the same pattern with respect to involvement and time lost. Another company has one traditionally highly stoppage prone works and another which is almost stoppage free. Some companies (e.g. B, E and F), on the other hand, are comprised of works with similar levels of stoppage activity. The works in company F have remarkably similar experience. The same applies to company E (which has the lowest stoppage propensity of multi-plant companies), except with respect to involvement. It is clear that in some companies, such as the one just cited, there is more variability among works in terms of some measures

TABLE 4
Meat Freezing Industry Stoppage Statistics on a Company Basis,
1967-73

Companies with ≥ 4 works		No. stoppages, seven yrs. 1967-73	No. man-days lost per year	No. man-days lost per worker per year	No. workers involved per year	No. workers involved per year as % of No. employed	No. man-days lost per worker involved per year
Coy. <u>A</u>	Works' averages	26.5	3,057.7	2.76	1,248	113.2	2.80
	Standard deviations	(30.0)	(2,830.6)	(1.78)	(1,543)	(97.8)	(1.26)
	Avs	23.7	2,860.2	4.14	1,233	178.3	2.35
	SDs	(12.3)	(1,562.1)	(2.05)	(593)	(76.8)	(0.41)
Coy. <u>C</u>	Avs	17.7	4,159.2	2.35	1,857	107.4	2.04
	SDs	(22.9)	(6,959.3)	(3.32)	(2,934)	(139.4)	(0.83)
Coy. <u>D</u>	Avs	9.6	1,702.6	3.27	622	122.9	2.35
	SDs	(7.4)	(1,778.0)	(2.95)	(570)	(90.1)	(1.16)
Companies with 2 or 3 works							
Coy. <u>E</u>	Avs	3.7	330.9	0.81	86	18.0	12.04
	SDs	(2.9)	(33.1)	(0.3)	(113)	(22.1)	(10.73)
Coy. <u>F</u>	Avs	17.0	2,121.7	4.07	819	155.1	2.83
	SDs	(0.0)	(3.7)	(0.27)	(339)	(54.4)	(1.16)
Coy. <u>G</u>	Avs	10.5	1,165.8	1.55	671	89.5	1.79
	SDs	(6.4)	(1,481.0)	(1.87)	(859)	(108.9)	(0.09)
Coy. <u>H</u>	Avs	7.5	1,190.7	3.64	261	79.7	3.84
	SDs	(3.5)	(1,286.7)	(3.95)	(117)	(36.49)	(3.20)
Coy. <u>I</u>	Avs	31.0	7,526.7	5.34	3,389	240.5	1.11
	SDs	(43.8)	(10,644.4)	(7.55)	(4,794)	(340.1)	(1.57)
Single plant companies							
Avs		7.7	782.9	1.46	403	61.9	3.31
SDs		(7.9)	(978.7)	(1.21)	(515.5)	(53.1)	(3.46)

- Notes: 1. The figures in parentheses below the means are standard deviations.
2. Works have been grouped according to ownership patterns prevailing for most of the 1967-73 period.

Source: Derived from Department of Labour strike returns.

of stoppage activity than of others. Another example is company H where there is greater variability in terms of time lost than of frequency or involvement.

In only a few companies is company-specific joint action by member plants of significance. While works belonging to the same firm quite often engage in simultaneous stoppages, such action is usually part of a wider regional or national stoppage rather than of one specific to the company. The degree of uniformity (or variability) of stoppage behaviour of works belonging to the same firm has interesting implications for the influence of company-wide factors on levels of conflict, which will be explored in more detail in the next chapter.

Turning to industrial accident statistics, accident frequency rates on a company basis are set out in Table 5.

TABLE 5

Meat Freezing Industry
Accident Frequency Rates on a Company Basis, 1964-69

Company	Accident frequency rate per works	Company	Accident frequency rate per works
Companies with ≥ 4 works:		Companies with 2 or 3 works:	
J	14.9 (3.2)	M	20.5 (2.4)
K	14.1 (3.2)	N	5.3 (2.0)
L	10.5 (4.3)	O	12.8 (3.2)
		P	9.6 (1.6)
		Q	11.7 (1.7)
		Single plant companies:	11.0 (4.8)

Note: Figures in parentheses are standard deviations.

Source: Derived from SIFCA data.

While there is considerable diversity in company accident frequency rates, it is less than for stoppages. Annual average frequency rates per works range from a low of 5.3 for company N to a high of 20.5 for company M. The standard deviations in the table suggest greater uniformity in frequency rates of plants belonging to the same company than in the case of stoppages. For example, the frequency rates of works in company M were 18.7, 19.6 and 23.3, and in company K were 9.5, 14.3, 15.9 and 16.7. The company with the greatest variation in frequency rates was company L with a range of 5.8 to 15.4.

III. THE REGIONAL LEVEL

As noted in Chapter III, one influence on the level of conflict may be the environmental features of the region within which the worker lives. It is therefore appropriate that the regional pattern of meat industry stoppages and accidents be analyzed. Our regional stoppage statistics for the industry are derived directly from figures for individual works and no attempt has been made to isolate out national or multi-regional stoppages.

The most highly stoppage prone region is metropolitan Auckland. Over 1967-73 the three works there accounted for 34.3% of all stoppages in the industry, 44.7% of man-days lost and 47.2% of workers involved. By contrast, they together employ only about 20% of workers in the industry. It is not surprising therefore that the region's average worker loss and worker involvement ratios should also be the industry's highest. Nonetheless, stoppages tend to be shorter there than in other North Island regions (see Col. 7, Table 6). All three Auckland works experienced a high level of stoppage activity over the period under study.

The next most stoppage prone region in terms of frequency and time lost is Wellington although it is far less so than Auckland. Over 1967-73, Wellington accounted for 15% of meat industry stoppages, the average number per works for the seven year period being 13.5. Plants in the region lost an average

TABLE 6
Meat Industry Stoppage Statistics on a Regional Basis, 1967-73

	(1) No. stoppages, seven yrs. 1967-73	(2) No. man-days lost per year	(3) No. man-days lost per worker per year	(4) No. workers involved per year	(5) No. workers involved per year as % of No. employed	(6) % of meat industry labour force	(7) No. man-days lost per worker involved per year
<u>AUCKLAND</u>							
Regional totals	185	34.5	36,520.5	44.7	-	16,526	47.2
No. per works	61.7	12,173.5	7.69	5,509	350.7	19.9	2.18
<u>NORTHLAND- WAIKATO- BAY OF PLENTY</u>							
Reg. totals	37	6.8	5,527.1	6.8	-	1,560	4.5
No. per works	9.2	1,381.8	1.79	390	58.6	10.8	2.91
<u>TARANAKI</u>							
Reg. totals	46	8.5	3,911.8	4.8	-	1,787	5.1
No. per works	11.5	977.9	1.88	447	70.0	7.5	2.89
<u>GISBORNE</u>							
Reg. totals	9	1.7	560.3	0.7	-	270	0.8
No. per works	4.5	280.1	0.70	135	36.0	3.5	2.31
<u>HAWKES BAY</u>							
Reg. totals	14	2.6	4,985.9	6.1	-	1,843	5.3
No. per works	7.0	2,492.9	1.92	921	71.9	10.7	2.79
<u>WELLINGTON</u>							
Reg. totals	81	15.0	10,690.7	13.1	-	3,534	10.1
No. per works	13.5	1,781.8	3.41	589	103.5	14.2	2.89
<u>NORTH IS. TOTALS</u>							
No. per works	372	68.9	62,196.3	76.2	-	25,520	72.8
	17.7	2,961.7	3.02	1,215	114.9	66.7	2.73
<u>NELSON</u>							
Reg. totals	6	1.1	150.9	0.2	-	131	0.4
No. per works	3.0	75.4	0.36	65	30.3	1.7	1.74
<u>CANTERBURY</u>							
Reg. totals	60	11.1	9,495.6	11.6	-	3,167	9.0
No. per works	8.6	1,356.5	2.71	452	81.1	13.4	8.3
<u>Otago</u>							
Reg. totals	37	6.9	4,139.4	5.1	-	2,229	6.4
No. per works	12.3	1,379.8	2.75	743	144.0	6.6	1.60
<u>SOUTHLAND</u>							
Reg. totals	65	12.0	5,671.0	6.9	-	3,988	11.4
No. per works	16.2	1,417.7	2.07	997	135.0	11.6	1.59
<u>SOUTH IS. TOTALS</u>							
No. per works	168	31.1	19,456.9	23.8	-	9,515	27.2
	10.5	1,216.1	2.26	595	100.0	33.3	4.47
<u>N.Z. TOTALS</u>							
National	540	100.0	81,653.2	100.0	-	35,035	100.0
Averages	14.6	2,206.8	3.41 ^a	947	146.3 ^b	-	2.33 ^c

- Notes: a The average of works' worker loss ratios (man-days lost per worker employed) is 2.69.
b The average of works' worker involvement ratios (workers involved as a percentage of those employed) is 108.5%.
c The average of works' duration of stoppages (man-days lost per worker involved) is 3.48.

1. Northland was added to the Waikato-Bay of Plenty group to preserve anonymity.
2. Regions are approximate provincial groupings.

Source: Derived from Department of Labour strike returns and six-monthly surveys of employment.

of 1,782 man-days a year, giving an average annual loss per plant of 3.41 man-days per worker. In terms of the worker involvement ratio, Wellington ranks fourth behind Auckland, Otago and Southland. There is some diversity among works in the region, with the level of stoppages being high in three of them, moderate in one and low in two.

Of the other North Island regions, Taranaki has a relatively high number of stoppages but is no more than moderately stoppage prone in terms of other measures. Most of the region's stoppage activity occurred in one works. Hawkes Bay and Northland-Waikato-Bay of Plenty have moderate to low stoppage propensities, while Gisborne's is the second lowest in the country. The propensities of individual works in Hawkes Bay are fairly similar as is the case for those in Gisborne. In Northland-Waikato-Bay of Plenty there is greater variability, with one works being considerably more stoppage prone than the others.

The Nelson region has the lowest level of stoppage activity in the country. Canterbury, like the two more southern South Island regions, has a high level of time lost per worker but, unlike the other two, only a moderate level of stoppage frequency and worker involvement. Canterbury's unusually high works' average duration of stoppages (man-days lost per worker involved) reflects a number of lengthy go slows. Of the stoppage propensities of the region's seven plants, two were high, one was moderate, and four were low.

Otago and Southland have similar levels of stoppage activity, both ranking highly in terms of frequency, man-days lost per worker and labour force involvement. In Otago, the three works have some similarity in respect of stoppage frequency but one works has a much higher worker loss ratio and worker involvement ratio than the other two. In Southland, the four works, with one exception, have similar stoppage propensities.

Conflict action on a regional basis is quite common in the meat industry. In 1967 joint action was taken by a number of works in the greater Auckland area. In 1968 Canterbury and

Southland works jointly instituted a load-out ban and in the following year works in greater Auckland struck in combination with one in Taranaki. Canterbury works acted together on a number of occasions in 1970, as did those in Southland and Auckland. Also, in that year workers in Auckland sheds combined on two occasions with those in a Gisborne shed. The Auckland plants also acted in combination twice in 1971. In the following year joint action was seen in Taranaki, Auckland and Canterbury and in 1973, in Canterbury, Otago and Southland. Some of these joint stoppages were parts of national disputes but even then the timing differed among regions.

National disputes in the industry are also quite common, although, despite the description, they do not always involve every works in the country. In 1968 an export load-out ban involved works in Wellington, Canterbury and Southland. In 1970 five Canterbury works instituted a go slow as part of a national dispute and tradesmen in 13 works stopped over a wage claim. 1972 saw office workers in 10 plants jointly taking action, and a large number of sheds in various parts of the country stopping over a national issue. In early 1973 another large group of works jointly instituted a go slow which was followed later by a ban on overtime and on export loading. This latter one was far the biggest national action in the years 1967-73, involving a total of nearly 22,400 workers from almost every shed and a loss of over 67,000 man-days and \$1,056,000 in wages.

It is interesting to compare the regional distribution of meat industry stoppages with that of stoppages in industry generally. Unfortunately, only frequency and involvement figures are published on a regional basis and even they are available for only all industry. Moreover, the regional breakdown is rather broad, being no finer than industrial districts. At the time of writing these statistics were available only up to 1972.

It seems clear from Table 7 that the 1967-72 regional distributions of stoppage frequency (Cols.1) differ between meat freezing and industry in general. For example, the

TABLE 7
Meat Freezing and All Industry Stoppage Statistics on an Industrial Districts Basis

Industrial District	Meat Freezing 1967-72				All industry 1967-72				All industry minus meat freezing 1967-72		
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1*)	(2*)	(3*)
	% of No. of Stoppages	% of No. of workers involved	% of industry labour force	(2)÷(3)	% of No. of Stoppages	% of No. of workers involved	% of surveyed employment	(2)÷(3)	% of No. of workers involved	% of surveyed employment (excl. meat freez.)	(1*)÷(2*)
NORTHERN	44.4	59.0	32.9	1.8	59.4	56.8	43.5	1.3	55.1	43.9	1.3
TARANAKI	5.9	3.8	4.8	0.8	3.2	2.3	2.6	0.9	1.1	2.5	0.4
WELLINGTON	17.8	13.5	29.0	0.5	15.0	17.9	26.1	0.7	21.7	26.0	0.8
MARLBOROUGH-NELSON	0.7	0.1	1.7	0.1	1.4	1.0	2.5	0.4	1.8	2.5	0.7
WESTLAND	0	0	0	0	0.9	0.6	1.2	0.5	1.0	1.2	0.8
CANTERBURY	12.6	8.1	13.4	0.6	10.1	8.5	14.2	0.6	8.9	14.2	0.6
OTAGO-SOUTHLAND	18.3	14.3	18.2	0.8	10.0	10.7	9.9	1.1	7.7	9.6	0.8
NATIONAL	0.3	1.3	NA ^a	NA	0.1	2.0	NA	NA	2.7	NA	NA
N.Z. TOTALS	100.0	100.0	100.0	1.0	100.0	100.0	100.0	1.0	100.0	100.0	1.0

Notes and Sources:

a NA = not applicable.

- Industrial districts (I.D.s) in this table do not necessarily correspond to the regions in Table 6, p.227. The Northern I.D. includes the Whangarei, Auckland, Hamilton, Tauranga, Rotorua, and Gisborne employment districts (E.D.s); the Taranaki I.D. is equivalent to the New Plymouth E.D.; the Wellington I.D. includes the Wanganui, Napier, Hastings, Masterton, Palmerston North, Lower Hutt and Wellington E.D.s; the Marlborough-Nelson I.D. includes the Blenheim and Nelson E.D.s; the Canterbury I.D. includes the Christchurch and Timaru E.D.s; the Otago-Southland I.D. includes the Dunedin and Invercargill E.D.s.
- All industry stoppage statistics are derived from *Statistics of Prices, Wages and Labour*, 1972 (Department of Statistics, Wellington). The "all industry" employment figures are "full-time employment" as per the Labour Department April surveys and are from the supplementary tables to the *Labour and Employment Gazette* (Department of Labour, Wellington).
- Sources of meat freezing statistics are given in Table 1, p. 217.
- The official statistics record only two national stoppages over this period, one of which was in meat freezing. For purposes of comparison, involvement (and frequency) figures for this stoppage were isolated out from the district data in "meat freezing, 1967-72".
- The all industry minus meat freezing figures do not include frequency as our meat freezing frequency figures were compiled on a slightly different basis from the official statistics (see Table 1, note 1).

percentage of stoppages in the Northern district is greater in all industry than in meat freezing. But when the proportion of stoppages occurring in a district is related to the proportion of the relevant labour force employed there (Cols. 3), the regional frequency pattern for the meat industry is found to be broadly similar to that for industry generally. Hence the different regional frequency pattern for meat freezing reflects differences in industrial location compared with all industry. Two districts, however, stand out. Marlborough-Nelson contributes relatively fewer stoppages to the meat industry total than it does to industry generally, while the reverse is true for Canterbury.

The 1967-72 regional distributions of worker involvement for meat freezing and all industry (Cols. 2) appear closer than for frequency. But when employment distributions are considered the picture changes. The contribution of the Northern region to involvement is relatively greater in meat freezing than in all industry, while the reverse is true for Wellington, Marlborough - Nelson and Otago - Southland.

In view of the dominance of meat freezing in total stoppage activity, it may be that similarities between the regional stoppage distributions of that industry and of all industry are due to its inclusion in the all industry figures. Consequently, involvement and employment figures for all industries other than meat freezing are also presented in Table 7 and these reveal a different picture again. The most noticeable changes relate to Taranaki which accounts for relatively more worker involvements in the meat industry than in other industries, and to Marlborough-Nelson where the proportion of meat industry involvements (relative to employment) is even lower in relation to all other industries than it is to industry generally.

Average accident rates for works in various regions are presented in Table 8. The regional pattern revealed is similar in some respects to that for stoppage activity (Table 6), but different in others. The difference between the two islands is much sharper in the case of accident frequency

rates than of stoppage activity. Also the relative positions of some of the regions, e.g. Northland-Waikato-Bay of Plenty, differ considerably between the two conflict forms.

TABLE 8

Accident Frequency Rates on a Regional Basis, 1964-69

Average accident frequency rate		Average accident frequency rate	
Auckland	17.4	Nelson	6.6
Northland-Waikato-Bay of Plenty	21.4	Canterbury	8.3
Taranaki	15.8	Otago	7.4
Gisborne	10.0	Southland	10.2
Hawkes Bay	15.7		
Wellington	14.1		
Av. for North Island Works	15.5	Av. for South Island Works	8.4
Av. for all N.Z. Works	12.1		

Source: Derived from SIFCA data.

There are unfortunately no official accident frequency rate statistics published on a regional basis and so it is not possible to compare the figures in Table 8 with those for some other industry or for industry in general. Official accident frequency figures are available by regions, however, and statistics based on these are found in Table 9.

Comparing the two distributions for meat freezing with those for all industry, we see they are not particularly close. Over 1968-70 Auckland, Hamilton and Lower Hutt-Wellington accounted for relatively more accidents (in relation to employment) in meat freezing than in industry generally. The reverse was true for Tauranga-Rotorua, Gisborne-Napier-Hastings, Blenheim-Nelson-Greymouth, Christchurch, Timaru, Dunedin and Invercargill. The remaining districts (Whangarei, New Plymouth-

TABLE 9
Meat Freezing and All Industry Accident Frequency Statistics on an Employment Districts Basis
1968-70

	Whangarei	Auckland	Hamilton	Tauranga-Rotorua	Gisborne-Napier	New Plymouth	-Wanganui	Palmerston North	-Masterton	Lower Hutt- Wellington	Blenheim-Nelson	-Greymouth	Christchurch	Timaru	Dunedin	Invercargill	At Sea, Outside NZ, Not stated	Total
<u>Meat Freezing</u>																		
% of accidents by number	4.3	30.8	10.5	0.6	10.7	12.2	8.8	4.0	1.0	5.4	2.1	2.7	6.9	0.0	100.0			
% of employ- ment	3.9	20.1	5.2	0.9	14.4	9.7	7.5	4.6	1.8	10.0	3.5	6.6	11.7	0	100.0			
<u>All Industry</u>																		
% of accidents by number	3.2	28.2	10.1	7.4	6.6	6.8	5.3	7.9	4.7	8.9	2.1	4.5	4.2	0.3	100.0			
% of employ- ment	2.4	27.5	6.9	5.3	4.9	4.9	5.1	15.1	3.7	12.5	1.6	6.6	3.4	0	100.0			

Notes and Sources:

1. Accident frequencies are from various Reports on Industrial Injuries (Department of Statistics, Wellington).
2. All industry employment figures are "full-time employment" as per the Labour Department April surveys and are from the supplementary tables to the *Labour and Employment Gazette*.
3. The source of meat freezing employment statistics is given in Table 1, p. 217.

Wanganui and Palmerston North-Masterton) accounted for broadly similar proportions in both meat freezing and all industry.

IV. THE INTRA-PLANT LEVEL

As noted in Chapter III, Kuhn⁶ and Sayles⁷ have pointed to the importance of work groups in determining plant levels of conflict. Many of the features of the meat freezing industry outlined in Chapter IV are conducive to the development of strong and active work groups. Its technology subjects workers to changes in materials and standards and groups workers into task departments, many of which are of similar size. In some departments, workers perform specialized jobs and have the opportunity to interact with others. Moreover, the technology requires rigidly sequential processing of materials into a few major (and many minor) products.

The basic employment unit in the industry is the task department, each of which has its union delegate and may have its own "smoko" room or other facilities. Its work differs from that of other departments, but because of the sequential nature of the processing operation, is dependent on the output of other departments. While all departments contribute to the production process, the work of some bears a more direct relationship to plant output than that of others. The traditionally "strategic" groups are those at the beginning and end of the production process, i.e. the slaughtermen and the freezing chamber workers.

Slaughtermen have historically been the elite of the industry. They perform a fairly skilled operation which sets the production process in motion. Their position shapes their perception of one another and of other workers and ensures they can disrupt the production of the works at a cost which is

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6. James W. Kuhn, *Bargaining in Grievance Settlement: The Power of Industrial Work Groups* (Columbia University Press, New York, 1961).
 7. Leonard R. Sayles, *Behaviour of Industrial Work Groups: Prediction and Control* (Wiley, New York, 1958).

small to themselves in relation to that inflicted on management. When slaughtermen stop work all follow-on departments are brought to a halt after processing any materials in the "pipeline". The impact is therefore quick and widespread. Moreover, slaughtermen are pieceworkers so that their earnings need not be affected by a stoppage providing the number of stock put up over a season does not fall as a result. By comparison, a plant can keep running for some time after certain follow-on departments stop work. For example, the raw materials used by a by-products department can be jettisoned if the department strikes. While this involves a cost to the employer, the rest of the works can still operate. Furthermore, workers in many follow-on departments are paid by the hour so that the cost of the action to the worker is not necessarily recouped on return to work. Sometimes slaughtermen or butchers will act with slaughtermen's assistants or labourers so that the work group encompasses the whole slaughterfloor or slaughterhouse. In other situations, slaughtermen and labourers are quite separate and may even be in conflict with each other.

The technology of the industry also places freezer workers in a strong position. Killing cannot go on unless the meat can go directly into cold storage as it is processed. Should freezer workers stop, no processed product is loaded into the freezers and none is loaded out for dispatch to buyers. They can consequently bring antecedent processing to a sudden halt and prevent orders being fulfilled and so revenue being received. Freezer workers are generally not paid on piece-rate but are hourly workers, albeit often with an additional incentive payment. Unlike some by-products departments, however, the material entering the freezers cannot be jettisoned. Thus, providing the stoppage does not reduce total stock numbers killed over a season, it may not lower the season's work for the freezer workers but merely increase the proportion of it performed as overtime.

Unfortunately we do not have detailed intra-plant stoppage data for all works. The data we do have relates only to five works and a summary of it is presented in Table 10.

TABLE 10
Stoppage Statistics by Departments, 1972-73 Season

	(1) Mutton Slaughtermen	(2) Mutton Labourers	(3) Beef Slaughtermen	(4) Beef Labourers	(5) Boners & Boners' Labourers	(6) Offal	(7) Freezer	(8) Other Departments	(9) All works, more than one dept., or not identifiable
	(percentages)								
<u>Works A</u>	Frequency Workers involved Man-days lost	9.7 3.4 1.5	1.6 1.5 0.2	12.1 1.1 0.3	6.4 2.7 0.9	16.1 6.5 2.1	10.5 14.2 16.8	27.4 25.9 11.7	4.1 40.2 62.4
<u>Works B</u>	Frequency Workers involved Man days lost	13.3 8.6 8.3	4.4 6.2 0.2	13.3 1.8 3.5	0 0 0	35.6 21.9 62.2	0 0 0	2.2 0.5 0.1	28.9 59.5 25.0
<u>Works C</u>	Frequency Workers involved Man days lost	20.8 8.8 5.0	4.2 5.4 0.8	33.3 3.4 1.1	0 0 0	20.8 13.3 1.5	0 0 0	0 0 0	20.9 69.1 91.6
<u>Works D</u>	Frequency Workers Involved Man days lost	23.1 22.5 16.7	7.7 5.8 0.8	0 0 0	0 0 0	0 0 0	0 0 0	15.4 19.5 48.4	53.8 52.1 35.0
	Frequency Workers involved Man days lost	7.5 (2.8) na ^a (1.7) na (0.6)	0 na na na	0 na na na	0 na na na	22.5 (44.4) na (10.2) na (18.4)	0 na na na	10.0 (13.9) na (3.1) na (4.2)	60.0 (36.1) na (84.5) na (76.8)

Notes: a na = not available.

- Figures for Works D are for an earlier season as those for 1972-73 were not available.
- For Works E only frequency figures were available for 1972-73. The figures in parentheses are for an earlier season.

Source: Derived from data obtained from companies.

The majority of the stoppages listed under a department were specific to that section although wider stoppages clearly resulting from disputes in that department are also included.

It is clear that slaughtermen account for a significant proportion of stoppage activity in all five works, especially in respect of frequency. Slaughtermen (mutton and beef) accounted for 21.8%, 26.6%, 54.1%, 23.1% and 7.5% of stoppages by number in Works A-E respectively. Their contributions to involvement and time lost are relatively smaller. In the case of beef slaughtermen this mainly reflects the comparatively small numbers employed. Beef slaughtermen constitute about 1.5% of the industry's peak labour force and an even smaller proportion of its average force. The departmental stoppages of mutton slaughtermen, who constitute about 16% and 13% of peak and average labour forces respectively,⁸ appear to be numerous but often relatively brief. In any event, the percentages for mutton slaughtermen in Table 10 understate their total contribution as they also accounted for a substantial proportion of stoppage activity embracing more than one department or the whole works. Freezer workers accounted for significant stoppage activity in two of these works.

The table also reveals that a number of groups other than the two traditionally strategic ones are important in some works. There is an increasing tendency for other departments to engage in collective action. There are few groups in a freezing works which are not in some way strategic and are not able to inflict, by a direct action, a relatively high cost on management. Increased processing and the development of new products has emphasized this so that, in the words of a works manager, "hourly workers have realized they can stop the works as effectively as pieceworkers". This particularly applies to boners and boners' labourers whose importance has increased substantially with the greater processing of carcasses into cuts and packs. (Although many boners are pieceworkers.) They are now a large and strategic group through which must pass a substantial part of total works' output.

8. The ratios of beef slaughtermen and of mutton slaughtermen to the industry's labour force are estimates derived from questionnaire responses.

While this may be so, it is nevertheless significant that as recently as 1972-73 a few departments in each of the above works accounted for a high percentage of stoppage activity. In Works A, for example, beef slaughtermen represented less than 1% of the labour force but accounted for over 12% of stoppages by number, and were also involved in several all-works and multi-departmental stoppages. Slaughtermen (mutton and beef), boners and boners' labourers, offal workers and freezer workers together constituted 34% of this works' 1972-73 average labour force but accounted for 75.8% of stoppages by number, 51.1% of workers involved and 32.4% of man-days lost. These figures again understate their total contribution because of their involvement in stoppages embracing more than one department or the whole works. A similar pattern is found in other works. Beef slaughtermen in Works C, for example, totalled 2% of its 1972-73 peak labour force but contributed 33.3% of stoppages by number. In Works B the boning room employed only 20.7% of the 1972-73 average labour force but accounted for 35.6% of the number of stoppages, 21.9% of workers involved and 62.2% of man-days lost.

While our detailed statistical information covers only five works, interview material on this question was obtained from a further 10 in the course of fieldwork. The pattern for most of these was similar to that in Table 10. Seven reported that slaughtermen (or the slaughterfloor) were the most stoppage prone group. In two works they were followed by freezer workers. The reason given for this pattern by one works' manager was that "they (slaughtermen and freezer workers) are in the strongest position and they take advantage of it". A number of works, however, noted a decline in the relative stoppage propensities of these two groups. In most cases, several departments were reported as being almost free of stoppages. Three works had no disproportionately important groups at the time of the interviews but all had experience of such groups in the past, noting that stoppage propensities of groups change over time.

As regards individual forms of conflict at the intra-plant level, accident frequency and time lost figures for the industry

are published on a departmental basis by the Department of Statistics. Unfortunately, it is difficult to infer much from these figures as they are related neither to hours worked in departments (and so producing frequency rates) nor to the number of workers employed in departments. In any event, the nature of the work of some departments, e.g. the slaughterboard, places workers in greater risk of incurring injury than does that of other departments, e.g. sausage casings. Not knowing the proportion of accidents in each department which is related to conflict, makes it difficult to compare conflict levels between departments on the basis of departmental accident figures. Bearing this qualification in mind, over 1968-70 71.2% of accidents by number occurred in the slaughterhouse, which was followed by the freezing chamber with 10.4%. These two departments also accounted for 60.6% and 12.4% of calendar days lost due to accidents, respectively. The proportion of plant labour force employed in the slaughterhouse (slaughtermen and slaughtermen's labourers) varies between works but ranges from about 19% to 39%, while for the freezing chamber the range is 6% to 11%. For works responding to the questionnaire, the slaughterhouse accounted for 34.7% of the peak labour force and about 30% of the average force, while for the freezing chamber the figures were 7.2% and 7% respectively. Table 11 contains a breakdown of frequency and time lost figures.

V. FORMS OF INDUSTRIAL CONFLICT: COLLECTIVE FORMS AND EMPLOYER-INITIATED FORMS

Up until now in this chapter we have used the term "industrial stoppage" to encompass all collective forms of industrial conflict (along with some employer-initiated forms). But the characteristics of the various forms differ, so in this section we provide a breakdown of the stoppage statistics into particular forms of conflict.

The forms of industrial conflict employed by parties in the meat industry are very diverse. Many of them, such as worker-initiated individual forms and numerous employer-

TABLE 11

Meat Freezing Industry Accident Statistics by
Departments, Annual Averages 1968-70

Department	No. of accidents	Calendar days lost (actual age basis)
Fellmongery & pelts	374 (5.2%)	16,424 (6.8%)
Sausage casing	124 (1.7)	2,854 (1.2)
Slaughterhouse	5,167 (71.2)	146,807 (60.6)
Freezing chamber	752 (10.4)	29,993 (12.4)
Canning & preserving	49 (0.7)	1,238 (0.5)
Boiling down & manure	143 (2.0)	7,125 (2.9)
Other departments	650 (9.0)	37,729 (15.6)
Meat Freezing Industry	7,259 (100.0)	242,170 (100.0)

Note: Figures in parentheses are percentages.

Source: Derived from various *Reports on Industrial Injuries*.

initiated forms, do not of course show up in the stoppage statistics. Those that do, however, include most of the collective forms outlined in Chapter II (and some variants not mentioned there) and some of the more overt employer-initiated forms. Among the former are various types of strikes and bans, go slows and stop work meetings; and among the latter are lockouts and refusals to put up stock. Often these forms are employed in combination. For example, in 1972 one action involved a load-out ban, stop work meeting and go slow. In the same year an overtime ban and a go slow were associated with company refusals to put up stock for slaughter.

A number of the forms employed are peculiar to the meat industry. The load-out ban, for example, is not commonly used

in other industries and consists of a refusal of workers to dispatch output from the freezer or any other part of the works. It may relate to all output or to part of it e.g. export produce (the export load-out ban). The industry's technology makes the load-out ban particularly "effective". Not only are orders unfilled, and so revenue not received, but also the ability of the works to continue killing is limited to the extent of spare capacity in the freezers. Once these are full, most operations must cease as the bulk of the products are highly perishable. Another type of ban in the industry is the refusal to kill a class of stock (such as export stock, wet sheep and so on), the effect of which depends on the importance of the banned class of stock in the total throughput of the works. The employer, for his part, may refuse to put up stock for slaughter which has the effect of closing down the works and so can be regarded as a form of lockout.

Statistics on these, and other forms of conflict, are contained in Table 12. Before discussing the table's contents, a few words should be said about its construction. It, along with others in this chapter, was derived from Department of Labour strike returns, the design of which is such that they provide only minimal information on the form of conflict involved. A stoppage is specified only as an industrial strike, a lockout or neither and further information on its nature must be gleaned from brief written comments contained elsewhere on the return. It is therefore not possible to fully categorise all actions into the particular forms of conflict involved.⁹ In constructing this table, the basic criterion used was that "an action will be classified as a strike unless the return clearly identifies it as something else". The effect of this is to overstate the importance of strikes (understate that of other conflict forms) but, given the nature of the source material, this is inevitable.

9. The Department of Labour is, at the time of writing, re-designing this return and, as a result, this problem may be of less importance in the future.

TABLE 12

Meat Freezing Industry Conflict Forms, 1967-73

Form	Number	No. of workers involved	No. of man-days lost	Wages lost (\$)
Strike	350 (82.9%)	181,190 (73.8%)	437,373.5 (76.3%)	4,973,170 (72.8%)
Unofficial Strike	5 (1.2)	2,342 (1.0)	3,329 (0.6)	43,998 (0.6)
Overtime Ban	9 ^a (2.1)	26,208 (10.7)	74,125 (12.9)	1,170,680 (17.1)
Load-out ban or export load-out ban	5 ^b (1.2)	2,229 (0.9)	2,427 (0.4)	36,622 (0.5)
Refusal to kill export stock	2 (0.5)	1,639 (0.7)	4,950 (0.9)	42,134 (0.6)
Go Slow	18 ^c (4.3)	12,433 (5.1)	32,528 (5.7)	318,097 (4.7)
Stop Work Meeting	31 ^d (7.3)	18,613 (7.6)	15,572 (2.7)	185,836 (2.7)
Lockout	2 (0.5)	1,023 (0.4)	2,647 (0.5)	56,230 (0.8)
Totals	422	245,677	572,951.5	6,826,767

- Notes:
- a Includes one overtime ban and refusal to put up stock, and one overtime ban and load-out ban.
 - b Two were bans on loading containers, one of which also involved stop work meetings; one also involved a stop work meeting and go slow.
 - c One also involved a refusal to put up stock, and another a load-out ban.
 - d One of which was unofficial.
1. Figures in parentheses are percentages.
 2. Unlike previous tables, frequency figures in this table were calculated on the same basis as the official frequency figures (see Table 1, note 1, p. 217).

Source: Derived from Department of Labour strike returns.

While the strike figures are inflated, they nonetheless indicate the prime importance of the strike among collective forms of conflict in meat freezing. Almost all strikes in this industry, as in other New Zealand industries, are official being supported and/or sanctioned by the union. The importance of overtime bans, load-out bans and go slows, in terms of man-days lost, is understated because of the impossibility in a number of instances of calculating time lost. Go slows are quite common, occurring in six of the seven years to which the above table relates. The same applies to stop work meetings, although their frequency also seems to be increasing. Of the 31 meetings in Table 12, 17 occurred in 1973. The importance of stop work meetings is considerably understated because they often precede strikes and so are included in the strike statistics.

Table 13 gives an indication of the number of works experiencing particular conflict forms in the five years ending 1973. It is based on questionnaire responses from works managements and shed unions. Management responses suggest a higher proportion of works experienced most of the actions listed in the table than do union responses. Both, however, indicate a fairly wide distribution of the conflict forms. It is interesting that while a high proportion of management responses indicate experience with unofficial strikes (44.4%), the proportion is, not unexpectedly, much lower for union responses (13.3%). (Management and union responses from a particular works were the same in only four of 10 cases.) By contrast, the proportion of responses indicating experience with lockouts was far greater for unions (53.3%) than for managements (14.8%). (Responses for the parties from a given works were, however, the same in seven of 10 cases.)

VI. UNIONS INVOLVED IN MEAT FREEZING INDUSTRY STOPPAGES

As noted in Chapter V, the meat industry has not only numerous companies but also many unions. In addition to the four freezing workers' unions there are at least nine tradesmen's

TABLE 13

Works' Experience with Conflict Forms
(No. of Works Experiencing Particular Conflict Forms in
years 1969-73)

Form	Management responses	Union responses
	n = 27	n = 15
Overtime ban	22	10
Go slow or work to rule	25	10
Load-out ban	22	12
Stop work meeting	23	10
Official strike	23	11
Unofficial strike	12	2
Lockout	4	8

Source: Management and union questionnaires.

unions, and unions covering clerical workers, shift engineers, drivers, coopers, labourers, retail butchers, restaurant workers and meat inspectors. It is therefore of interest to know the distribution of stoppages among members of these unions. The following table was again derived from Labour Department strike returns, on which are recorded the names of the union (or unions) and company (or companies) involved.

It is clear that the vast bulk of stoppage activity in the industry involves members of freezing workers' unions. Stoppages jointly involving freezing workers and tradesmen (and others) account for the next highest proportion of workers involved, time lost and wages lost and those involving tradesmen's unions the next highest proportion of stoppages by number. But in the absence of a detailed occupational breakdown of meat freezing employment, it is difficult to accurately compare the stoppage propensities of the groups in this table.

TABLE 14
Meat Freezing Industry
Stoppage Statistics on a Union Basis, 1967-73

	No. of Stoppages	No. of Workers Involved	No. of Man- days lost	Wages lost (\$)
<u>Freezing Workers' Unions</u>	363 (86.0%)	226,055 (92.0%)	494,617 (86.3%)	6,028,629 (88.3%)
<u>Tradesmen's Unions</u>				
TU1	15	2,741	16,177	109,340
TU2	2	36	89.5	938
TU3	5	1,319	4,245	60,651
TU4	1	6	12	130
TU5	1	45	392	3,350
Subtotal - Tradesmen's Unions	24 (5.7)	4,147 (1.7)	20,915.5 (3.7)	174,409 (2.6)
<u>Other Unions</u>				
OU1	1	16	16	166
OU2	7	3,051	2,450	35,934
OU3	1	72	126	3,649
OU4	1	20	180	2,040
OU5	3	205	212	1,473
OU6	1	101	19	118
Subtotal - Other Unions	14 (3.3)	3,465 (1.4)	3,003 (0.5)	43,380 (0.6)
<u>Joint Tradesmen's Stoppages</u>				
TU1/TU3	1-	210	525	3,043
TU1/TU5	6	346	596	12,070
TU1/TU2	1	74	299	4,142
TU2/TU4	1	16	72	590
Various trades	4	368	916	15,877
Subtotal - Joint Trades- men's Stoppages	13 (3.1)	1,014 (0.4)	2,408 (0.4)	35,722 (0.5)
<u>Joint Freezing Workers'- Tradesmen's Stoppages</u>				
FW/TU1	3	4,661	23,204	155,595
FW/various trades	5 ^a	6,335	28,804	389,032
Subtotal - Joint FW- Tradesmen's Stoppages	8 (1.9)	10,996 (4.5)	52,008 (9.1)	544,627 (8.0)
TOTALS	422	245,677	572,951.5	6,826,767

Notes: a Three involved other unions in addition to those of freezing workers and tradesmen.

1. Figures in parentheses are percentages.

Source: Derived from Department of Labour strike returns.

Employment statistics for freezing workers and tradesmen (among others) were received by questionnaire for 25 works, in which freezing workers represented 76.4%, and tradesmen 8.6%, of average employment in 1972-73. Applying these percentages to the total labour force for the industry gives an estimate of the number of freezing workers and tradesmen which, related to the involvement figures in Table 14, gives a worker involvement ratio of 176.8% for freezing workers, 35.9% for tradesmen and 146.3% for all workers in the industry. When related to the time lost figures it yields a worker loss ratio of 3.87 for freezing workers, 1.62 for tradesmen and 3.41 for all workers in the industry.

VII. CONCLUSION

Our intra-industry analysis has revealed patterns of conflict which the industry level statistics of the previous chapter were incapable of showing. The most stoppage prone industry in the country has been seen to have highly complex and diverse conflict patterns at all levels. Over 1967-73, 14 freezing works averaged less than one stoppage a year and an equal number experienced stoppages in only three or less of these years. On the other hand, five works averaged over four stoppages a year in accounting for about 47% of all meat industry stoppages during the period. Groups of five works also accounted for about 56% of time lost and 57% of workers involved. Diversity also characterizes the works' pattern of industrial accidents. While five works had an average frequency rate less than 6.5, another five had a rate greater than 18.5 for the years 1964-69.

Stoppage levels also differ between companies, with four multi-plant companies accounting for over 60% of the industry's stoppages, man-days lost and workers involved during 1967-73. In some multi-plant companies, there are also differences between member plants. The differences between accident frequency rates of companies, and of works belonging to the one company, are considerable but less marked.

Diversity is again present at the regional level. During 1967-73 the metropolitan Auckland works accounted for a disproportionately large amount of stoppage activity, while the contribution of some other regions, such as Nelson, was almost negligible. There are also pronounced regional differences in accident frequency rates, especially as between the North and South Islands.

Stoppage activity is often largely localized to particular departments within freezing works. Groups such as slaughtermen, boners and boners' labourers, and freezer workers account for a disproportionate share of stoppages. Accidents are also distributed unevenly among departments, with the slaughterhouse and freezing chamber again being of prime importance.

Most collective and employer-initiated forms of conflict are found in the freezing industry. Strikes are the most important of the collective forms although overtime bans, go slows and stop work meetings also figure prominently. The industry's stoppages involve many different unions (and combinations of unions), with at least 15 engaging in stoppage activity at one time or another during 1967-73. But the great bulk of stoppages involved members of freezing workers' unions.

The various levels of analysis of this chapter have shown different aspects of conflict which, when taken together, form the overall conflict pattern for the industry. Statistics at the industry level give just part of the pattern and, when considered in isolation, may even give misleading impressions. They must be supplemented by data relating to lower levels of aggregation. Unfortunately this is easier said than done in New Zealand where stoppage statistics are not available for these other levels. If the analysis of industrial conflict in this country is to be meaningful, far more disaggregated information must be published. We would do well to follow the practice of the Canadian Department of Labour which publishes for every stoppage involving 100 or more workers not only the name of the industry but also of the employer, union and location along with pertinent statistics, a brief note on major

issues involved, and the result.¹⁰

VIII. APPENDIX: MEAT FREEZING INDUSTRY STOPPAGE STATISTICS

Most of the intra-industry stoppage statistics used in this chapter have been extracted from the final strike returns forwarded by the Department of Labour (DOL) to the Department of Statistics (DOS). Some of these statistics differ somewhat from those actually published. Differences arise because the DOS can, and does, make limited changes and refinements to information supplied by the DOL. The DOS can, for example, decide an action is not an industrial stoppage and so not record it. It may also classify a stoppage as belonging to an industry different from the one outlined by the DOL. The DOS classifies stoppages by industry on the basis of industry descriptions provided in the DOL strike returns, which can be rather loose. Descriptions of the meat freezing industry, for example, include "freezing works", "meat processing" and "meat industry". Furthermore, the DOS may disagree that a certain enterprise belongs to the industry described by the DOL and may reclassify it. A source of confusion in this respect concerns abattoirs. Occasionally the DOL has wrongly described an abattoir as belonging to the meat freezing industry. In some instances the DOS has corrected this error but in others has introduced similar ones of its own. In at least one case it wrongly included a meat freezing works in the abattoir industry, while in others it included abattoirs in the meat freezing industry. But the number of such errors made by either department is very small. Another possible source of difference between statistics arises from changes made by the DOS when checking and examining DOL figures. For all these reasons, data derived from DOL strike returns may differ somewhat from the official statistics. The statistics extracted from the strike returns have, however, been reconciled with the official ones for those years for which DOS work forms were available. A comparison, at industry level, of these two sets of statistics is contained in the following table.

10. See, for example, *Strikes and Lockouts in Canada* (Labour Canada, Ottawa, 1971) pp. 30-59.

TABLE 15

A Comparison of Meat Freezing Stoppage Statistics, 1967-73

	No. of Stoppages	No. of workers involved	No. of man- days lost	Wages lost (\$)
<u>1967:</u>				
Own	25	13,002	50,347	425,360
Official	26	13,027	50,435	425,480
<u>1968:</u>				
Own	42	22,828	79,638	634,658
Official	40	21,954	79,702	627,710
<u>1969:</u>				
Own	37	22,040	69,551	670,480
Official	37	22,040	69,551	670,480
<u>1970:</u>				
Own	91	45,333	109,633	923,170
Official	91	45,333	109,633	923,170
<u>1971:</u>				
Own	67	34,190	43,126	660,779
Official	68	33,992	43,126	618,050
<u>1972:</u>				
Own	62	35,199	78,864.5	1,181,990
Official	62	35,199	78,864.5	1,181,990
<u>1973:</u>				
Own	98	73,085	141,792	2,330,330
Official	98	73,085	141,738	2,330,330

Note: "Own" indicates statistics derived by the author.
 "Official" indicates statistics published by the Department of Statistics.

Source: Derived from DOL strike returns and various *Monthly Abstracts of Statistics* (Department of Statistics, Wellington).

An alternative set of stoppage statistics for this industry has been compiled since October 1969 by the New Zealand Freezing Companies' Association (NZFCA) and its predecessor. On a number of occasions representatives of this association have publicly compared their industry-wide figures with those of the DOS and noted discrepancies between them.¹¹ The author

11. See, for example, Meat Industry Employers' Association Submission to the Commission of Inquiry into the Meat Industry, 1973, pp. 34-7.

therefore asked the Association for confidential access to its detailed statistics in order to pinpoint the source of these discrepancies and to gain greater knowledge of the pattern of stoppages within the industry. This request was denied and so it is impossible to evaluate their reliability. Some of the Association's industry-wide figures, which are made public, are contained in Table 16.

Referring back to Table 15, it is obvious that the NZFCA frequency and involvement figures are much higher than the equivalent official ones. But it is also clear that differences in respect of man-days lost and wages lost are much less great, which suggests that the NZFCA records far more stoppages of short duration than does the DOL. This is likely in view of differences between the two organisations in methods of data collection and in definitions used. NZFCA statistics are compiled from monthly strike returns received from member companies. Employers, however, are under no obligation to report any stoppage to the DOL, although it is likely that most larger ones come to the department's notice. Moreover, the NZFCA defines a stoppage as "any stoppage which is not specifically approved by the employer"¹² which, in a sense, is broader than the definition used by the DOL. The NZFCA also counts each strike or departmental or works stop work meeting separately, while the DOL may group several strikes or stop work meetings into one stoppage provided they all relate to the same issue, so that workers involved in more than one such action are counted only once. Stop work meetings are common in this industry and are often preludes to strikes. These differences help explain why the NZFCA's frequency and involvement figures are so much higher than those of the DOS, while its statistics for lost man-days and wages conform far more closely to the equivalent official figures. It should be noted, however, that the NZFCA statistics do not include wages lost by workers indirectly involved in stoppages, nor do they include go slows, overtime bans or other similar actions.

12. MIEA Submission, p. 35.

TABLE 16

New Zealand Freezing Companies' Association Stoppage Statistics

No. of stoppages	No. of workers involved	Man-days lost	Wages lost (\$)	Man-days lost per worker involved
1970	1,058	207,545	1,325,176	0.57 (2.42 official stat.)
1971	893	201,631	1,083,993	0.34 (1.27 ")
1972	793	173,292	1,449,079	0.53 (2.21 ")
1973	1,158	312,818	2,961,605	0.52 (1.94 ")

Source: Meat Industry Employers' Association Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 35 and the NZFCA.

Chapter X

FACTORS SHAPING THE MEAT FREEZING INDUSTRY
PATTERN OF CONFLICT

I. NATURE OF THE INQUIRY

We are now in a position to study the factors which have shaped the observed pattern of conflict in this industry. In doing so we will naturally make use of the existing literature. But despite the importance of the industry economically and in terms of industrial conflict, relatively little has been written relating specifically to its conflict pattern. Much of the material in this chapter will therefore be derived from field-work in the form of interviews and visits, and questionnaires.

Interviews and visits played a fundamental part in becoming familiar with the industry and in gaining information. A heavy emphasis was placed on obtaining the views of those directly engaged in the industry. This required visiting meat works and offices of freezing companies, employers' organisations and unions, not to mention related organisations such as producer boards and government departments. The geographic distribution of the industry's plants, with about 40 spread from Moerewa in the North to Bluff in the South, makes total visitation coverage very difficult. An attempt was made, nonetheless, to visit as many as possible. From December 1973 to January 1975, a total of 11 works were visited. These plants, located in Southland, Otago, Canterbury, Wellington, Taranaki, Auckland and Northland, represented a reasonably good cross-section of types in the industry. Moreover, visits were made to the head offices of six companies owning a total of 17 works (six of which plants were visited). During plant visits, discussions in the form of unstructured interviews were held with works managers and, where possible, with shed union secretaries or presidents. These discussions also often involved other members of management and of the board of control and workforce generally. The parties were usually inter-

viewed separately although on at least one occasion a works manager and a shed secretary preferred to participate jointly in discussions. Where possible, works' operations and methods were also observed.

Officials of the following unions were interviewed: the head office and three of the branches of the New Zealand Meat Workers' Union, the Auckland Freezing Workers' Union, and the Taranaki Freezing Workers' Union. Informal discussions were held with a number of other union officials. Representatives of the New Zealand Freezing Companies' Association (and its predecessors) were also interviewed. Discussions and interviews were not confined to participants in the industry but extended to related organisations such as the New Zealand Meat Producers' Board, the Ministry of Agriculture and Fisheries, and the Department of Labour. In total, interviews were conducted with over 40 people. No request for an interview was turned down and the fullest co-operation was invariably received in the answering of questions. Despite the range of those interviewed or visited it was not possible to cover the whole industry in this way. Questionnaires were therefore used as a supplementary means of gaining information.

Two questionnaires, one for managements and one for unions, were developed largely from scratch as no similar ones existed. Union officials, employers' representatives and managers studied relevant preliminary drafts and made suggestions which greatly improved the questionnaires' quality. Thirty-eight management questionnaires were distributed in April 1974, one for each works in the country (excluding one or two minor and untypical plants). Of these, 27 were completed and returned, giving a very high response rate of 71%. It should be mentioned that the Meat Industry Employers' Association did not openly endorse the questionnaire but left completion of it to the wishes of individual companies. Of the 11 managements that did not respond, letters declining participation were received from six. One of these gave no grounds for its decision, one declined because of the presence of a committee of inquiry and another because only a small proportion of its production workers were employed under freezing workers' awards. Grounds

given by the others can be summarised as follows:

"Some of the information is, in our view, confidential and we cannot see that such a study can make a worthwhile contribution towards improving the present industrial relations problems facing our industry."
(*Reply for one works*)

"The people who are concerned in this field have enough problems on their plate and we are reluctant to add unnecessarily to them." (*Reply for two works*)

Thirty-eight union questionnaires were also distributed, one for each shed union. All branch or union secretaries, except one, forwarded them on to member sheds which decided whether or not to complete them. A total of 18 questionnaires were completed and returned (47% response rate), although two will not be used in our analysis as they relate to an abattoir and a cool store. Responses were received from all unions or branches except one, with the response rate in three being 100%. A secretary of a large branch refused to distribute the questionnaire because, *inter alia*, "we feel that we are equipped to iron out our own problems and believe that students of industrial relations who, in the main, have little practical experience can often misinterpret information fed to them by well-meaning people. I have studied the Questionnaire thoroughly and am of the opinion that the information you receive through this might be misleading." Only one response was received from another branch, the executive committee of which refused to participate.

II. AN EVALUATION OF POSSIBLE INFLUENCES ON THE MEAT FREEZING INDUSTRY PATTERN OF CONFLICT

1. The Seasonal Nature of the Industry

The most commonly mentioned of the possible influences on meat freezing conflict is the seasonal nature of the industry. The "seasonality" discussion has many strands which are seldom brought together in a coherent and consistent argument. It has its basis in a technical condition of the industry, i.e.

traditionally the level of activity of a meat works has been dictated by the seasons or, more specifically, by the times at which various classes of stock reach prime condition. This variation in supply of stock means the demand for labour also varies over the course of a year. Seasonality of employment is in turn seen to influence both the inclination and ability to engage in collective forms of conflict. As regards inclination, it is argued that seasonality produces not only casual employment but also a casual relationship between workers and employers.¹ The seasonal worker knows his employment lasts only as long as the season and so has no lasting commitment or loyalty to his employer. Equally the employer has only a limited commitment and loyalty to the worker. The constraints on engaging in behaviour potentially harmful to the other party are therefore weaker than in the case of permanent employment. This argument could of course apply to individual as well as collective forms of conflict.² Another facet concerns the difficulty in achieving a "settled atmosphere" when workers are continually moving in and out of employment in response to seasonal demands.³

It is also suggested that a seasonal industry attracts some workers itinerant by nature who have no association with any particular works' management or shed union and so even less commitment than those returning to a particular works each

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1. See N.S. Woods, *Report on Industrial Relations Legislation* (Department of Labour, Wellington, 1968) pp. 19-20; Meat Industry Employers' Association (MIEA) Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 41; and *Report of the Commission of Inquiry into the Meat Industry*, H.4 (Government Printer, Wellington, April 1974) p. 110 (hereafter called *Report of the Meat Industry Commission*).
 2. This was implied in a submission to the 1973 Commission of Inquiry into the Meat Industry which stated that high rates of labour turnover result from the seasonal nature of the industry, and particularly from the casual employment relationship (see Republican Movement Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 6).
 3. See J.M. Howells and R.P. Alexander, "A Strike in the Meat Freezing Industry: Background to Industrial Discontent in New Zealand", *Industrial and Labor Relations Review*, Vol. 21, April 1968, p. 423.

season.⁴ Conflict may therefore result not only because of the transitory nature of the employment relationship but also because of the nature of some of the workers attracted to it.

It is also argued that seasonal employment leads to economic insecurity on the part of the worker who may respond by engaging in conflict action.⁵ Insecurity creates a "defensive" frame of mind which treats employer actions with suspicion.⁶ The worker may further respond to insecurity by attempting to gain greater control over such aspects of the work situation as seniority, hiring and firing, promotion, overtime, inter-departmental transfers, the level of throughput and so on. These attempts are resisted by the employer with conflict the result.

Another way seasonality may influence the inclination to engage in conflict is the high pitch of activity which must be sustained by workers at the peak of the season.⁷ Aside from problems concerning piecerates and incentives, this can produce the desire to simply "have a break from it all" which usually entails an individual or collective stoppage of work. In the off season, on the other hand, fewer workers are present and managements may take the opportunity to unilaterally change work methods and payment systems.⁸ Such changes may be sources of conflict when the season starts again and the main body of workers returns.

While arguments in the literature relate largely to collective forms (and by implication, to certain, employer-initiated forms), most seem equally applicable to individual

4. See Woods, *op.cit.*, pp. 20-1; and "Pylos", "Industrial Unrest in Freezing Works", *New Zealand Financial Times*, 10 April 1974, p. 320.

5. See F.E. McNulty, *The Freezing Workers' Case and the Meat Commission* (New Zealand Monthly Review Society, Christchurch, 1974) p. 29; MIEA Submission, p. 41; and H. Watt, M.P., Speech to Meat Industry Employers' Association, 18 September 1973, p. 4.

6. See Watt, *op.cit.*, p. 4.

7. See Department of Agricultural Economics and Marketing, Lincoln College Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 78.

8. See *ibid.*, p. 83-4.

forms of conflict. The worker in a transitory employment relationship and faced with economic insecurity, peaks of work pressure and unilateral changes by management, may react in any of a number of the individual ways outlined in Chapter II. Conflict arising from seasonality may nonetheless take a collective form because seasonality also influences the ability of workers to engage in such forms.

In the first place, the seasonal nature may mean that the cost to the workers of stopping or restricting work is not high.⁹ If the number of animals to be killed by a works is unaffected, a stoppage may merely extend the season so that the worker loses only off-season income or unemployment benefit (which loss is offset to the extent that extra overtime is worked at a later date because of the stoppage). The cost to the employer depends again on whether stock numbers are affected and also on the ownership of stock at the works or in transit at the time of the stoppage. The effect on stock numbers depends on the degree of competition from other works in the locality and so on the extent of alternative outlets for farmers. If the stock is owned by the company in question the cost of extra grazing and/or loss of condition must, at least in the first instance, be borne by it. If it is owned by others such as farmers or other companies, these will generally bear most of the cost.

The presence of a season means the relative bargaining power of the parties varies during a year. At the peak of the season the workers possess considerable bargaining power as the employer is under pressure to produce at maximum capacity.¹⁰ He wishes to kill as much of the available stock as possible and farmers are anxious to have their stock killed in prime condition. Should stock not be killed then it may be lost to

9. See A.J. Geare, "The Problem of Industrial Unrest: Theories into the Causes of Local Strikes in a New Zealand Meat Freezing Works", *Journal of Industrial Relations*, Vol. 14, March 1972, p. 19. The possibility of "assured high earning rates" contributing to stoppages is mentioned in MIEA Submission, p. 43.

10. See Kenneth F. Walker, *Australian Industrial Relations Systems* (Harvard University Press, Cambridge, Mass., 1970) p. 296.

other works and future numbers offered may also fall. At season's peak the employer is also under pressure daily to clear large numbers of stock held in works' yards. Moreover, scheduling of transport and other facilities and the orderly future operation of the works depend on continuous production during the peak. For these reasons, collective forms of conflict can be employed with considerable effect during this period. During the "run-down" and off-season and other periods of slack (such as when the freezer space is full), however, the employer possesses substantial bargaining power and his tactics can be expected to change accordingly.

The high in-season demand for labour of some works has to be met by recruiting seasonal labour from other areas. It has been hypothesized that migratory labour housed in company hostels constitutes an isolated mass, which along the lines of the Kerr-Siegel hypothesis, tends to be strike prone.¹¹

Many of the strands of the "seasonality argument" may have application to conflict among workers and between workers and their unions. It has been suggested, for example, that the presence of itinerant labour "makes the task of the union on the one hand and of management on the other...particularly difficult".¹² The argument already mentioned about the difficulty in achieving a "settled atmosphere" related specifically to relations between the slaughtermen and the union.¹³

The "seasonality argument" appears relevant to all levels of conflict in the industry. The tendency for it to be prone to stoppages, and to certain individual forms of conflict, could possibly be explained by the pervasiveness of seasonality among its plants. Variations in regional, company, establishment and even intra-plant levels of conflict may be partly explained by

11. See Howells and Alexander, *op.cit.*, pp. 425-426. (A slightly different version of this article entitled "The Kerr-Siegel Hypothesis and the Meat Freezing Industry in New Zealand", is found in *New Zealand Economic Papers*, Vol. 2, No. 2, 1968, pp. 35-47.)

12. Woods, *op.cit.*, p. 20.

13. Howells and Alexander, "A Strike in the Meat Freezing Industry", p. 423.

variations in the degree of seasonality among units at each of these levels.

While much of the argument is intuitively appealing, the conditions under which seasonality produces a relatively low cost of collective action to the worker require further scrutiny. The cost will only be low if such action does not significantly reduce the number of stock offered for slaughter over a season at the "struck" works. But stock numbers are likely to fall if farmers can send their animals to other works, in which case the season at the struck works may not be extended and the cost to the worker could be high.¹⁴ Stock numbers will be unaffected only if alternative outlets are unavailable or if workers at such outlets refuse to handle stock from the struck area. In the final analysis this is of course an empirical question. It is also difficult to categorically state that the level of collective actions will be high at the peak of the season because, while the worker is in a strong position, the employer also has an incentive to settle disputes short of a stoppage.¹⁵ Furthermore, the application of Kerr and Siegel's "isolated mass" concept to migratory labour housed in company hostels is inappropriate. Kerr and Siegel used the concept in an attempt to explain inter- rather than intra-industry strike propensities.¹⁶ As noted in Chapter III, their approach has been criticised because of its inability to account for

14. In any event the argument that an extended season means a low cost to the worker assumes the off-season income given up is relatively low. This is unlikely in some instances.

15. Paradoxically, the conditions producing a low cost of conflict to the worker also restrain the cost to the employer. The employer's cost may nonetheless be relatively high if he owns stock at the works or in transit at the time of stoppage, if future numbers of stock offered fall, if marketing opportunities are lost or if the scheduling of transport and other facilities is upset. He is also under pressure to remain operating from farmers and to clear the large numbers of stock on the plant. Geare seems to rule out the possibility that production can be "lost forever" to a particular works (see A.J. Geare, "The Conflict Over Strike Causes in Otago and Southland Meat Freezing Works", *Journal of Industrial Relations*, Vol. 15, March 1973, p. 93).

16. See Paul Alexander, "Local Strikes in Otago-Southland Meat Freezing Plants", *Journal of Industrial Relations*, Vol. 14, Sept. 1972, p. 330; and Geare, "The Conflict Over Strike Causes", pp. 90-1.

differences in strike proneness between plants in the same industry. Kerr and Siegel suggest other elements of the industrial environment may explain these differences.¹⁷ The appropriate concept is not the "isolated mass" but rather Kuhn's "cohesive work group".¹⁸

These few difficulties aside, the seasonality argument finds considerable support not only in the literature but also in the industry itself. Of union officials and delegates interviewed, most considered the seasonal nature has an important effect on industrial conflict. Many would agree with the sentiments of the senior official who stated that:

"The main cause of industrial conflict is the effect of the casual nature of the industry. It develops a 'don't care' attitude among workers who feel they owe no responsibility to anyone. How can you owe responsibility to an industry when it doesn't ensure a man a living. They think 'to hell with them, I'll try and get as much as possible'."

Another official argued that freezing workers feel exploited and insecure because they are "chucked on the scrap heap when they are not wanted". One worker said that freezing workers are "doing the country a big favour by doing a seasonal job", while a shed secretary encouraged workers to take "political action" by registering as unemployed as soon as they are laid off. Numerous officials and delegates agreed with the statement of a branch secretary that "the most unsatisfactory aspect of the industry is its seasonal nature".

While no union representative regarded seasonality as unimportant, two saw problems with all-year production. One felt that some workers like seasonal work and may be unhappy to give up their off-season employment while the other foresaw the possibility of "friction" arising through workers having to

17. See Kerr and Siegel, *op. cit.* p. 11. 18. See Kuhn, *op. cit.* p. 11.

perform freezing work all year. But both argued that, despite possible difficulties, permanent employment is a necessity for the industry.

There was some difference in the extent to which "seasonal" workers (as opposed to "permanent" or all-year workers) were seen to participate in collective action. Officials at one shed said that seasonal workers there were "if anything more militant"¹⁹ and a union president singled out students as "troublemakers". Officials at another shed, however, stated that "seasonal workers are not so much involved as regulars".

Few union representatives, or for that matter managers, placed great stress on seasonality as a cause of conflict among workers or between workers and their union, although the above-mentioned president said that students were also "a problem to the union". The extent to which seasonal workers were seen to be involved in affairs of the shed union varied, although most shed officials said these workers were "union conscious".

There were also differences in the extent to which stock numbers (and so the cost to workers) were seen to be affected by a stoppage. One secretary implied that each works in his branch has to kill a certain number each year in stating that: "It doesn't matter if workers lose a few days. It just postpones the kill". The actions of shed unions in another branch, however, purposefully reduces stock numbers at a works involved in a stoppage. The strategy there was explained by a shed secretary as follows:

"If a shed goes out the other sheds keep working so as to cause it to lose profits. If other sheds are working, great pressure is on that management. We're quite happy to kill stock from a struck shed. The company will take any stock offered and the union doesn't enquire too closely where it comes from."

Few officials or delegates commented on the extent to which managements make unilateral changes in the off-season or on how

19. The manager of this works held the view that "transient workers are not the cause of trouble. They have little say in things."

significant such changes are as causes of conflict.

There is less support for the seasonality argument among managers and other company officers. Of those interviewed, one group saw seasonality as having an important effect on conflict, while a similar sized group saw it as having an unimportant effect. A third, smaller group saw the effect as being of some importance. Those considering it important, mentioned the tendencies to produce a lack of interest and commitment and a feeling of insecurity on the part of the worker. The "unsettling" effect of a large influx of labour was also noted by a works' manager who stated that: "We have a quick influx of workers. Suddenly 300 people are put on in three days and, of this number, only 150 have worked here before." A number argued that the seasonal nature attracts some unstable workers, although one qualified this by arguing that there is no direct correlation between the number of itinerants and stoppages. One works' manager summed up the feelings of several in this group in stating that:

"The industry has got to take meat processing a lot more seriously. Attitudes have got to change. The seasonal nature influences attitudes. The people who are here all year round rely on the industry and we get little bother with them. When the season starts we expect people to drop things and come and work for us. In theory the industry is here to service the farmer who doesn't care much about workers. If the stock is killed in a short period the men are dumped. The attitude of farmers and the company is that the men are at their beck and call. The unions won't have it. We're out of touch with what is going on in other industries. We're trying to run a seasonal industry and to achieve a high standard with casual labour."

Another manager argued that the industry has "all the things which make for an explosive situation with casual labour on a production line that is susceptible to disruption". Those in this group represented works with diverse stoppage experiences and seasonal employment fluctuations.

Of managers regarding the seasonal nature as of only limited importance, those in a particular company felt it was important in country areas but "not in Auckland". An industrial

relations executive considered its importance is overstated, while another said it was difficult to generalise but felt that seasonal employment fulfils a social need in that "many people want seasonal work" and that "anyone who wants full-time work in the industry can get it".

A number of managers did not consider seasonality to be a cause of stoppages or, for that matter, of other conflict forms. One employers' representative said the argument "does not fit the facts", suggesting, along with several managers, that workers are "happy to have time off" and "look forward to the change". One industrial relations officer argued that the seasonal nature is not important in itself and that it "may almost be better to have a break because it's such a — of a job". A works manager went as far as to suggest that a longer season may "worsen" rather than "improve" industrial relations.

There was a diversity of opinion among company officers about the cost of stoppages (and of strikes in particular). One stated that: "With strikes we lose nothing. We just pull down the blinds." Another implied that stock numbers offered to a struck works are not greatly reduced by a stoppage in that "the work has to be performed - the product ... has to be processed at some time irrespective of industrial hold ups". Numerous others, however, disagreed. One works' manager argued that if only a few works are "out" they must "lose". Others said they took stock from struck regions if their works had excess capacity. Stoppages at the seasonal peak may not significantly reduce the season's kill as other works are unable to kill more stock at that time. But over the rest of the season these works may, in the words of a works' manager, "do some 'pirating'". Seasonal kill figures for one plant given to the author showed clear evidence that it gained stock when others in the region were stopped for any length of time. One manager, however, said he was careful not to kill stock from a struck area in case his workers might refuse to handle it.

Several company officers noted a seasonal change in

bargaining power and one in particular argued that the local union leaders "choose the time (to engage in stoppages) that will most embarrass the company". Another suggested that seasonality means workers are "more likely to get what they want because of the pressure to kill". Yet another claimed to have "good industrial relations till mid-January because the men want to get money in their pockets". An industrial relations officer in an adjacent region said conflict actions of all sorts build up from the end of January to March. A branch union secretary felt that workers have an advantage from the early part of the season which builds up to a peak about mid-February and is lost at the end of the season.

As regards migrant labour housed in company camps, those managers interviewed whose works operated camps indicated they were seldom direct sources of conflict. The manager of a works with a large camp noted that "you get minor problems with any camp" but that it gives rise to "no major problems and doesn't become a hotbed of trouble". A manager at a works with two camps said that their inhabitants "close ranks in a difference with the boss but differences can arise between the camps" and that there "is a distinction between hostels and jobs. Complaints arising from the hostel are kept there and not translated into work. A hostel does not necessarily lead to industrial relations problems".

Substantial information on seasonality was also obtained from the questionnaires. Figures supplied by works on capacity utilization clearly show the industry's seasonal nature. These are summarised in Table 1. It is interesting to note that even in works in and north of the Waikato, which typically have relatively low seasonal variation, only one reported an average plant utilization of 90-99% through the season, most there reporting averages of 60-79% utilization.

Managements and unions were asked in the questionnaires to assess the importance of certain factors as causes of strikes in their works, one of which was the seasonal nature of the industry. Factors were rated on a scale of 1 to 5 with the degree of importance reducing from 1 to 5. Results in Table 2

TABLE 1

Assessments of Plant Utilization, 1972-73 Season

No. of works in each category	Percentage of maximum utilization				
	100	90-99	80-89	60-79	Below 60
At peak of season (n=27)	9	12	6	0	0
At trough of season (n=26)	0	1	3	4	18
On average through season (n=27)	0	5	13	7	2

Source: Management questionnaire.

are similar to those revealed by the interviews. Six managements considered it a very important cause of strikes at their works and another 12 said it was of above average or average importance. Of the six works in the first category, five are in the North Island, three are highly stoppage prone and all have low to moderate seasonal fluctuations in employment. On the other hand, four managements thought it of no importance. Of works represented by these, three have very low stoppage levels, while seasonal employment fluctuations are very low for two, moderate for one and very high for another. The mean response accorded this factor (2.73) was the seventh lowest for the 23 factors assessed by managements as possible causes of strikes. This gives an indication of the relative importance they accorded this factor, remembering that the lower the rating the greater the perceived importance. Despite the concern shown by some managements, only three of the 27 works responding to the questionnaire operate enterprises aimed at providing off-season work for their laid-off freezing workers. Of the remaining 24 works, only two planned any such businesses for the future.

Shed unions tended to regard the seasonal nature as more important than did managements. Thus about 42% of respondents (i.e. of those responding to this particular question) saw it as very important, 83% as of at least average importance

TABLE 2

The Perceived Importance of the Seasonal Nature
of the Industry as a Cause of Strikes

	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant	No Answer	Mean Response	Standard- ised Mean Response (SMR)
Management responses (n=27)	6	6	6	1	4	4	2.73	2.48
Union responses (n=16)	5	1	4	2	0	4	2.25	2.30

- Notes:
1. The "mean response" is the average of responses and does not of course include the "no answer" category.
 2. The mean response obviously depends on the average scale of values of the party as well as on the particular perceptions of individual respondents. Managements generally thought all factors to be "on average" less important than did unions. Thus the average of management mean responses for all factors was 3.31 as compared with an average of union mean responses of 2.93. In both cases the standard deviations were about 1. The "standardised mean response" converts the average of the mean responses to 3.00 in each case. The changes involved are illustrated in the following distributions of mean responses:

(i) management mean responses (ii) union mean responses

(iii) both (i) and (ii) standardised to a distribution with an average of 3.00

(i.e. answering with numbers 1 to 3), and none as not important. The five in the first category represented works ranging from low to high stoppage levels and employment fluctuations. The mean response (2.25) was again seventh lowest of the assessed factors. Despite the importance placed on this factor, only one of the 16 responding shed unions operated an enterprise aimed at providing off-season work for members, although one co-operated in placing workers in other businesses and another compiled a roll of available off-season work. Of the 15 not presently operating such an enterprise, only one had any planned for the future.

It is interesting to note the degree of concordance in perceptions of managements and unions from the same works. Both parties responded to this question for seven works and in only two cases were the responses identical, while in two others responses differed by margins of three and four. (For one of which the management rated the factor not important (i.e. 5) and the union very important (1).)

It is clear that many authors, and participants in the industry, view the seasonal nature as, in one way or another, an important influence on conflict. But despite this substantial body of opinion there have been virtually no empirical studies published on the subject. There are numerous conceivable empirical relationships between seasonality and the level of stoppages. To the extent that there is a direct relationship between these two variables, it might be expected that an increase in the seasonal variation in meat industry employment may lead to an increase in stoppage activity. But the strong upward trend in such activity observed in Chapter VIII cannot even be partly explained in this way as the overall seasonal variation exhibits no trend over a similar period (see Chapter V). Nonetheless, units in the industry may have a predisposition toward stoppages compared with those in industries offering stable, permanent employment.

As the seasonal employment variation, measured by the surge index,²⁰ differs greatly among works and regions (Chapter

20. The surge index is the difference between peak and trough labour forces expressed as a percentage of the peak labour force.

V) it may help explain differences in amounts of conflict at those levels. In particular, it might be hypothesized that works (regions) with high surge indices experience high stoppage levels. As a test of this hypothesis, the correlation between works' surge indices and works' stoppage frequencies was calculated for several years. Results were as follows:

TABLE 3

Correlation Coefficients: Works' Surge Indices
and Stoppage Frequencies

1972	r = -0.333 (significant 0.10)
1971	r = -0.341 (" 0.10)
1970	r = -0.025 (insignificant)
1969	r = -0.418 (significant 0.02)

Source: Derived from Department of Labour strike returns and employment data.

It appears the relationship between surge index and stoppage frequency is weak and even in the year when it was strongest (1969), the surge index explained only 17.5% of the variation in frequency among works. If anything, the relationship is negative implying that works with higher surge indices have lower stoppage frequencies. It seems therefore that either the seasonal variation in employment has little effect on stoppage frequency or that the effect is modified by other influences. This latter possibility will be explored later and may offer some explanation of the failure of these results to substantiate popular feeling on the importance of seasonality as a cause of stoppages. As man-days lost and worker involvement are strongly positively related to stoppage frequency (see Chapter IX) it is unlikely that the use of these alternative measures as the "dependent" variable will make much difference to the results.²¹

21. For example, the correlation coefficient for works' man-days lost and works' surge indices for 1969 was $r = -0.321$ (significant 0.10).

It may also be suggested that variations in surge indices among departments might help explain departmental stoppage propensities. Certainly the surge index for slaughtermen is higher than for most departments, but that for freezing chamber or boning room workers is often lower than for some departments. In any event we have insufficient stoppage data at departmental level to test this relationship statistically.

One strand of the seasonality argument suggests that relative bargaining power varies over the course of the year so that workers are in a strong position at the peak of the season and in a weak one toward its end. As already stated, however, this in itself does not necessarily imply that stoppage activity will be higher at the peak than the trough of the season. It is nonetheless of interest to see if there is a seasonal pattern to such activity, especially as the existence of one is relevant to factors to be evaluated. Seasonal indices for stoppage frequency and man-days lost per thousand workers were constructed in the familiar way by expressing the monthly figures as percentages of a 12 month centered moving average and are presented in the following table:

TABLE 4

Meat Industry Seasonal Stoppage Indices, 1967-73

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Stoppage frequency											
185.0	168.1	162.0	112.7	132.3	59.7	69.5	58.7	37.0	44.1	138.7	32.2
Man-days lost per thousand workers											
135.3	180.1	295.0	83.2	60.1	42.3	23.0	109.6	82.0	33.4	142.1	13.9

Note: Stoppages are recorded in the months in which they terminated.

Source: Derived from Department of Labour strike returns and Department of Statistics information [stoppage data] and various *Statistics of Prices, Wages and Labour* (Department of Statistics, Wellington) and supplementary tables to the *Labour and Employment Gazette* (Department of Labour, Wellington) [employment data].

There appears to be some similarity between the two indices. Testing them for correlation, the simple correlation coefficient was found to be $r = 0.722$ (significant 0.01). Ranking the monthly figures according to size, and using Spearman's coefficient of rank correlation to test the correlation between ranks, it was found that $r_s = 0.734$ (significant 0.02). These results support the above intuitive conclusion. Stoppage frequency over 1967-73 tended to peak in January but remained high until May, after which time it tapered off until the new lamb and mutton seasons started again in November. The month of lowest frequency was December which is understandable in view of the imminence of the holiday break and the need to accumulate savings from which to meet holiday expenses.²² To eliminate the effect of the changing size of labour force, man-days lost were related to numbers employed each month and this index shows a build-up from January to a peak in March, a steady fall from April to July and an increase in August foreshadowing another rise in November with the start of the season. As with frequency, December had the lowest level of man-days lost per thousand workers.

Our seasonal indices differ somewhat from those of Geare.²³ This is not surprising as the two sets relate to different periods (i.e. 1967-73 as opposed to 1947-70). Geare's stoppage frequency and man-days lost per thousand workers indices peaked in April and February respectively and both troughed in September. Also his man-days lost index for August is very much lower than ours. Be this as it may, stoppage activity clearly shows a strong seasonal pattern with both frequency and man-days lost per worker being highest when the lamb and mutton seasons are in full swing (December being a possible exception). Unfortunately a similar analysis cannot be performed on employer-initiated forms as these seldom come to the notice of the Department of Labour and so are largely unrecorded.

We have already indicated that numerous strands of the

22. See also A.J. Geare, "Seasonal Influences on Strike Intensity in New Zealand", *Journal of Industrial Relations*, Vol. 14, Sept. 1972, p. 326.

23. Geare, "Seasonal Influences on Strike Intensity", p. 327.

seasonality argument appear relevant to individual as well as collective and employer-initiated forms of conflict. A number of those interviewed felt this was the case, especially with regard to industrial accidents. Two shed officials noted a higher accident rate among seasonal workers than "permanents", and others commented on how the lack of training and experience of many seasonal workers led to accidents. Several works managers also regarded the "lack of loyalty" in the industry as a major cause of high rates of absence and labour turnover. One manager argued that "overwork" in the season can be a cause of absence and that "if workers have a steady job and income you don't have so much absenteeism". As noted in the previous chapter, the only individual form for which we have detailed statistics is industrial accidents. We tested the hypothesis that works (regions) with high surge indices have high accident frequency rates. The correlation between these two series for 1967 was $r = -0.645$ (significant 0.001) and for 1968 was $r = -0.674$ (significant 0.001).²⁴ The results indicate a fairly strong but negative relationship between the surge index and accident frequency rate. In 1968, for example, the surge index explained 45.45% of the variation in frequency rates. It seems that high surge indices are associated with low frequency rates. While the effect appears clear, too much should not be drawn from a simple correlation which may be affected by influences other than those it is intended to measure. The results nonetheless cast doubt on the importance of seasonality in itself as a determinant of accident rates.

While some of our empirical results fail to show a positive relationship between seasonality and levels of certain conflict forms, it is quite conceivable that the seasonal nature has led workers to attempt to gain greater control over the work situation. Officials, delegates and workers interviewed almost invariably insisted that the casual nature of the industry makes it necessary for them, through their unions, to gain greater control over a situation which would otherwise

24. The calendar year 1967 surge indices were correlated with works' accident frequency rates for the year ending March 1968, and those for 1968 were correlated with March year 1969 frequency rates.

be from their viewpoint an insecure, discriminatory and irregular one. Actions adopted in this attempt may be regarded both as forms and sources of conflict. Some employers label them "restrictive practices".²⁵

One means of lengthening the season or "spreading the kill" is to control the level of output. The most quoted example of this is the "Canterbury Quota" under which the Canterbury etc. branch of the NZMWU sets a daily quota on the kill of lambs and sheep at each works in its region. This system has operated for about 20 years and, according to some Canterbury branch officials and managers, is modelled on one introduced in the 1930s by the government at the insistence of some companies which were worried that an overseas-owned company would outbid them and take a disproportionate amount of stock. The quota is imposed unilaterally by the branch but its officials maintain they will agree to increase it if rises in livestock numbers warrant it. They argue further that no prior conditions are imposed or *quid pro quo* demanded in negotiations for quota increases. The branch is prepared to lift the quota if the freezing companies guarantee 14 weeks minimum employment at full contract rates for all workers. But the employers maintain a guarantee of this nature is wrong in principle and consequently are unwilling to give it.

The existence of the Canterbury Quota is strongly criticised by farmers²⁶ and the MIEA.²⁷ A number of managers in the region are also critical of it. One saw "no positive aspects in it from the company's point of view" and argued that it had detrimentally affected planning decisions. An example cited was the installation of a third chain in the hope that a larger quota might be given. But no increase in quota was granted, with the result that the throughput of the existing two chains was reduced so that the partially manned new chain could have some stock to kill. The men on this chain allegedly will

25. See, for example, MIEA Submission, pp. 26-33.

26. See North Canterbury District of Federated Farmers of New Zealand Submission to the Commission of Inquiry into the Meat Industry, 1973, pp. 6-7 and Appendix 1, and Marlborough District of Federated Farmers of New Zealand Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 1.

27. MIEA Submission, pp. 27-8.

not return to the others so the same output is now spread over effectively two and a quarter chains, a change which the management describes as "very expensive". Others, however, see advantages as well as disadvantages in the system. One, for example, argued that while it has restricted the development of works and location of new chains, it also ensures a longer season and so better utilization of plant and more stable work force. Some Canterbury managers seem indifferent to it while yet others regard it almost favourably. One said the quota "is not an issue", one that it "is not a major problem" and another that "it's not a worry". A works manager felt that it results in a better planning of the kill and a stable labour force which entails less training than otherwise. In any event, one industrial relations manager argued that there is a limitation on kill of one form or another at every works in the country. Comments from several others in the industry corroborated this assertion.

It appears a tally system is operated at most, if not all, works outside the NZMWU Canterbury branch.²⁸ A tally is a set number of animals that can be killed (or processed) by a worker in a day while a quota is a set number that can be killed by a whole works in a day. In other words, one is a limitation on output per man and the other on output per works. For example, the lamb equivalent tally for a slaughterman in a particular Auckland works is 73 a day, while the quota for a certain Canterbury works is 9,000 a day. A management can vary the daily kill under a tally system by changing the number of slaughtermen on a chain, with the daily maximum being set when it is fully manned. The tally is strictly enforced and few managements attempt to exceed it by putting up more stock. In many cases it is unilaterally imposed by the union but in some is negotiated.

It is clear that the tally determines manning.²⁹ If a beef house has a capacity of 180 animals a day and the tally

28. Although aspects of such a system are operated in Canterbury, for example, with respect to beef.

29. The union can be, and often is, involved in the determination of manning even when a quota rather than tally is in force.

is 30 per butcher, six butchers are required for full utilization. Moreover, in some works the manning of the follow-on departments is dependent on the number of butchers. Unions are now placing emphasis on negotiating formal agreements on the manning of departments. The tally can also affect hours worked because slaughtering stops when it is reached. In some works the tally is met before 5 p.m. (ordinary finishing time in the Meat Processors' etc. Award) and the slaughtermen, who are pieceworkers, go home.

Some union representatives maintained tallies are necessary not only to spread the kill but also to avoid pieceworkers "revving up the chain so that hourly workers (in follow-on departments) have to work harder for no extra pay". Some managements have few objections to the tally system but others are critical of it. Its implications for manning are resented by some, as are union attempts to get workers on to the chain who are not "counted in the tally". The addition of these workers, known by various names such as "subsidized tallymen", results in no change in output, although they are paid as if they were killing a full tally. Others argue that output could be increased if award hours were kept. One manager commented that "we have clock hours in the award from 8 to 5 but people won't work these hours". In some works though, managers have explicitly or tacitly recognised a shorter working day and "allowed the men to cut out the tally in 8 to 4 p.m.". At least one branch union has also tried to spread the kill by controlling the distribution of overtime among works in the region.

Aside from attempting to gain some control over output, manning and hours of work, workers have also sought to regulate the process of hiring and firing. They argue that a casual system of employment leads to discrimination and abuse on the part of employers. The main instrument of regulation has been the seniority system. As with kill limitations, it seems that some form of seniority is operated in every works. The system may be formal or informal, agreed to between the parties or unilaterally imposed by the union and operated at departmental or works level (or both). In the Canterbury region systems are highly formalised and provide for each worker to be assigned a number on a departmental seniority list when he first joins

a works. The higher the worker on the list, the lower his number and greater his seniority. Workers are hired or laid off according to their numbers on the basis of "first man on, last man off". Union officials and delegates, regardless of their seniority number, however, are in the first group to start and last to finish each season. In some cases seniority rules are set out in agreements between management and union but in others are simply laid down by the union. The Canterbury branch has a number of such rules which regulate the behaviour of members. Under these, members failing to commence at the start of the season when sent for lose their number except those suffering sickness or accident and notifying the branch secretary by mail and enclosing a doctor's certificate. The application of a member failing to report through exceptional circumstances is considered by his department. Moreover, those leaving other than when a chain or part of one is being dismissed lose their number unless the department concerned grants dispensation. A delegate can ask his department to reduce a member's number or place it at the bottom of the list for continual absence (other than due to sickness, accident etc.), failing to carry out the delegate's wishes re the working of the department, divulging union business to other than members or behaving in a manner bringing the union into disrepute.

While the Canterbury system is probably the most developed in the country, many of its features are found in one form or another elsewhere. In northern sheds, while workers do not have numbers, a member who is late for or misses a season must argue his case before the union if he is to avoid losing seniority.

Workers feel that seniority is essential "to prevent the employers hand-picking the workers when the season commences, or when the season slackens off". Some officials also argue it helps stop bickering both among workers and between workers and employers, and that it gives security.³⁰ Others, in

30. Despite this, alleged wrongful dismissals are still seen to be quite an important cause of strikes by both unions and managements. In the questionnaires they were asked to

(Footnote 30 is continued on the next page.)

addition, see it as important in maintaining union discipline.

Some managers have explicitly accepted seniority by entering into agreements. Others recognise it by their "actions but not in writing", regarding it as a "union principle" about which little can be done. One employers' representative said it "works by and large" while a works manager claimed it "works well", noting, among other things, that those found pilfering may have their numbers dropped to the bottom of the list. Another praised the system, commenting that he had drawn up the local agreement which contained penal clauses for such things as absence and lateness. While the disciplinary aspects were seen to be useful by some, others were critical of alleged limitations which seniority systems place on flexibility. In particular, numerous managers were against departmental systems which have the effect of preventing workers from transferring from one department to another. They argue that these prevent the most efficient deployment of labour and prevent workers from gaining new skills but, as one manager said, "the union won't allow the men to be made a convenience of". Others also argued that there can arise a "conflict between ability and seniority" and that, in any case, "employers are fairer in engaging labour than unions". Seniority appears, however, to be universal in the industry and many managers recognise that

(Footnote 30 continued):

assess the importance of alleged wrongful dismissals as causes of strikes at their works. Responses were as follows:

	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant	No Answer	Mean Response	SMR
Management responses (n=27)	6	2	5	5	5	4	3.04	2.76
Union responses (n=16)	4	1	1	4	2	4	2.92	2.99

Source: Management and union questionnaires.

On the basis of size of mean response, managements rated the factor tenth in importance of the 23 assessed and unions twelfth equal.

"the union is hot on any indication of favouritism". Even in the less formal systems the employer must "prove a case to the hilt to overcome seniority".

It is clear that unions have made significant inroads into the casual system of employment and gained some control over areas that would otherwise be "management prerogatives". In doing so conflict has arisen and, given the unions' view on the need to overcome seasonality and casual employment, is likely to continue to arise from this source in the future.

2. The Nature of the Work and of the Worker

Another commonly mentioned possible influence on meat industry conflict is the nature of the work itself. The killing and disassembling of animals can be unpleasant and obnoxious work and it is suggested that unpleasantness, possibly combined with other features, significantly influences the inclination to engage in conflict action.³¹ Much of the work is also monotonous, tedious and repetitive,³² not to mention being heavy and physically demanding.³³ These features, along with an element of danger,³⁴ produce a situation where conflict easily emerges. Geare combines the nature of the work with the seasonal aspect to suggest that workers refrain from collective actions for the first few months of the season until they are in a sound financial position, whereupon "the irritation from monotonous and unpleasant work" combined with "the feeling that a well-earned break (is) due" means that stoppages readily occur.³⁵ The nature of the worker may also be important. Geare argues

31. See Woods, *op.cit.*, p. 20; Geare, "The Problem of Industrial Unrest", p. 17 and *idem*, "Seasonal Influences on Strike Intensity", p. 328; Watt, *op.cit.*, p. 4; and New Zealand Federation of Labour (NZFOL) Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 6.

32. See Geare, "The Problem of Industrial Unrest", p. 17 and NZFOL Submission, p. 6.

33. See Gear Meat Company Limited, *Annual Report and Chairman's Review*, 1971, p. 20.

34. See Woods, *op.cit.*, p. 20 and Howells and Alexander, "A Strike in the Meat Freezing Industry", pp. 424 and 426.

35. Geare, "Seasonal Influences on Strike Intensity", p. 328. See also *idem*, "The Problem of Industrial Unrest", p. 18.

that the strong and aggressive slaughterman may have his inherent aggressiveness increased by working in cramped conditions.³⁶

The "nature of the work argument" again appears consistent with either collective or individual forms of conflict. It concerns the inclination and ability to engage in conflict, although says relatively little about the choice of a particular conflict form. Moreover, the argument appears relevant to a number of levels of conflict. The proneness of the industry to collective and individual forms at the national level could possibly be explained by the pervasiveness of the unpleasant, monotonous etc. features of the work, and plant variations by differences in the extent of these features as among works. Similar differences within plants may help explain intra-plant patterns of conflict. The nature of the work again results largely from a technical condition of the industry.

Much of the work in the industry is assembly-line (or disassembly-line) production with strong mass production characteristics. This particularly applies to the mutton and lamb slaughterhouse, with its chain system of killing, and the beef slaughterhouse, with its "on-the-rail" system. The speed of these systems is set mechanically and jobs are therefore machine paced. Moreover, workers in either slaughterhouse perform a set task (e.g. making a particular cut) many times a day. On the mutton chain, especially, the worker's task cycle may be very brief and be repeated on hundreds, if not thousands, of animals daily as they pass along the chain. The work of many other departments also has mass production characteristics. The flow of raw materials to by-products departments is set by the speed of the chain, and repetition is the key characteristic of much of the work. Plants processing sheep and lambs are especially typified by the high physical volume of throughput. Each chain of 40 to 50 slaughtermen may kill, dress and trim from about 2,700 to 3,200 lamb equivalents a day, from which are extracted thousands of skins, trotters, offals, guts and so on. In addition to by-products having to

36. See Geare, "The Problem of Industrial Unrest", p. 20.

be processed, these thousands of carcasses must either be boned and packed or stored in the freezing chambers. Much of this work is monotonous, repetitive and unpleasant, and some also dangerous or heavy. It seems plausible that these characteristics should produce conflict, especially if some of the jobs attract or produce "aggressive" workers. Research on the relationship between mass production characteristics of jobs and levels of conflict (see Chapter III) adds weight to the plausibility of the nature of work argument.

As with the seasonality argument, this one has strong support not only in the literature but also in the industry itself. Of union officials interviewed, several placed heavy emphasis on aspects of the work. One senior official said the repetitive nature of production means that "when something irritating occurs workers are inclined to want a day off", as a result of which "it is the easiest thing to get a vote to knock off work". In Geare's language, repetition produces a low "strike flash point" and so requires a relatively weak "catalyst" to set off a strike (or other conflict action).³⁷ The official referred to above further argued that conflict arises because of the high physical effort involved and the machine-paced tempo of the work. A branch secretary stressed the influence of monotony in arguing that freezing workers "start to do the job mechanically and their minds are free to roam". In many cases this was seen to produce conflict but in some "lifts the worker from the physical". This official contended that conflict arises because "the work is destructive and destroys the creative urge". In his view, the freezing worker builds nothing and so cannot relate to anything produced, has no sense of accomplishment and no identification with the product. This view was shared by some managers. Many officials and delegates stressed the importance of safety issues as causes of stoppages, noting that several jobs are dangerous. Dirty work was also mentioned by a group of officials who argued that "the industry has been filthy in the past".

37. Geare, "The Problem of Industrial Unrest", p. 16 and *idem*, "The Conflict Over Strike Causes", p. 96.

Most managers interviewed considered monotony a major cause of conflict. One industrial relations officer said the work, especially on the mutton chain, is so monotonous and mentally undemanding that workers are continually seeking something that will give them excitement and mental stimulation. Several company officers argued that some workers occupy their minds by developing strategies and tactics as part of the "industrial game" which is a feature of many works. They would agree with the sentiments of a general manager who stated that:

"The men concentrate on detail. This is indicative of the nature of the work. There is nothing to exercise their minds so that a trifle becomes a major issue. Its relative importance is highlighted by the deadness of the background. There is an industrial game going on all the time."

For some, stoppages are seen as a "revolt" against monotonous and "soul destroying" jobs. One industrial relations officer suggested the jobs offered by the industry do not satisfy the rising expectations of workers, arguing "it's a ____ of a job. How can a man be happy in it?" One works manager encouraged visitors, as he saw them as providing the workers with a break from their monotony. Boredom and monotony are seen to be particularly important when the type of man attracted to the job is aggressive and resourceful. Slaughtermen are a case in point. One manager argued that it is the resourceful people and those able to acquire skills who become slaughtermen. Paradoxically, these independent and often able people are the "kind of person getting into the highly monotonous work on the slaughterboard. They are unfitted for this kind of work." These workers are seen to seek excitement from the "industrial game" and from "skylarking" with such things as water hoses. This latter behaviour incurs penalties from management which lead to stoppages. The situation on the slaughterboard is often made worse by cramped working conditions. One works manager commented that "the men are working very close to one another. The psychological conditions aren't good and so you get stoppages just for the change." Another argued that this difficulty was becoming greater as the number of men on the chain increases.

As noted previously, it is a quite widely held view that workers refrain from extensive conflict action until they have some funds, at which point they rebel against their work by having a break in the form of a stoppage. Also as seen there is a distinct seasonal pattern to meat industry stoppage activity. If monotony and other aspects of the nature of the work combine with the seasonal character of the industry to produce a seasonal pattern to stoppage activity, it might also be expected that these same factors may produce a seasonal pattern in the level of individual forms of conflict. The only monthly figures for individual forms in our possession were for accident frequencies in Otago-Southland works for March year 1969 to March year 1972. As mentioned elsewhere, accident data must be used with caution as the industrial accident is an imperfect measure of conflict. Be this as it may, we derived a seasonal index for number of accidents per thousand workers in similar fashion to those for stoppage activity. Accident frequency was related to numbers employed each month to eliminate the effect of the changing size of the labour force.

TABLE 5

Seasonal Index for Number of Accidents per Thousand Workers,
Otago-Southland Works, 1969-72

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
126.6	113.5	161.9	125.7	132.5	84.7	84.7	69.1	77.7	62.4	66.5	94.7

Source: Derived from Department of Labour six-monthly employment survey information (employment data) and South Island Freezing Companies' Association data (accident data).

The number of accidents per thousand workers in Otago-Southland shows a clear seasonal pattern, peaking in March and troughing in October. Even though this index is for a different period and only a limited number of works, it bears some similarity to those for stoppages in Table 5. Both stoppage frequency and number of accidents per thousand workers are at their highest from January to May. The accident index does

not, however, show the sharp fall in December that the stop-page indices do.

Aside from monotony and cramped conditions, the "unpleasant" and "unsavoury" nature of the work were mentioned as causes of conflict by some managers. Several commented that it was a "blood and guts" industry but one argued this had nothing to do with conflict as workers get used to it. Less emphasis was placed on danger, and at least one works manager argued that meat freezing work is not dangerous. Of course there were even different views over the extent and importance of monotony. One group of managers acknowledged that the work is monotonous and dirty but contended that these factors were not critical in the generation of conflict as evidenced by the number of workers who have long service in the industry. Several managers noted an apparent readiness of workers frequently to be absent, although this tendency was not always attributed to the nature of the work.

Union and management questionnaires contained several questions relevant to the nature of the work argument. Parties were asked to assess the importance of the chain nature of the production process, the forceful, combative nature of freezing workers, safety, boring and monotonous work, and dirty work, as causes of strikes at their works. It will be seen from Table 6 that both parties considered the chain nature of the production process an important cause of strikes, with about 78% and 85% of responding managements and unions respectively considering it of at least average importance at their works (i.e. rated from 1 to 3). On the basis of size of mean response, managements rated this factor fourth in importance of those assessed and unions sixth. Assessments of it by management and union from the same works tended to be similar. Of the seven plants for which both parties responded, answers were identical in the case of three, differed by a margin of one (e.g. 3 and 2) for two, and by a margin of two for two others.

TABLE 6

The Perceived Importance of Factors Relevant to the
Nature of the Work as Causes of Strikes

		Scale of importance					No Answer	Mean response	SMR
		1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
1.	<u>Chain Nature^a</u>								
	Manage- ment responses (n=27)	7	7	4	3	2	4	2.39	2.17
	Union responses (n=16)	6	1	4	1	1	3	2.23	2.28
2.	<u>Forceful Nature^b</u>								
	Manage- ment responses	4	9	5	2	2	5	2.50	2.27
	Union responses	2	3	3	1	3	4	3.00	3.07
3.	<u>Safety</u>								
	Manage- ment responses	2	3	10	4	4	4	3.22	2.92
	Union responses	8	2	1	3	0	2	1.93	1.97
4.	<u>Boring Work^c</u>								
	Manage- ment responses	8	11	1	3	1	3	2.08	1.89
	Union responses	6	1	4	1	0	4	2.00	2.05
5.	<u>Dirty Work</u>								
	Manage- ment responses	1	3	5	8	5	5	3.59	3.25
	Union responses	1	2	7	1	1	4	2.92	2.99

Notes: a The chain nature of the production process.
b The forceful, combative nature of freezing workers.
c Boring and monotonous work.

Source: Management and union questionnaires.

Boring and monotonous work was rated by managements as the second most important of the 23 factors assessed. One third of them rated it very important and another 46% as of above average importance. The only one answering 5 (not important) represented a very low stoppage level works, although one of those answering 4 was from a highly stoppage prone plant. Unions also considered the factor significant, according it, on the basis of size of mean response, fifth in importance. Management and union responses from a particular works were identical in only one case, and differed by margins of one to three in five others.

The forceful, combative nature of freezing workers was also given considerable emphasis by most managements, with 81% rating it of at least average importance. The four rating it very important represented works ranging in stoppage proneness from low to high. On the basis of size of mean response, managements accorded this factor fifth in importance of those assessed. While several unions also considered it significant, they overall rated it only fifteenth equal. Responses of the parties from a given works were identical in only two of seven cases.

Most managements considered dirty work of little or no importance as a cause of strikes, although several attached some significance to it. They rated it sixteenth of the 23 factors assessed. Most unions, on the other hand, considered it of average importance and, from the size of mean response, assessed it at twelfth equal. No two responses from a given works were identical, but differed by a margin of only one in six of seven cases.

The greatest differences in overall assessments in Table 6 concern safety. A majority of unions considered this a very important cause of strikes and, on the basis of size of mean response, unions rated it fourth of those assessed. While there was some diversity of assessment among managements, most rated it of average importance or less. From the size of mean response, they accorded it thirteenth in importance. Of the seven works for which both parties responded, identical answers

were given for only one.

It is clear from interview and questionnaire material that the nature of the work is considered by those in the industry to be an important influence on conflict. Monotony, boredom and repetition were strongly emphasised by both managers and union representatives and appear major causes of conflict, both in its collective and individual forms. The related aspect of the chain nature of the production process was also given considerable emphasis by both parties. Numerous managers and some union officials regarded the forceful nature of freezing workers as an important influence. Union representatives placed more weight on dirty and unpleasant work as causes of conflict than did managers but few of either group rated it of very high importance. Several officials and managers mentioned the destructive and disassembly aspects of the work and the lack of visible product as important factors. There was, however, disagreement, especially in the questionnaire responses, over the role of danger. Most unions considered it very important while managements generally regarded it as of average importance or less. In many sheds safety is the only matter over which a delegate, at least according to union rules, may call a stoppage of his department without reference to the rest of the shed.

Many aspects of the nature of the work are technologically determined and, to the extent that the technology is uniform throughout the industry, would seem to predispose all plants toward conflict. For example, to the extent that most of the work is of a disassembly and "destructive" character, and lacks a visible product, this aspect's effect might be expected to be uniform both among and within works. Not all these aspects, however, are likely to be uniform in effect. While monotony and repetition is present in all freezing work, the variation in its degree as among departments may help explain intra-plant differences in conflict levels. The forceful nature of freezing workers may be a determinant of both intra- and inter-plant levels. Some jobs, for example, slaughtering, seem to attract or produce a more "aggressive" worker than others, while at the same time offering limited opportunities for

individual expression. Moreover, there are likely to be variations among works in conditions which heighten aggression, such as limited space on the slaughterboard, and these may assist in explaining differences in plant levels of conflict. The work of some departments is again more unpleasant and dirty than that of others, while differences in the physical nature of works modifies the degree of unpleasantness of given jobs as among plants. Furthermore, accident figures suggest the degree of danger differs both within and among plants. Thus while the nature of the work is a general influence, it has sufficient variation to be important in the explanation of a number of conflict patterns.

3. The "Isolated Mass", Company Camps and the Kerr-Siegel Hypothesis

Howells and Alexander combine aspects of the seasonality and nature of work arguments to attempt a Kerr-Siegel type explanation of the apparent high strike propensity of the Otago-Southland meat freezing region in the decade ending 1965.³⁸ They imply that much of the region's stoppage activity involved butchers who formed an "isolated mass" of workers engaged in a dangerous trade. The butchers were said to be an isolated mass in Otago-Southland because the migratory proportion of the labour force is higher there than elsewhere in the country, and because it is housed in company camps and is predominantly Maori. The geographic isolation of the mass was seen to be bolstered by social isolation in that Maori butchers found "it much more difficult to become socially integrated in South Island".³⁹ These strands are combined in the statement that: "In the meat freezing industry in the south of South Island, one can detect the three conditions necessary to explain strike proneness as presented by Kerr and Siegel: a homogeneous

38. Howells and Alexander, "A Strike in the Meat Freezing Industry". The disproportionately high strike propensity of this region noted in *ibid.*, p. 419 seems confined to years prior to 1965 (see Chapter IX and Geare, "The Problem of Industrial Unrest", p. 14).

39. *Ibid.*, p. 426.

group of workers isolated from the general community, working in a dangerous trade, and with a capacity for group cohesion."⁴⁰ This conclusion is supported by Prain.⁴¹

We have already argued that Howells and Alexander's application of the Kerr-Siegel hypothesis to butchers housed in company hostels is theoretically inappropriate. Their attempt to explain the apparent high strike propensity of the Otago-Southland region in the 10 years ending 1965 is open to criticism on other grounds, many of which have been outlined by Geare during an exchange in the literature with Alexander.⁴²

Geare contends that Howells and Alexander's analysis is not relevant to some of the most highly strike prone works in the region during that approximate period. He notes that, of the seven works in the district, two with camps had abnormally low strike records, while one with no camp and another with a relatively small camp were highly strike prone.⁴³ In terms of the more recent period of 1967-73, there is also a fairly poor correspondence between rankings of Otago-Southland works on the bases of camp size and a measure of strike activity. In any event, the Howells and Alexander argument has little relevance to recent times as Otago and Southland are no longer disproportionately stoppage prone (see Chapter IX).

Howells and Alexander, moreover, quoted Burridge⁴⁴ as showing "that the proportion of the labour force which is migratory is higher in the south of South Island than in any other part of New Zealand. This labour force is housed in company camps and is made up predominantly of Maori butchers.

40. *Ibid.*, p. 426.

41. K.J. Prain, "The Pattern of Industrial Disputes in New Zealand, 1921-1966", M.Com. Thesis, University of Otago, 1970, pp. 11 and 73.

42. See Geare, "The Problem of Industrial Unrest", and *idem*, "The Conflict over Strike Causes"; and Alexander, "Local Strikes in Otago-Southland Meat Freezing Plants".

43. Geare, "The Problem of Industrial Unrest", p. 15 and *idem*, "The Conflict over Strike Causes", pp. 91-2.

44. G.J. Burridge, "The New Zealand Meat Freezing Industry - Its Location and Factor Flow Patterns", M.A. Thesis, University of Canterbury, 1962.

Here is Kerr and Siegel's isolated mass."⁴⁵ The authors implied that most of the Maori butchers came from the North Island and actually stated in the later article that they were "mainly from North Auckland and the East Coast".⁴⁶ While Burrridge's research supports the contention about the relatively high proportion of migrant labour, it contradicts the one about it being predominantly North Island butchers. He speaks of "the majority (of workers housed at the works coming) from the local farming areas and the rest of the South Island" and states "at the most, the 350 men from the North Island represent only one quarter of the total accommodated at the works in South Otago and Southland".⁴⁷ Three hundred and fifty men spread over five works hardly constitutes an isolated mass in the Kerr-Siegel sense. In recent seasons, it may be noted, camp numbers have been falling at four of the works in Otago and Southland.

While Howells and Alexander's theoretical and empirical discussion has major deficiencies and fails to explain adequately the Otago-Southland situation of over a decade ago, it is nonetheless of interest to see whether facets of their argument are applicable to the industry generally. Eighteen works have hostels although a considerable number of them are never full and one is not used at all. There is a general trend away from camp accommodation, with numbers falling at about seven works and remaining static at the rest and only one showing some growth. Of these 18 works, the stoppage propensities of seven could roughly be described as low, of six as medium, and of five as high. Even among plants with hostels, there seems little relationship between hostel size and stoppage activity. In terms of the industry generally, several regions such as the north of the North Island and Canterbury have few hostels, while none of the three most highly stoppage prone works in the country have camps (and some plants with hostels have among the lowest stoppage propensities). There appears little or no relationship between the existence or otherwise of a

45. Howells and Alexander, "A Strike in the Meat Freezing Industry", p. 426.

46. Howells and Alexander, "The Kerr-Siegel Hypothesis", p. 46.

47. Burrridge, *op.cit.*, p. 53.

camp and relative stoppage levels. This is in line with the opinions expressed in interviews and reported previously. Furthermore, all North Island managements responding to the questionnaire reported 90% or more of their peak labour forces as coming from local districts (i.e. within a radius of 30 miles), with eight reporting figures of at least 98%. All responding South Island works north of Southland, except one, reported figures of 90% or more, with seven of at least 98%. The figures for the Southland works were generally lower, being 90%, 80%, 78% and 50%.

Other parts of the questionnaires have a bearing on this matter.^{47a} Managements and unions were asked to assess the importance of the presence of migrant labour housed in company hostels, any tendency for freezing workers to be isolated communities and racial frictions as causes of strikes at their works. From Table 7 it will be seen that both parties generally considered these factors of little or no importance. Managements, on the basis of size of mean response, rated the presence of migrant workers in hostels third to last in importance of the 23 factors assessed and unions rated it last. When only responses from works with hostels are considered, it was still accorded little significance. Of the two managements rating it of average importance, one was from a works in the south of the South Island with a substantial hostel and the other from one in the middle of the North Island with a fairly small hostel. Management and union responses from a given works were identical in four of seven cases.

Kerr and Siegel, and later Howells and Alexander, stressed the importance of geographic and social isolation in producing strike prone isolated masses. Most managements and unions, however, considered any tendency for freezing workers to be isolated communities of little or no importance as a cause of strikes. The two managements regarding it of above average importance and the one union considering it very important, did represent works in Southland, two of which are geographically isolated. Managements from the other two Southland works

47a. On the specific question of the difference between Otago-Southland and New Zealand as a whole, the union questionnaire was not useful because of the composition of the sample.

TABLE 7

The Perceived Importance of Factors Relating to the
Kerr-Siegel Hypothesis as Causes of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
1. <u>Company hostels</u> ^a								
Management responses (n=27)	0	0	2	2	18 ^c	5	4.73	4.29
- with hostels	0	0	2	2	7		4.45	
Union resp- onses (n=16)	0	0	1	1	10 ^d	4	4.75	4.86
- with hostels	0	0	1	1	6		4.62	
2. <u>Isolated communities</u> ^b								
Management responses	0	2	0	3	17 ^e	5	4.59	4.16
Union responses	1	0	3	0	8	4	4.17	4.26
3. <u>Racial frictions</u>								
Management responses	0	0	0	5	17	5	4.77	4.32
Union responses	0	1	2	1	8	4	4.33	4.43

Notes: a The presence of migrant labour housed in company hostels.

b Any tendency for freezing workers to be isolated communities.

c Includes three "N.A."s.

d Includes two "N.A."s.

e Includes one "N.A.".

Source: Management and union questionnaires.

rated it of no importance. Overall managements accorded this factor fourth to last in importance of those assessed and unions fifth to last. Parties from a given works provided identical assessments in three of seven cases.

Howells and Alexander implied that racial tensions, and so the social isolation of Maori butchers, was greater in the south of the South Island. But responding managements from Otago and Southland, like those from other regions, considered racial frictions of little or no importance. Unions also generally attached no significance to this factor. Managements rated racial frictions second to last in importance of the 23 factors assessed and unions third to last. Responses of the parties from the same works were identical in only one of seven cases.

At a superficial level, the Kerr-Siegel hypothesis seems relevant to the meat industry, but its application, as seen in the case of Howells and Alexander, presents difficulties. Freezing workers appear homogeneous but are often differentiated along departmental lines. Occupational distinctions, such as between slaughtermen and labourers, can be very pronounced. There are also distinctions between freezing workers and other groups such as tradesmen. Geographic isolation, even in small centres, is largely confined to the migrant labour force in hostels and we have argued that the presence and size of hostels is not a major explanatory variable of conflict patterns. The rest of the workforce tends to live locally and often appears well integrated into the wider community. In some cases there may be a social stigma attached to being a freezing worker, but as a whole these workers do not appear socially ostracised or cut off.

While departments may at times be rivals, they are often cohesive in a conflict with the employer. Managements were asked in the questionnaire: "Is your workforce generally cohesive in the event of a stoppage? For example, if a group of workers, e.g. butchers, goes on strike, does the rest of the shed workforce normally give them support?" Shed unions were asked an almost identical question in which the word "membership" was used instead of "workforce". Responses were as follows:

TABLE 8

Responses to the Question "Is your Workforce
(Membership) Cohesive?"

	Unqualified YES	Qualified YES	Qualified NO	Unqualified NO	"Varies"	Other
Management responses (n=23)	12	4	2	2	2	1
Union responses (n=16)	5	9	2	0	0	0

Source: Management and union questionnaires.

Over 52% of responding managements gave an unqualified "YES" to this question and another 17% said "YES" subject to qualifications such as "there is indication of inter-departmental conflict" and "some areas will not be involved". The two managements giving unqualified "NO"s were both from works with low stoppage propensities. Over 31% of responding unions also gave an unqualified "YES" and of those giving a qualified "YES", seven noted support is given subject to a works meeting. One shed even commented that: "If the support of any department is not required these members get very apprehensive that they are not doing their bit". One of those classified as giving a qualified "NO" noted, however, that "over the last 20 years it (the membership) has not very often given the mutton butchers very much support because we have thought they were wrong in their claims". Both sheds in the "qualified NO" category have low stoppage propensities. Management and union from the same works gave similar answers in nine of 10 cases.

As regards occupational mobility, a high proportion of foremen and other supervisory-level staff are appointed from the ranks of freezing workers but a much lower proportion of staff above that level started as freezing workers. When asked how many manual workers in the last few seasons had been appointed foremen and how many people who began in the industry as manual workers had been appointed to management positions above the foreman level, responses were as follows:

TABLE 9

Extent of Appointment to Foreman Level or Above

	Many	Few	None
<u>No. appointed foremen</u>			
Management responses (n=26)	9	17	0
Union responses (n=16)	7	9	0
<u>No. appointed above foreman level</u>			
Management responses (n=24)	3	12	9
Union responses (n=16)	0	7	9

Source: Management and union questionnaires.

Some of the conditions for an isolated mass are present while others are not, so that the applicability of this part of Kerr and Siegel's analysis is limited. Concerning the nature of the work and worker aspect of their hypothesis, we have already noted the importance accorded such factors as monotony and boredom, danger, unpleasantness, casualty, the forceful nature of freezing workers and so on. While some of these are undoubtedly major influences on conflict, they are best considered within contexts other than the Kerr-Siegel hypothesis. As argued in Chapter III, these factors, along with any making for isolated masses, must themselves be related to more basic causal influences and, in particular, to the technology of the industry. This is what we have endeavoured to do.

4. Work Groups

Howells and Alexander, in their wider discussion, stress the importance of inter-group conflict,⁴⁸ and especially the extent to which stoppages result from conflict between butchers and labourers and between butchers and the union. They seem to

48, Or, as they call it, intra-group conflict. They appear to use the term "working group" to include both butchers and labourers (see, for example, "A Strike in the Meat Freezing Industry", p. 425).

suggest that this conflict results largely from technological change which has increased the number of labourers on the chain and elsewhere. This change reduced not only the status of butchers but also their political voice in the shed union which, in turn, heightened their opposition to the union officials. They also suggest that the strategic position of the butchers in the production process results in their being more "militant" than labourers.⁴⁹

Walker places the role of the group in industrial conflict within a broader perspective, arguing the technical conditions of the industry demand that the stages of livestock treatment follow one another in rapid sequence. This means that each department performs an essential role once the programme is started by the slaughtermen so that any group is in a position to bring the whole works to a standstill in order to enforce its claims.⁵⁰ McNulty also suggests that the group nature of much of the work means that the interests of workers in a department are similar and that a sense of solidarity easily develops.⁵¹ This argument stresses the ability to engage in collective action and may help explain the industry's overall stoppage proneness, to the extent that particular groups are generally stoppage prone. It may also partly explain the intra-plant pattern of conflict and, possibly to a lesser extent, differences in regional, company and establishment levels of conflict.

We have several times noted the sequential, integrated nature of the production process and how this produces departmental work groups which may be in a position to bring the whole works to a standstill. This feature makes this argument intuitively appealing. Furthermore, the structuring along departmental lines might be expected to produce departmental loyalties which could come into conflict with those of members of other departments.

49. Howells and Alexander, "A Strike in the Meat Freezing Industry", p. 421.

50. Walker, *op.cit.*, p. 298.

51. F.E. McNulty, "The Place of Industrial Relations in Works' Efficiency", *Papers of the Eleventh Research Conference of the Meat Industry of New Zealand*, 1969, p. 97.

The sequential nature of livestock production does not (as Walker implies) give departments roughly equal bargaining power. (He argues that "any section (is) in a position to bring the whole works to a standstill in order to enforce its claims".)⁵² As argued in Chapter IX, some sections are better able to cause a standstill than others. Plants can keep operating for some time after certain departments stop work. They may nonetheless eventually close if the cost to the employer of the lost output of such departments is sufficiently great to make continued operations unprofitable in the longer term. The stopping of other departments, e.g. the slaughterboard, necessitates an almost immediate closure because their absence makes the production process inoperative. Thus, while most departments can disrupt operations, some are more able to do so than others. But greater bargaining power in the hands of a department does not necessarily mean it will be more stoppage prone than others because management will have an incentive to settle its demands short of a stoppage. However, insofar as powerful departments formulate relatively more demands and as relativities exist between conditions and earnings of various departments, it is likely that strategic and powerful groups will be more stoppage prone. Such groups are especially likely to make more demands if they are more subject to some of the influences already mentioned such as monotony, danger, unpleasantness, the forceful nature of workers and so on.

In the course of interviews most union representatives said their shed memberships were cohesive and several noted it was policy and practice for departments not to stop work and go home without a shed meeting. A number commented though that some departments, especially slaughtermen, were more involved in conflict than others. The machine pacing and monotony of slaughtermen's work was emphasised. A branch secretary commented that workers have an "awareness of power as members of the organisation - power which they would not otherwise possess". He saw the source of this power as lying "solely in the fact that the freezing worker handles a perishable product.

52. Cf. Walker, *op.cit.*, p. 298.

The animals have got to be processed." Some noted the importance of the department to the worker. One secretary argued that "the involvement of the rank and file is very keen in their own department", and observed that workers were most interested in departmental meetings, less interested in works meetings and less again in branch meetings. While the significance of the department was generally recognised, few shed officials or delegates acknowledged significant inter-departmental conflict. Some claimed to have no distinction "between pieceworkers and labourers" and no "pieceworker-hourly worker battle".

Some officials commented that relationships between freezing workers and other workers were very good but several were less positive. There was some resentment that other workers, especially tradesmen, "ride on the meat worker" by getting concessions originally won by freezing workers' unions. Several also argued that when a small number of tradesmen stop work the whole plant stops and freezing workers lose earnings, yet when meat workers stop tradesmen are still in work.

Most managers interviewed said a few departments, particularly the slaughterboard and freezers, were involved in a disproportionate amount of stoppage activity. The power and strategic position of these "kingpin" groups was emphasised but other contributory factors such as monotony were mentioned. One manager labelled slaughtermen "a large group of men in an unfavourable environment". Some commented that the highest earning sections were the most "militant".

Several managers claimed inter-departmental conflict to be significant. One argued that departmental seniority systems foster the development of sectional rivalries, splitting workers into sectional groups each of which looks after its own interests. Another noted that at his works, a department sometimes goes home after a stop work meeting in the lunch hour without informing anyone. One manager even argued that slaughtermen sometimes stop work just to show other departments their strength, while an employers' representative contended that mutton butchers in a certain area "are king" and that they

"sometimes take no notice of other men in the plant". Conflict with the employer can arise when departments demand make-up pay because another is holding a stop work meeting, has instituted a go slow or work to rule, or has gone home. Inter-group conflict may also arise if the earnings of one department are affected by the actions of another. But it must be pointed out that some managers reported little or no inter-departmental conflict.

A number of aspects of the questionnaires are relevant to the role of work groups in conflict. As already noted, most responding managements and unions considered their work forces or memberships cohesive in the event of a stoppage. Responses on the perceived extent of unofficial strikes have also been documented. Only 13% of shed unions acknowledged experiencing an unofficial strike in the last five seasons as compared with 44% of managements. This response pattern is understandable as matters of worker unity and union solidarity are involved, and was in fact replicated in answers to a related question. Parties were asked to note at what level the decision by workers to take strike action was usually made. Responses were as follows:

TABLE 10

Where Strike Decisions are Perceived to be Made

	Level of decision						
	National	District	Works	Depart- ment	Depart. + Works	District + National	Other ^a
Management responses (n=25)	4	2	5	8	2	2	2
Union responses (n=15)	1	0	11	0	0	0	3

Note: a Involving more than two levels.

Source: Management and union questionnaires.

While a considerable number of managers (32% of those responding) considered the strike decision was usually made at department level, no shed union shared this view. Most unions (73%) said it was made at works level. Incidentally, these management responses were not necessarily inconsistent with the view that the workforce is cohesive, especially as the question on cohesion cited an example concerning support for a department on strike. Management and union from a given works provided the same answer in only three of nine cases.

Parties were also asked to assess the importance of frictions between different occupational groups as a cause of strikes at their works. As can be seen from the following table, managements generally accorded this factor more importance than did shed unions although even they only rated it fifteenth of the 23 factors assessed. Unions considered it of little or no importance rating it second to last. Of the seven works for which both parties responded, answers were identical for one, and differed by a margin of one for three. For one other, however, the management rated it 1 (very important) and the union 4 (below average importance). Shed unions were also asked to assess the importance of frictions between unions as a cause of strikes at their works. Most again accorded this factor little or no importance, although they rated it of slightly more consequence than frictions between occupational groups.⁵³

TABLE 11
The Perceived Importance of Frictions Between
Occupational Groups as a Cause of Strikes

	Scale of importance					No Answer	Mean Response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	2	5	5	3	7	5	3.36	3.05
Union responses (n=16)	0	0	3	4	5	4	4.42	4.52

Source: Management and union questionnaires.

(Footnote 53 is given on the next page.)

The technical conditions of the industry produce distinct work groups, some of which are involved in collective forms of conflict more than others. Many managements actually see strike decisions as being largely made at department level although unions dispute this, arguing they occur at works level. Most managements and shed unions consider the plant workforce cohesive, particularly in terms of giving support to a group on strike. Despite this, some managements consider frictions between occupational groups an important cause of strikes, although most rate the factor of little importance, as do unions. The sequential nature of the production process, along with the nature of the work and workers in particular departments, seems one of the most fruitful explanations of intra-plant conflict patterns.

5. Hygiene Regulations

Another technical condition of the industry is that meat must be inspected to maintain standards of hygiene and prevent the spread of disease. Standards of inspection in New Zealand works have been greatly influenced in recent years by the requirements of export markets. The inspection function is performed by meat inspectors (and veterinarians) employed by the Meat Division of the Ministry of Agriculture and Fisheries (MAF). It is suggested that the hygiene regulations and their application have produced considerable conflict.⁵⁴ Changes in

53. Union responses were:

	Scale of importance					No Answer	Mean Response
	1	2	3	4	5		
Number	1	0	2	1	7	5	4.18

Source: Union questionnaire.

This question was not included in the management questionnaire.

54. See North Island Freezing Workers' Federation (NIFWF) Submission to the Commission of Inquiry into the Meat Industry, 1973, p. 11; *Report of the Meat Industry Commission*, pp. 62-3; and T.G. McNab, Address to dominion meat and wool section of the Federated Farmers of New Zealand (Inc.) 30th annual conference, Rotorua, 1-3 July 1974, p. 4.

these regulations lead to changes in established work methods which unsettle the work force.⁵⁵ This effect is exacerbated when changes in work methods result in reduced earnings and/or increased effort for the worker.⁵⁶ Resentment against these changes is further heightened when neither their nature nor purpose is adequately communicated to the workers concerned.⁵⁷ Communication difficulties apparently exist not only between workers and employers but also between workers (and their unions) and the MAF (and its inspectors), between the MAF (and its staff) and the employer and so on.⁵⁸ Worker resentment and frustration is also induced by apparent inconsistencies in the application of the regulations between inspectors and by the seemingly arbitrary and high-handed way in which some inspectors perform their work.⁵⁹

The effects of the regulations are also alleged to be sources of conflict. For example, the operation of the detain rail has in some instances led to the rate of kill being reduced or production ceasing altogether.⁶⁰ This has reduced work rates and so incomes of pieceworkers and others on incentive payments, who then demand make-up pay (and/or extra manning) which becomes a source of conflict if not conceded. Another example concerns heat and humidity. The regulations require that windows and other ventilation points be closed in slaughterhouses to prevent the entry of foreign matter. They also require the more extensive use of hot water, and so protective clothing. These changes, combined with the considerable

55. See New Zealand Freezing Companies' Associations (NZFCAs) Submission to the Commission of Inquiry into the Meat Industry, 1973, Part VII, p. 9.

56. See NIFWF Submission, p. 12.

57. See NIFWF Submission, p. 11; and *Report of the Meat Industry Commission*, p. 65.

58. See Federated Farmers of New Zealand (Inc.) Submission to the Commission of Inquiry into the Meat Industry, 1973, Part IV, p. 2.

59. See NIFWF Submission, p. 11; and the *Report of the Meat Industry Commission*, pp. 63-4.

60. The detain rail is a diversionary area attached to slaughterlines where carcasses of sheep, lambs, beef or pigs are directed and detained for closer examination for disease or for contamination arising out of the dressing procedure (see NZFCAs Submission, Part III, pp. 6-11).

age of many slaughterhouses and works generally, have increased temperature and humidity despite the use of fans and other devices.⁶¹

Most of the strands of the "hygiene regulations argument" concern the inclination to engage in conflict actions. It appears to have most relevance to collective and employer-initiated forms but is also consistent with many individual forms of conflict. It also appears relevant to most levels of conflict. The tendency for the industry as a whole to be prone to stoppages and certain individual forms may be partly explained by the pervasiveness and increasing strictness of the hygiene regulations. Variations in regional, company, establishment and intra-plant conflict levels may be partly explained by differences at these levels in the application and effects of the regulations.

Hygiene regulations have become much stricter in recent years. The number of Ministry of Agriculture and Fisheries meat inspectors has also increased and works have been inspected on a number of occasions by visiting American and British veterinarians and inspectors. The Meat Regulations (1969) confer considerable powers on MAF inspectors, including the ability to correct, reduce or cease production in any part of a slaughterhouse (Regulation 85). That the regulations have led to conflict came through very clearly in interviews.

Virtually every manager interviewed claimed difficulties with the regulations, several stating they were the most serious cause of stoppages in recent years. There was general agreement that the regulations upset established work methods and rhythms and that workers resist such change. One manager cited an example whereby the works veterinarian ordered the practice of pithing and fiddling be stopped. (Pithing involves putting a metal rod in the bullet hole to sever a nerve and so stop reflex action on cutting the beef animal's neck.) The shed union refused to stop on safety grounds whereupon the veterinarian repeated his order and threatened to close down

61. See *Report of the Meat Industry Commission*, pp. 108-109.

operations unless it was followed. Managements see themselves as involved in situations over which they have no control and did not create. Many also argued that there are inconsistencies in interpretation and application as among inspectors. Several attributed this to a lack of training and experience of the large numbers entering these positions.⁶² These factors, along with a desire for power, were also considered important in explaining the alleged arbitrariness of some inspectors. One manager argued that "some of the young inspectors are ignorant and take delight in being perverse", and another that inspectors "have authority and enjoy using it. Some are power crazy and are themselves hygiene hazards." A works manager contended that "MAF personnel have been ridiculous in certain cases" and asserted, along with numerous others, that managements are unable to negotiate with inspectors.

The effect of arbitrariness and inconsistency was seen by some to be heightened through workers not understanding the meaning of or need for new regulations. It was further claimed that some of the regulations are impractical and unnecessary and, by implication, that workers have some justification in resisting them. Several managers argued that "management is losing control of the works" and that there are "too many bosses in the industry". Similar feelings were expressed in respect of an alleged increasing "militancy" among MAF personnel. One argued that "at this shed MAF personnel are a militant body. They are against their superiors (i.e. senior meat inspectors and veterinarians) as much as the company. They have their own row to hoe." Some suggested there had been a "rub off of militancy and unionism" on to meat inspectors.

62. The approved meat inspection staffing has increased dramatically from 848 in 1968 to 1305 in 1974. In some years turnover was also high. Over the period 1968-73 the veterinary establishment increased from 52½ to 74. The 1969 *Report of the Department of Agriculture*, H. 29 (Government Printer, Wellington), notes with respect to meat inspectors that: "Overall, the standard of staff being appointed has improved, but it is still difficult at some locations to recruit and retain staff of the desired calibre". (p. 50) In the previous year it was also noted that "in some places it is still difficult to obtain staff with good educational qualifications". (p. 51)

The effects of the regulations were also seen to cause conflict. Heat was described as a problem in several works, being caused in part by the need for slaughtermen to continually wash their equipment.⁶³ Disputes over make-up pay due to a slowing of the chain or the detain rail being full were also reported, although some managements and unions have negotiated agreements whereby full rates are paid workers if the chain slows or stops due to hygiene regulations. One industrial relations officer argued, moreover, that the regulations have made the job less tolerable by leading to greater regimentation and less chance for individual expression.

The regulations have become a major bargaining point. One manager claimed the union used every change in normal methods as a bargaining point arguing they involved increased work or decreased earnings. New regulations were seen to result in demands for "more men or more money" and were characterised as a "union hobby horse" through which the union gained everything but gave nothing. The manager of one works claimed the workers were not willing to acknowledge that the regulations had made their jobs better, but union officials at the same plant revealed to the author that they "have improved everything". There is a feeling among some managers that the regulations have been used by the workers as a convenient device for obtaining concessions. One, referring to increased stoppages over heat, noted that "now the company is suddenly responsible for the heat and not nature". Several were also worried about yielding precedent - setting concessions which might spread via a "ripple effect" throughout the industry. Of all managements interviewed, only one reported no difficulties with hygiene regulations.

Many union representatives voiced similar complaints about the regulations to some of those of managements. At least one official claimed they were the source of a majority of stoppages in recent years. Several mentioned a lack of

63. It was claimed at a meeting of the Otago District of New Zealand Federated Farmers that the regulations require some chain slaughtermen to wash their knives 3000 times a day (see *Evening Post*, 11 Dec., 1974).

uniformity in interpretation and application and of communications on the nature of and need for the regulations. Relations with MAF inspectors varied, with several sheds claiming little or no relations between freezing workers and MAF personnel, but a few noting that the latter do "quite a good job". Effects of the regulations were also stressed. It was claimed by some that the employers have tried to pass their cost on to workers in the form of lower earnings or extra work. Loss of earnings of pieceworkers and others on incentive rates were regarded as a major problem in certain areas. Even where agreements existed on make-up pay, a pressure for extra work was noted. Some officials also argued the regulations cause heat problems.

It is clear that unions regard a change in regulations as a bargaining point. At one shed, officials claimed that "the biggest battles" occur over such changes, commenting it was their policy to demand "extra money or extra men". Several officials, while noting detrimental aspects of the regulations, also saw their implementation as leading to many improvements in working conditions. One group argued that "in some ways the regulations are doing a good job. They have brought in changes that have been argued about for years." Another official claimed they had "improved conditions out of sight".

In the questionnaires, managements and unions were asked to assess the importance of new technology and changes resulting from hygiene regulations, and heat as causes of strikes at their works. As can be seen from Table 12 the first of these factors was accorded great importance by both parties. In terms of size of mean response, both managements and unions rated this factor the most important of those assessed. There was, not unexpectedly, a high concordance of opinion from works for which both parties responded. Of the eight plants in this category, both parties gave identical responses for five.

Unions regarded heat as a more important cause of strikes than did managements. They rated it second in importance to new technology and changes resulting from hygiene regulations. One shed commented that: "80% of the problems revolved around heat on the slaughterboard". Ten of the 24 responding

TABLE 12

The Perceived Importance of New Technology and Changes
Resulting from Hygiene Regulations and of Heat as Causes
of Strikes

	Scale of importance					No Answer	Mean Response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
1. <u>Changes from hygiene regs.</u>								
Management responses (n=27)	11	8	3	0	0	5	1.64	1.49
Union responses (n=16)	12	2	1	0	0	1	1.27	1.30
2. <u>Heat</u>								
Management responses	4	6	8	3	3	3	2.79	2.53
Union responses	9	2	2	0	1	2	1.71	1.75

Source: Management and union questionnaires.

managements considered it of at least above average importance and overall accorded it, on the basis of size of mean response, eighth importance of the factors assessed. The four answering 1 (very important) represented works with stoppage propensities ranging from high to low. Management and union from the same works gave identical responses in five cases, but in one of three others the management answered 5 (not important) and the union 2 (above average importance).

It is very difficult to ascertain the cause of a stoppage from Department of Labour strike returns, especially if it involves hygiene regulations. Stoppages over the regulations may be reported as involving a claim for more money or men, a protest over a slower chain speed or extra work or a change in working conditions and so on. It seems relatively few of them are reported specifically as disputes over hygiene regulations.

This along with the fact that reported causes are not always actual causes, makes it almost impossible to state the proportion of stoppages resulting from the regulations. It appears though from information in the returns and received from the parties, that a significant proportion of stoppage activity has been related to them. Also in some years, several stoppages have been specifically attributed in the returns to heat, one cause of which is the regulations.

The hygiene regulations have undoubtedly led to substantial conflict in the industry. The parties are unanimous in this view and other evidence seems to support them. Heat, as an item in itself, is also considered very important by unions and quite important by managements. The increasing number and strictness of the regulations in recent years is probably an important factor in explaining the strong upward trend in meat industry stoppage activity dating from 1968. Moreover, there is some suggestion both from the parties and the MAF that the quality of MAF personnel has varied among areas and this may go some way to explaining differences in conflict activity both among works and at particular works over time.

6. The Low Status of the Industry

The arguments evaluated so far largely concern technical conditions of the industry. A number of others relate to matters deriving at least in part from technical conditions. These concern the status of the industry, the male dominance of the labour force, payment systems and earnings relativities, the complexity and ambiguity of the award, and the size and location of works. It is suggested that the low status of the industry and lack of pride in it are contributing factors to industrial conflict.⁶⁴ The Meat Industry Employers' Association contends this inferior status is partly due to the publicity given to conflict in the industry.⁶⁵ A reason suggested by the 1973 Commission of Inquiry is the poor environment of some works.

64. See MIEA Submission, pp. 42-3.

65. *Ibid.*, pp. 42-3.

It argued that in some plants nothing is done to create an atmosphere which counteracts the inevitably unpleasant features of certain activities. Many old buildings have unattractive appearances and the amenities for workers in some are dingy and inadequate.⁶⁶

The logic of this argument is not well developed. It seems that low status and lack of pride are results of more primary factors, a number of which, such as seasonality and the nature of the work, have already been discussed. Several participants in the industry commented on its low status but few related status directly to conflict. One general manager argued that the image it gets is far worse than it deserves but a union official maintained that "the industry is only being recognised through disputes".

A possible primary factor leading to low status and lack of pride mentioned by the Commission of Inquiry is the poor physical environment of some works. A manager of a new and well-laid out works argued that the good quality of amenities and facilities generally was important in setting attitudes and avoiding conflict. He noted workers had developed a pride in the plant, but cautioned that "you can't buy perfection". A manager of another relatively new works attached less importance to the physical environment but commented that it "has assisted the company". He regarded it of not "too much importance" on the grounds that workers are unaware of the situation elsewhere and so have limited scope for comparison. Possibly he underestimated worker knowledge on this matter, especially as he and several other managers noted, in different contexts, how information of an often detailed nature spreads rapidly from shed to shed through social gatherings of freezing workers at such places as hotels. Workers are certainly very aware of the standard of their amenities, with one group actually showing the author the alleged inadequacies of theirs and noting they had been a source of conflict.

The low status of the industry probably has little indep-

66. *Report of the Meat Industry Commission*, pp. 101-102.

endent effect from those of more basic factors. The physical environment of works is one such factor and is seen by those in the industry to be of some importance as an influence on conflict. While it is difficult to isolate the effect of this factor from that of others, several better laid out and often newer plants have lower stoppage levels than others.

7. The Predominance of Male Labour in the Industry

The argument that the unusually high proportion of male labour in the industry is related to industrial conflict has not been well developed by its proponents. The industry's technical conditions result in work that is often unpleasant and heavy and are probably at least the historical basis for the predominance of male employment. The argument seems to imply that females are less prone to engage in collective and individual forms of conflict and is usually stated in terms of a greater female participation "enhancing" industrial relations.⁶⁷ For example, the Meat Industry Employers' Association argues that "greater female participation in the labour force will enhance industrial relations by a display of a more positive application to repetitive duties, a lesser degree of absenteeism, a biologically influenced attitude to inspection and hygiene, and a greater stability in labour turnover".⁶⁸

As noted in Chapter V, only 4.6% of the industry's average labour force in 1972-73 was female, as compared with 27.0% of manufacturing sector labour force and 29.8% of total labour force. For the 27 works responding to our questionnaire, 2.6% of the 1973 peak force and 3.5% of the trough force was female. The largest peak female employment at any of these works was only 7.4% of the total there. Seven of the plants employed no female manual workers and another four each employed only one. These statistics confirm the existence of an unusually high proportion of male workers in the industry.

67. See MIEA Submission, p. 62 and *Report of the Meat Industry Commission*, p. 59.

68. MIEA Submission, p. 62.

The argument rests largely on assertions that the presence of females "enhances" industrial relations through a better application and attitude to certain jobs, greater stability and so on. Several of the managers interviewed argued that the presence of women workers "puts a tone on the place" or "lifts the morale of a department" and that mixed sex departments have different industrial relations behaviour patterns than those composed entirely of males. It was further claimed that women were better suited to certain repetitive jobs such as packing and trimming. One manager argued this was because women are "more used to repetitive work", and another that they have a "better aptitude" for such work. Several regarded their plants' experience with women workers as very satisfactory. Two managers of works with relatively large female labour forces, however, noted a different experience. One commented on having had "trouble with women", especially those in the boning room who readily participated in any stoppage of that department. He concluded that "the employment of women is not a panacea for industrial relations trouble". This view was shared by the other manager who stated that "hiring women does not necessarily lead to industrial peace". He claimed the opposite was the case with a group of young women who were "very militant", and regarded young women as "more militant than men and uncontrollable", preferring to employ more mature women who come to work "with a purpose". A preference for mature women workers was expressed by several managements.

In the questionnaires, managements were asked whether they planned to employ more women in the future, and unions if they envisaged more women being employed in their works. Both parties were asked to give reasons for their answers. As can be seen from Table 13, a high proportion of both either planned or envisaged more women workers. Of the 11 works for which both management and union responded, answers were the same in the case of seven, of which answers were "YES" for five and "NO" for two. Of the four works for which the parties disagreed, in all cases the managements answered "YES" and the unions "NO". The degree of uniformity of responses is perhaps surprising in view of the feeling of some managements that

unions oppose this development and of the fact that stoppages have occurred over the introduction of women workers at some plants.

TABLE 13

Responses to: "Do You Plan (or Envisage) More Women Workers in the Future?"

	Yes	No	Not Sure
Management responses (n=27)	16	10	1
Union responses (n=16)	10	6	0

Source: Management and union questionnaires.

Of managements answering in the affirmative, 12 said women were suited to particular jobs, a number mentioning repetitive and monotonous ones such as packing, trimming or wrapping. Several said that women were "reliable", "meticulous", "good workers", "more committed" and so on, three noted they were better attenders, and one that they were less injury prone. Two saw the presence of women as having a "harmonizing effect" on the labour force. The other main reason given for planning to employ more women was a shortage of male labour. Of those answering in the negative, two argued that women are less efficient than men and a similar number that the union would either "object to" or "not permit" more women workers. Several noted a lack of facilities for females and an abundance of male labour, while one also claimed much of the work was too heavy.

Of unions answering in the affirmative, six also mentioned that women were more suited to certain jobs. One claimed they were "a better proposition than tail end, casual labour" and another (from a stoppage prone shed) they they were "not troublemakers". One shed asserted that women were less "union conscious" and less willing to engage in direct action. Several commented that they were better attenders and one that they were less prone to injury and pilfering. A few seemed a little dubious about further employment of women but saw it as

a "trend of the times" or a "necessary evil". Four unions also cited a shortage of male labour. Of those answering in the negative, reasons given included the nature of the industry and seniority systems, lack of amenities, abundance of male workers and an alleged failure of women to provide equal work for equal pay.

It appears that women are generally regarded as being more suited to particular jobs, and as leading to lower levels of conflict in departments and works where they are employed. Certainly numerous managers plan, and unions envisage, greater employment of women for these reasons. But some managers of works with substantial female labour forces argued that women are at least as conflict prone as males and so have no "restraining" influence on the level of conflict. Much of the argument that women are more suited to repetitive and monotonous jobs is based on experience with few or no women workers. It seems likely that where significant numbers of women are employed in such jobs, they too will be influenced by the nature of the work and other factors and will exhibit behaviour patterns not dissimilar to men. Even if they are better suited to monotonous work, which is not substantiated, they are subject to the other influences which generate conflict among males. There appears little relationship between the proportion of a plant's labour force which is female and its level of stoppage activity although this is not surprising in view of the small numbers and so lack of significant variation among works.

8. Payment Systems and Earnings Relatives

A commonly mentioned possible influence on meat freezing conflict is the payment systems and earnings relationships in the industry. Because of its seasonal nature and need to process the raw material rapidly, extensive use is made of piece-work and other payment-by-results schemes. The operation of such schemes apparently often leads to conflict,⁶⁹ especially

69. See Department of Agricultural Economics and Marketing, Lincoln College Submission, pp. 73-81; *Report of the Meat Industry Commission*, pp. 112-113; MIEA Submission, p. 42; and McNulty, *The Freezing Workers' Case*, p. 21.

when the basis of a scheme becomes outmoded because of technological change or where special extra rates are applicable in particular situations.⁷⁰ Conflict over the application of piecerates and other incentive rates is often intensified when, as in this industry, many incentive agreements are oral and are made "privately" between foremen and delegates.⁷¹

The industry's high division of labour, combined with its complex payment systems, means there are many bases for earnings comparisons within and between works. At a broad level, an earnings "relativity" exists between freezing workers and tradesmen. There is pressure for an increase received by either group to "flow-on" to the other. Moreover groups such as clerical workers attempt to maintain relativity with freezing workers. There are also relativities among freezing workers, for example, between pieceworkers (say, slaughtermen) and hourly workers (labourers). Furthermore, earnings comparisons are important within particular categories of workers. Thus relativities exist between mutton and beef slaughtermen and comparisons may even be made between earnings of slaughtermen on different chains. Any change in relative earnings within a works (or even between works) sets in motion a sequence of demands which, if resisted by the employer, become sources of conflict. An important source of changes in effective earnings already mentioned is the hygiene regulations.

The "paymentsystems" and "relativities" arguments appear consistent with collective, individual and certain employer-initiated forms of conflict and seem relevant to all levels of conflict. The conflict proneness of the industry generally may partly be explained by the widespread nature of particular payment systems and relativities. Conflict patterns at the regional, establishment, intra-plant, and especially company levels may, on the other hand, be partly explained by variations in payment schemes and relativities.

70. For an account of difficulties encountered with slaughtermen's piecerates see Geare, "The Problem of Industrial Unrest", p. 19.

71. See the remark of Mr. Justice Tyndall quoted in R.H. Bevin, "Union Activities in the War and After", *New Zealand Meat Producer*, Nov. 1, 1970, p. 47; and also *Report of the Meat Industry Commission*, p. 113.

There is considerable diversity of payment systems in the industry, the main ones being piecework rates, incentives, and hourly rates. With piecework, a rate is established per unit of output and workers are paid according to the number of units produced by their department or section, except that they revert to hourly rates when output is insufficient to give piecework earnings equivalent to a minimum hourly or weekly rate. Incentive schemes vary but normally take the form of an output norm based on hourly rates and a pooled bonus or incentive rate on each unit produced above the norm. Hourly rates are of course unrelated to output.

In almost all works responding to the management questionnaire, slaughtermen were paid piecerates and other commonly mentioned pieceworkers were wool pullers and, to a lesser extent, boners. In several plants only slaughtermen, or they and wool pullers, were pieceworkers but in several others a considerable number of departments, and in some a majority, were on piecerates. At seven plants all workers other than pieceworkers were paid hourly rates. Non-pieceworkers at the others were in some cases all on incentive rates and in others either on hourly or incentive rates.

There was some diversity of opinion among managements on the extent to which payment systems have produced conflict. A number of managers contended that workers on piecerates or incentives resist anything affecting their rate of output and so earnings, and that this can be a barrier to the introduction of desirable changes. An example cited concerned piecework contracts of follow-on departments which had been developed on the basis of full chain production. When slaughtermen were absent, earnings of follow-on workers fell who demanded make-up pay to restore full rates. The company refused so work stopped. Numerous examples were also cited of go slows or stop work meetings elsewhere leading to demands for make-up pay from follow-on departments and subsequent stoppages. Some managers responded to go slows and such demands by withholding stock and so closing the works on the grounds of cost and the alleged "demoralizing" effect of go slows on other workers. One manager argued incentives were of "limited

usefulness" in that they soon become the "mean" and fail to spur extra output. Several commented on the importance of earnings relativities. At a number of works conflict had arisen because slaughtermen and other pieceworkers felt their earnings had fallen relative to those of other workers. One manager argued that "payment to freezing workers is all wrong" in that "rates of pay are still geared to the old solo system and no longer pay the man for skill". At many plants foremen were not allowed to make agreements because, it was argued, any concession gained spread throughout the works and sometimes further afield. Several, however, noted the existence of many customary, word-of-mouth agreements that were often sources of conflict but "difficult to stop". Some required all agreements to be written, commenting that "everything must be recorded in this industry". At plant level, strong relativities among sheds were noted and some argued that unions "pick one off and the ripples go from shed to shed". But several managers saw advantages in existing piecerate and incentive schemes. One felt that piecework was essential to obtain sufficient levels of output. A number of others praised incentive systems for producing efficiency and high quality output and attracting "good quality" labour.

Several union officials argued that payment systems have led to conflict. One group claimed that "stoppages arise because of the payment systems. Changes affect contract and bonus rates but management makes changes and discusses payment after." Hourly rates were seen to be preferable. Another official also opposed contract and incentive systems, arguing that incentive rates "do not go up in direct ratio with production" and that they remained the same when hourly award rates increased. He also favoured hourly rates which he suggested remove problems arising from hygiene regulations and other factors affecting output and so earnings under incentive (and piecerate) schemes. But at least one shed secretary noted advantages with incentive rates although even he commented that a "lot of stoppages involve ironing out contracts". Main advantages cited were a more stable work force and greater team effort. At this shed general wage orders were passed automatically on to both hourly and contract rates.

Managements and unions were asked in the questionnaires to assess the importance of the bases on which wages are calculated as a cause of strikes at their works. As can be seen from Table 14, unions accorded this factor more importance than did managements. On the basis of size of mean response, unions rated it ninth equal in importance of those assessed and managements only seventeenth. The three sheds rating it very important all have low or medium stoppage propensities. Management and union from the same works provided identical responses in only one of seven cases.

TABLE 14

The Perceived Importance of the Bases on Which
Wages are Calculated as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	0	3	6	5	8	5	3.82	3.45
Union responses (n=16)	3	3	3	1	2	4	2.67	2.73

Source: Management and union questionnaires.

Parties were also asked to note whether their works had a comprehensive productivity-based payments scheme and, if so, to rate its success. From the descriptions provided it appears that not more than four, but possibly only two, responding works operate such schemes. Another seven operate schemes of less than comprehensive coverage, and the remaining 16 said they had no such schemes. Of the 11 which had either a fully or partly comprehensive scheme, three rated it highly successful, five reasonably successful, two unsuccessful and one gave no rating of its success. One manager qualified his negative answer on the existence of such a scheme by saying: "We have

several *ad hoc* schemes scattered around the works. I am convinced productivity agreements are a waste of time and all eventually fail."

It appears that piecerate and incentive systems have, in several instances, led to conflict. Many managers expressed this view in interviews even though it came through less clearly in their responses reported in Table 14. Most unions are also firmly of this opinion. Managers, and unions implicitly, further regard earnings relativities as being important influences on conflict. To the extent that payment systems are often local and that practices of adjusting piecerates and incentives, and so relativities, in line with changes in hourly rates vary among works, these factors are likely to be important in explaining differences in conflict levels among departments, plants and companies.

9. The Complexity and Ambiguity of the Award

A related argument is that the complexity and ambiguity of the New Zealand meat processors' etc. award⁷² is in itself a cause of conflict.⁷³ The 1973 Commission of Inquiry stated that: "We have carefully read the present Award and have come to the conclusion that its terms and conditions are themselves a fruitful cause of industrial stoppages. Some clauses are difficult to interpret and in some cases are capable of more than one interpretation."⁷⁴ This argument seems most applicable to collective and employer-initiated forms although may conceivably also relate to individual forms of conflict. It could provide a useful explanation of the general conflict level of the industry, but to the extent that local conditions result in different emphases being placed on parts of the award, may also help explain differences

72. Or, more fully, the New Zealand (except Westland) Meat Processors', Packers' and Preservers' Freezing Works Award. (In line with the Industrial Relations Act, 1973 this instrument is now called a registered collective agreement.)

73. See Woods, *op.cit.*, p. 20.

74. *Report of the Meat Industry Commission*, p. 112.

among plants.

In an industry such as this, written documents like awards and agreements are important and closely scrutinized by all parties. In these circumstances it is inevitable there will be disagreements over the meaning and application of clauses in the award but some participants in the industry argue that it has become so complex and ambiguous that it is a significant source of conflict. One manager termed it "a positively divisive instrument", commenting that "because parts are unworkable, the whole has fallen into disrepute". He said that "far from providing ground rules for industrial harmony, the award provisions themselves are a source of dispute". Another cited an example relating to clause 53 of the 1973-74 award which concerns a payment to piecework slaughtermen and boners for sharpening knives and keeping protective clothing up to the standard required by the hygiene regulations. He claimed this clause was made before new regulations required slaughtermen to scrub their aprons in a hot detergent solution but because of its existence, satisfactory local agreements could not be reached and conflict resulted.

Managements and unions were asked in the questionnaires to assess the importance of "a complex award" as a cause of strikes at their works. As can be seen from Table 15 the pattern of responses for both parties were fairly similar. Among managements there was some diversity of opinion, with slightly more rating it of little or no importance (4 and 5) than of considerable importance (1 and 2). Of the three answering "very important", one represented a high stoppage level works and the other two low ones. A management noted elsewhere in the questionnaire that "an award which has become meaningless as far as a building document is concerned" was a very important cause of strikes at its works. On the basis of size of mean response, managements rated this factor fourteenth in importance of the 23 assessed. A higher proportion of unions considered it of at least above average importance and, in terms of size of mean response, they rated it twelfth equal. Of the two unions answering "very important", one was from a high stoppage level shed and the other from a

low one. Management and union responses from a given works were identical in only one case, but differed by a margin of one in four of six others.

TABLE 15
The Perceived Importance of a Complex Award
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	3	3	6	5	5	5	3.27	2.96
Union responses (n=16)	2	4	2	1	3	4	2.92	2.99

Source: Management and union questionnaires.

While there was some diversity among the parties, it appears that numerous managements and unions consider the complexity and ambiguity of the award an important cause of conflict. The important question is why has the award, in the eyes of many, become this way? In part it reflects the increasing complexity of the industry and need to document rules. Differences in interpretation, however, are also likely to reflect more deep seated differences between management and workers in the work situation. In an industry where conflict is generated by many factors, differences in interpretation will arise however simple and apparently clear the award or agreement. To the extent that different parts of the award vary in applicability as among and within works, this factor may help explain differences in amounts of conflict at most levels of aggregation.

10. Size of Works

Some argue that the optimum sized meat works is a large one because of economies of scale in assembly of livestock, processing and distribution of processed products.⁷⁵ It has also been suggested, however, that larger works have relatively higher levels of industrial conflict (especially, in its collective forms) than smaller ones.⁷⁶ The few causal mechanisms mentioned by the proponents of this latter argument concern the development of impersonal attitudes and centralisation as works increase in size.⁷⁷ It appears consistent with collective, individual and employer-initiated forms of conflict and, to the extent that meat plants are generally larger than those in other industries, may help explain the industry's conflict proneness. It may be especially useful in explaining differences in establishment levels of conflict (and in regional and company levels in so far as works in a region or company are of similar size). It is likely to be less help though in explaining variations at the intra-plant level.

The logic of this argument has not developed past a suggestion that impersonal attitudes and centralisation increase with size. Those managers supporting it placed emphasis on similar factors. One said "bigger plants have more difficult industrial relations because communications are harder to control" while an employers' representative argued that "in larger plants there is a less personal relationship between management and men". These supporters generally considered size a very important factor in conflict and mainly, though not invariably, were associated with large plants.

75. See Department of Agricultural Economics and Marketing, Lincoln College Submission, pp. 25-35; NZFCAs Submission, Part VI, pp. 2-3; and *Report of the Meat Industry Commission*, pp. 54-8.

76. See *Report of the Meat Industry Commission*, p. 104; Department of Agricultural Economics and Marketing, Lincoln College Submission, p. 87; and C.J. Moyle, M.P., as quoted in the *Dominion*, 29 June, 1973.

77. See Moyle, *op.cit.*

A number of union officials also saw it as important. One likened a smaller works to "a happy little family" in which problems are more easily resolved. Again, officials placing emphasis on size tended to be associated with large sheds. A number of managers and officials saw size as important when considered along with the location of a works and one industrial relations officer even contended that "the size and location of sheds is the main factor in industrial relations trouble, not management".

In the questionnaires, managements and unions were asked to assess the importance of the "size of your works" as a cause of strikes. As can be seen from Table 16, most managements regarded it of little or no importance, although two of the three rating it ^{at least} of above average importance were from very large works. Most of those answering 5 (not important) came from medium to small works.⁷⁸ On the basis of size of mean response, managements rated it eighteenth in importance of the 23 factors assessed. Several unions also considered size of little importance but, again, there was some tendency for larger sheds to consider it more important than smaller ones. Unions also rated it eighteenth in importance. Of the seven works for which both parties responded, identical answers were given in the case of only two, while for one other the management answered 5 (not important) and the union 1 (very important).

TABLE 16
The Perceived Importance of the Size of Works as
a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	1	2	6	3	10	5	3.86	3.50
Union respon- ses (n=16)	1	2	2	3	4	4	3.58	3.66

Source: Management and union questionnaires.

78. Among the 22 responding managements, the various size categories of works were represented in roughly the same proportions as exist in the total.

As noted in Chapter V, meat export works are typically large employment units. In 1970-71, for example, 85% of works had labour forces of more than 200 workers, while only 2.2% of establishments in the manufacturing sector as a whole employed over 200 workers. Meat works are also physically very large, being composed of numerous buildings on a site often covering several acres. If communication networks become more complex and attitudes and relationships more impersonal as size of plant increases, it seems that freezing works would have a predisposition toward higher levels of conflict than the typically smaller plants in most other industries.

If conflict levels and size are related, it might also be expected that larger works would experience greater stoppage activity than smaller ones. We tested this hypothesis by calculating the correlation between plant levels of employment and a measure of plant stoppage activity.

TABLE 17

Correlation Coefficients: "Size of Plant Hypothesis"

Plant labour forces and stoppage frequencies	Plant labour forces and plant man-days lost per 1000 workers
1971 $r = 0.688$ (significant 0.001)	$r = -0.071$ (insignificant)
1970 $r = 0.713$ (significant 0.001)	$r = 0.107$ (")

Source: Derived from Department of Labour strike returns (stoppage data) and Department of Labour six-monthly employment surveys (employment data).

The relationship between size (in terms of labour force) and stoppage frequency appears strong and positive, the implication being that the larger the works the greater the number of stoppages. In 1970, plant employment levels explained 50.77% of the variation in frequency among works. Size bears little or no relationship, however, to the number of man-days lost per thousand workers employed in a plant.

As can be seen, the correlation coefficients for both 1970 and 1971 are insignificant when this measure of stoppage activity is used as the "dependent" variable. It may be that the more numerous stoppages of large works are of shorter duration than those at small ones, with the result that man-days lost per worker does not display the same variation with respect to plant size. It is interesting to speculate on possible reasons for this. For example, large works might have more numerous short departmental stoppages than small ones. But there is

results indicate a fairly strong positive relationship between the size of a plant's labour force and its accident frequency rate, so that, at least for the above years, larger plants tended to have higher accident rates. In 1968, plant employment levels explained 47.62% of the variation in frequency rates among works.

Managements and unions associated with large works often regard size of plant as an important influence on works' levels of conflict. This was borne out in the questionnaire responses, although they indicated that the parties taken as a whole accorded the factor much less importance. The results of statistical analysis provide some support for the argument. Larger plants appear to have relatively higher stoppage frequencies and accident frequency rates, although their time lost per thousand workers does not seem to differ significantly from that of smaller works. As such, variations in size may be useful in explaining differences in stoppage frequency and accident rates as among plants. Moreover, within a number of regions, plants are of a similar size (for example, in metropolitan Auckland, Otago, and Southland) so that size may also help explain variations in these conflict measures at a regional level.

11. The Location of Plants

A related argument concerns the location of works. It is suggested that many rural works have lower levels of conflict than urban ones. At rural works the worker is seen to understand the problems facing the farmer in the handling of his livestock; the employer is seen to have a close personal knowledge and understanding of his employees and their families; and, although there are problems in certain country areas for off-season work, the workers in most instances have continuing arrangements with other employers for off-season employment.⁸⁰ These features reduce the rural worker's inclination to engage in conflict actions. Workers in the bigger city works, on the

80. See *Report of the Meat Industry Commission*, pp. 59-60 and NZFCAs Submission, Part VI, p. 9.

other hand, are seen to have little communication with country districts and therefore to lack understanding of the farming community's problems. This means these workers are more inclined to engage in collective actions than those in rural plants.

This argument is plausible but again requires development. Further aspects were mentioned during interviews. Managements were generally of the opinion that rural works have lower levels of stoppages, and possibly of such individual forms as absence and turnover, than urban works. A manager of a rural plant argued that "there is not the same number of stoppages in country areas generally", while one at an urban works contended that "metropolitan sheds tend to have more industrial problems than those in the country". Several reasons were suggested for this apparent pattern. Some argued that rural workers have a greater understanding of animals and farming generally and are therefore more sympathetic to the farmer's problems. Also, numerous rural works are located in single-industry areas, within which, it was often noted, there is little alternative work available. As one manager said, "workers cannot get another job here and the union is aware of this". In rural areas plants are important not only as sources of employment but also of income which is vital to the wellbeing of the local community. One works manager noted that "the town is built up from workers here". Freezing workers in such areas, especially those living locally, are seen to be part of the local community and to have a concern for its welfare. One company officer, referring to a rural works, commented that "people have a stake in the place" so that "a days work (there) is a way of life" while in a city works "it's a business". In urban areas, on the other hand, workers are seen to be more conflict prone because of tighter labour markets, less association with the country but more association with other unions, and less involvement in the work situation generally. One manager even argued that "in cities people become things. To management they are just pieces of equipment." Another said rural workers "let (the city) works do the dirty work" and get the benefit of concessions gained there through a "ripple effect".

Several union officials also regarded location as an important influence on conflict. Again the greater familiarity of rural workers with farming was mentioned, with a "closer understanding of farming and problems of farmers" being claimed. One secretary noted that at his shed "the majority of workers until recently were reared on farms" where conditions were often worse than at the works. A branch secretary suggested that some rural workers are "not so militant" because they rely on the farming community for off-season employment. Also the close knit and integrated nature of small communities was mentioned, as was the general lack of alternative employment in rural areas. One official, while noting that "location makes some difference", said its influence is "not as great as many think", citing a number of works as exceptions to the "location argument".

This body of opinion suggests rural works will have less stoppage activity than urban ones. To test this possibility, we divided works up into two categories, one consisting of plants drawing most of their labour from cities or conurbations of over about 50,000 people ("urban works") and the other of all remaining plants ("non-urban or rural works"). This dividing line, while necessarily arbitrary, is quite successful in delineating works popularly considered urban, from those considered rural. Of the 12 works in the first category, all were either within or on the fringes of large cities. Those in the second category were largely either main plants in single-industry towns or part of somewhat larger agricultural centres. Average stoppage measures for each category were calculated and results were presented in Table 18.

Urban works clearly have a higher average level of stoppage activity, in terms of all three measures, than do rural ones.⁸¹ While there was some variation among works classed as

81. It is interesting that many managers, especially of rural plants, considered national disputes an important cause of strikes at their works. In the questionnaires each party was asked to assess the importance of national disputes and responses were as follows:

(Footnote 81 is continued on the next page.)

TABLE 18

Stoppage Statistics for "Urban" and "Rural" Works, 1967-73

	Stoppage frequency seven years 1967-73	Man-days lost per worker per year	No. workers involved per year as % of no. employed
<u>Urban Works</u>			
No. per works	24.8 (23.4)	4.35	178.6
<u>Rural Works</u>			
No. per works	9.7 (9.0)	1.90	74.8

Note: Figures in parentheses below frequency averages are standard deviations.

Source: Derived from Department of Labour strike returns (stoppage data) and Department of Labour six-monthly surveys of employment (employment data).

urban, only one such works would be classified as having a low stoppage propensity. As a general rule, it appears that the larger the city involved, the greater the stoppage activity. As can be seen from the standard deviations with respect to frequency, the degree of variation among urban works was of the same order as that for rural works. While most rural plants have relatively low stoppage levels, five of the 25 in this category would be classed as highly stoppage prone.

(Footnote 81 continued):

	Scale of importance					No Answer	Mean Response	SMR
	1	2	3	4	5			
Management responses	12	2	6	5	2	0	2.37	2.15
Union responses	2	1	4	3	3	3	3.31	3.39

Source: Management and union questionnaires.

Of the 12 managements rating it very important, 10 represented rural works. The two unions according it this importance also came from rural works. On the basis of size of mean response, managements rated it third in importance of the 23 factors assessed and unions only seventeenth.

Some of those interviewed suggested that rural works also have lower levels of certain individual forms than urban ones. The manager of a city plant, for example, attributed part of a high absence rate to the large number of workers taking time off to perform second jobs such as taxi driving. It might be expected that many of the factors producing low stoppage levels in rural works would also produce low levels of individual forms. Our only extensive data on individual forms are for accidents and these could be used to test this suggestion. A proviso, however, must first be made. The foregoing arguments suggest that both the desire and ability to engage in collective actions is lower in rural works. While the desire to engage in individual forms might also be expected to be lower, should a rural worker be in a conflict situation he may have an incentive to withdraw from work in a "legitimated" fashion (i.e. through an accident) rather than risk dismissal and possible unemployment by withdrawing in a less "legitimated" way (e.g. through absence). The ability of an urban worker to engage in the full spectrum of individual forms may be greater. Average accident frequency rates for each category of works are given in Table 19. Again, urban works on average have higher frequency rates than rural works. As revealed by the standard deviations, there is considerable variation among works within a category, although it is less in the urban than rural group.

TABLE 19

Accident Frequency Rates for "Urban" and "Rural"
Works, 1964-69

Urban works	average	14.50
	standard deviation	(19.12)
Rural works	average	10.87
	standard deviation	(22.71)

Source: Derived from SIFCA data.

The location argument is given considerable support both by those in the industry and by the statistical evidence. It

is very difficult, however, to separate the influence of this factor from that of size, because most of the works we have classed as urban are also the largest ones. Location, together with size, appears an important factor in explaining differences in conflict levels at plant, company and regional levels.

12. The Presence of Agitators

There are a number of possible influences on meat freezing conflict which, at least superficially, are unrelated to the technical conditions of the industry. A popularly mentioned one in some quarters concerns the role of "disruptive elements" and "agitators" in creating conflict situations. One version of this argument states that "the main cause of unrest in the freezing industry is the presence of individuals, not necessarily union officials, who are assiduous in sowing seeds of discontent; dedicated troublemakers".⁸² It is suggested that these people are seeking the nationalisation of the industry, if not the collapse of the private enterprise system altogether.⁸³ Some see the "agitators" as controlling the unions,⁸⁴ while others see them as "members who show little respect for agreements and refuse to accept the direction of their officers".⁸⁵ Irrespective of their position in relation to the union, these people are seen to be interested in fostering industrial conflict. The argument is often coupled with the assertion that the majority of workers "sit on the side-line"⁸⁶ or "are not well qualified to assess the truth of what is told to them by troublemakers, or are too easy-going to bother to do so".⁸⁷ It appears limited to collective forms

82. "Pylos", *op.cit.*, p. 321.

83. See "Pylos", *op.cit.*, p. 321 and McNab, *op.cit.*, p. 4. See also MIEA Submission, p. 43 and appendix entitled "meat worker", which at least implies that such people are causes of stoppages.

84. W.G. Tolhurst, M.P. as quoted in the *Evening Post*, 23 June, 1971.

85. *Report of the Meat Industry Commission*, p. 111.

86. South Otago Freezing Company Limited, *Annual Report and Accounts*, 1972, p. 9.

87. "Pylos", *op.cit.*, p. 321.

of conflict but, to the extent that "agitators" are distributed unevenly throughout the industry, could conceivably help explain the distribution of these forms at intra-plant, establishment, company and regional (and possibly national) levels.

There are a number of difficulties with the "agitator argument". First, whether one labels a person an agitator depends very much on one's view of the nature of the enterprise. As noted in Chapter I, managements holding a unitary conception are likely to regard leaders of workers in conflict situations as "agitators", while the workers themselves may regard them as anything but. Second, and aside from the problem of definition, the argument fails to explain how a few "militants" can infiltrate otherwise peaceful groups of workers and lead them into conflict action. In other words, it does not adequately explain why "agitators" exist in the industry and why they are apparently successful. It is at most a secondary influence, having its roots in more basic determinants of conflict.

It is not surprising that there was a sharp difference in opinion between managements and unions on this question. Several managers commented on the presence of "stirrers" or "troublemakers", although they largely preferred these descriptions to that of "agitator". One industrial relations manager argued that "every freezing works, because of their large size, has troublemakers" but that there are few "genuine agitators". Some saw union delegates as "stirrers" and one even seemed to view the shed union in these terms by arguing that "the average good joker doesn't want to get tied up in union affairs". Others saw "stirrers" as often not holding union office. One manager noted that "we have a group of stirrers who feel that if they can't have an argument (with management) every day on the board, life would be — boring". A few managers subscribed to a "conspiracy theory" whereby people are planted in the industry with the express purpose of causing conflict. One contended that "there is a certain amount of direction coming from outside" in that "some people deliberately set things up", and another that "you get people

who want to stir. It's part of a more general pattern." Some of these managers see this situation as communist inspired, although at least one said it was not always associated with a political party but represents a "fightback against authority". Other managers, while not holding such a theory, noted that some delegates or other workers would "like to see private ownership done away with" or "don't agree with the system". Several, however, argued that "agitators" or "stirrers", at least in their works, did not exist.

Most union officials and delegates interviewed placed little or no emphasis on this factor. Several did not acknowledge the existence of such people in the industry while others said "we don't worry about agitators. We don't mind different opinions". One official mentioned the presence of "a small group of anarchists" but attached no importance to it.

In the questionnaires, managements and unions were asked to assess the importance of "the presence of agitators" as a cause of strikes at their works. As can be seen from Table 20, managements considered it more important than did unions. In fact, 72% of responding managements, representing works with a wide range of stoppage propensities, rated it of at least average importance. On the basis of size of mean response, managements rated it sixth in importance of the 23 factors assessed. Unions, on the other hand, rated it only twentieth, with a full 50% of respondents considering it not important at all. The two sheds according it at least average importance both have medium stoppage levels. There were wide differences in perceptions of management and union from a given works, with the same response being provided in only one of eight cases. For one works the union rated the factor 5 (not important) and the management 1 (very important), while for three others responses differed by a margin of three (e.g. 5 and 2) with the management rating it more important than the union.

TABLE 20

The Perceived Importance of the Presence of Agitators
as a Cause of Strikes

	Scale of Importance					No Answer	Mean Response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	7	5	6	4	3	2	2.64	2.39
Union responses (n=16)	0	1	1	4	6	4	4.25	4.35

Source: Management and union questionnaires.

The agitator argument is suspect on a number of grounds and no concrete evidence of the role of "agitators" was given to the author. Rather, interview and questionnaire responses highlighted its weaknesses. Opinions on the existence and importance of "agitators" depend on the frames of reference being applied. Many managements view leaders of workers in conflict situations as agitators, while unions hold a different view. Other factors discussed seem more plausible and basic explanations of conflict patterns in the industry.

13. Personality Differences

Personality clashes have also been suggested as causes of conflict. The industrial reporter of the *Evening Post* newspaper (J. Parker) argued that at least one national dispute was partly the result of a clash of personalities between spokesmen of the union (F.E. McNulty) and of the employers (J. Murray).⁸⁸ Geare also suggested that strike incidence at plant level can be strongly influenced by the personalities of

88. *Evening Post*, 24 Jan., 1973.

the shed secretary and works manager (and, presumably, of other parties as well).⁸⁹ While the "personalities argument" has been developed in terms of collective forms it appears applicable to individual and employer-initiated forms of conflict. Moreover, as personality clashes can occur at any level from national to department, it could apply to all levels of conflict although, as Geare implies, its greatest usefulness may be in explaining differences in plant stoppage propensities.⁹⁰

This argument has some of the weaknesses of the agitator one. In particular, personality differences may only be a precipitating rather than a basic cause of conflict, being a symptom of more fundamental factors. To the extent that personality characteristics are culturally induced, personality incompatibilities may be reflections of more primary causes of conflict in the industry.

Many of the managers interviewed failed to mention personality incompatibilities as a source of conflict, but there was some difference in opinion even among those who did. At one extreme was the manager who argued that personality differences were of prime importance in that "most disputes are conflicts between people". At the other, was the one who argued they are not important in saying "the belief that industrial relations depends on personalities is wrong. The reliance on personal relations is false." A number suggested that personality differences are important when there is a change in such positions as works manager, shed secretary, foreman and delegate. One argued that "where personalities change you get changes in disputes and accidents, especially when there are changes in manager and shed secretary". A recently appointed works manager gave a possible reason for this in suggesting that "the union is trying to test the new manager. They're trying to erode former agreements and testing to see what they can get out of me."

89. Geare, "The Conflict Over Strike Causes", p. 96.

90. *Ibid.*, p. 96.

Many union representatives also failed to mention personality differences as a source of conflict. One implied they are of little importance by saying that his liking for certain managers as people did not influence his relationship with them or alter "the fact that they are committed to the investors". Another, however, suggested that "personalities have quite an influence". Again, a tendency for conflict to arise with a change in personnel was noted. One branch secretary cited an example where the personality of an assistant manager allegedly "turned a complete flip" when he was appointed manager, with conflict being the result.

Managements and unions were asked in the questionnaires to assess the importance of personality differences as a cause of strikes at their works. As can be seen from Table 21, both parties rated the factor in a similar way. Among managements, the same number rated it of at least above average importance as rated it below average or not important. In the case of unions, slightly more were in the first category than the second. On the basis of size of mean response, managements rated it ninth in importance of the 23 factors assessed and unions eleventh. Of the seven works for which both parties responded, identical responses were given for only two, while responses differed by a margin of four for two others (at one, the management rated it 5 while the union 1; at the other the ordering was the opposite). One management rated the factor 5, but in response to a question on ways of "improving" industrial relations suggested that the shed secretary be "sacked", while a union which answered 3 suggested that industrial relations would be improved "by getting rid of the works manager and the personnel manager".

There appears a diversity of opinion among both managements and unions as to the importance of personality differences. The reasons given by those supporting the argument suggest that personality differences or changes are often precipitating factors or "catalysts" for more basic sources of conflict. For example, if unions in fact "test" a new manager this is not just because of a change in personalities but also an opportunity to express conflict present in the

TABLE 21

The Perceived Importance of Personality Differences
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	3	4	10	4	3	3	3.00	2.72
Union responses (n=16)	3	3	2	1	3	4	2.83	2.89

Source: Management and union questionnaires.

first place. It might be argued that more basic factors account for the existence of this conflict and for the grasping of the opportunity to express it. Similarly, such factors may explain why someone's personality may apparently change when he assumes a management position. While personality differences are unlikely to provide fundamental explanations, they may be the precipitating influence accounting for sudden changes in conflict patterns at departmental, plant, company, regional or even national levels.

14. Inadequate Communications

We have already mentioned the alleged communications problem with the hygiene regulations. This could be regarded as a special case of the argument that conflict in the industry results from "inadequate" communications. The Under-Secretary of Transport (Mr. E.E. Isbey) has suggested that a majority of the "problems" in the freezing industry stem from lack of adequate and regular talks between workers and employers.⁹¹ The 1973 Commission of Inquiry also implied

91. As quoted in the *Dominion*, 18 Sept., 1974.

communications were inadequate by suggesting, among other things, that works councils be established "as a means of fostering a genuinely co-operative spirit".⁹² As with the personalities argument, this one appears consistent with most forms of conflict and may be relevant to the explanation of conflict at all levels.

This argument also has weaknesses. Again, there is nothing in it to explain why poor communications develop and we may be dealing with a symptom or precipitating factor reflecting more basic causes. Also, as noted in Chapter 1, the best efforts to reveal and propagate the "facts" of a situation may not resolve conflict if there is disagreement over what constitutes the facts or different interpretations of them. These points are particularly important in an industry such as this where, in some sheds, works management has no direct contact with workers, delegates and workers will not speak to foremen, and minutes of meetings between the parties are kept in writing, agreed to by both as being accurate and signed.

Surprisingly, neither managements nor unions in interviews generally placed great emphasis on communications in isolation, but rather discussed them within the context of other matters. But several managers implied a lack of communications existed at their works. One emphasised the importance of habitual attitudes which cause both parties to "attack, attack, attack". It was also noted that "until recently the only contact with the men was through the union". Another argued that the union itself finds it hard "to get the facts across to the workers who are the difficult ones to control", commenting he would never address "such a meeting" of workers as it would be "chaotic". One manager said the parties "were virtual enemies" and that neither "delegates nor men would talk to foremen". He characterised the situation as one of "them and us". Several saw communications as important because "people get upset if not consulted". Union officials also tended to place communications within broader contexts.

92. *Report of the Meat Industry Commission*, p. 114.

Managements and unions were asked in the questionnaires to assess the importance of poor communications as a cause of strikes at their works. As can be seen from Table 22, unions considered this factor to be more important than did managements, with about 92% of union respondents according it at least average importance. On the basis of size of mean response, unions rated it third of those assessed. A number of managements, on the other hand, considered the factor of little or no importance. The pattern of management responses is similar to that with respect to personality differences. Managements rated it eleventh in importance. In no case were responses from a given works identical. In four cases they differed by a margin of two (e.g. 5 and 3) and in one, by a margin of three.

TABLE 22

The Perceived Importance of Poor Communications
as a Cause of Strikes

	Scale of Importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	3	4	9	3	5	3	3.12	2.83
Union responses (n=16)	7	2	3	0	1	3	1.92	1.96

Source: Management and union questionnaires.

A number of managements and unions emphasised communications in responding to a question on ways of "improving" industrial relations at their plants. In particular, several unions stressed a desire for greater and closer consultation with management, possibly through consultative committees or works councils. Managements were asked in the questionnaire whether their works operated any formal types of worker

participation scheme. Seven replied in the affirmative and 19 in the negative. Of the seven, four said they operated works councils or other joint consultative committees.⁹³ Unions were asked how often their delegates met with management. Ten replied "frequently", four "infrequently" and one "not at all". Of sheds answering "frequently" or "infrequently" at six the meetings were scheduled on a regular basis, usually monthly and often after the board of control meeting, and at eight they were on an irregular basis.

Differences in responses of union and management from the same works to identical questions are themselves interesting reflections on perceptions and so on communications. Both parties, for example, were asked to rate the level of strikes at their works in relation to others in their region and in New Zealand generally. Management and union from a given works provided different ratings when comparing their works with others in the region in eight of 11 cases, and gave different ratings when comparing with other New Zealand works generally in five of 11 cases. Lack of agreement in perceptions of management and union from the same works was also common when similar comparisons were made in terms of absence, labour turnover, industrial accidents and pilfering. Parties were also asked to rank five causes of time lost in order of man-days lost caused by each.⁹⁴ As a test of the similarity of the rankings of both parties from the same works, Spearman's coefficient of rank correlation (r_s) was calculated. For four of the eight works for which both responded, pairs of rankings were sufficiently similar to give an r_s significant at the 0.10 level. But it is difficult to draw conclusions from such a small sample, especially as none of the eight responding works were highly stoppage prone. We have already noted differences in responses to some other questions. In particular, perceptions on the importance of factors as causes of strikes

93. Other schemes in operation, and regarded by respondents as involving worker participation, included autonomous work groups (1 works), profit sharing (1), safety committee (1), savings scheme (1) and cafeteria committee (1).

94. These causes were: Industrial stoppages, absence, labour turnover, industrial accidents and mechanical breakdowns.

at a given works were more often different than alike. Even at the works for which responses were most similar, the management and union gave identical ones in only seven of the 23 factors assessed by both.⁹⁵ At one works, responses were the same for only one factor. On the basis of the limited number of works from which both responded, it is, however, difficult to discern any straightforward relationship between the degree of uniformity of perceptions on strike causes and stoppage levels.⁹⁶

There can be no doubt that communications between the parties at some works are lacking. From the point of view of conflict generation, what is of interest is not so much that such a situation exists but why it exists. It may be suggested that some of the other factors discussed in this chapter are the basic determinants of not only poor communications but also conflict. We are not arguing that communications difficulties cannot lead to conflict but that the factors producing them are the basic causes. Variations in the amount and quality of communications as among or within works may help explain differences in amounts of conflict at those levels although it is difficult, if not impossible, to test this empirically.

15. Foremen and Other Management Personnel

A related argument is that the apparent indifference of "low-level" management to workers' complaints at some works is

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95. We tested a rather weak null hypothesis that the ratings of the importance of the 23 strike causes by management and union from the same works are totally unrelated, by the use of the chi-square test. For the six works for which the pattern of responses was tested, the calculated χ^2 in all cases exceeded the table values of χ^2 at levels of significance of 0.05 or better, so that χ^2 was significant and the null hypothesis was rejected, i.e. in all cases the ratings of the importance of strike causes by both parties were not unrelated.
96. For a study on the ability of freezing industry managers and union officials to predict worker preferences see J.M. Howells and A.E. Woodfield, "The Ability of Managers and Trade Union Officers to Predict Workers' Preferences", *British Journal of Industrial Relations*, Vol. VIII, July 1970, pp. 237-251.

a "catalyst" for strikes.⁹⁷ It is implied that this "apparent indifference" results from inadequate communications and training within the management structure. The Lincoln College Department of Agricultural Economics and Marketing broadened the argument in stating: "while this is undoubtedly oversimplification, the plant management and supervisory staff structure appears totally production and quality oriented and few adjustments have been made at this level to technical and social changes".⁹⁸ This argument also seems applicable to most forms of conflict and may help explain conflict patterns at a number of levels, especially the plant and department.

Several managers suggested it is difficult to attract suitable people into supervisory and other lower management positions. This is not surprising in view of the fact that many of the powers and functions of foremen have been taken from them by higher management. Many supervisors or foremen no longer have the power to fire a worker or to make agreements with delegates. It was suggested that these and other powers have led to conflict, and that they have largely been taken away implies managements have recognised the key position of foremen in industrial conflict. Several actually stated that "a lot of stoppages occur over foremen". Some contended this was due to a lack of training of foremen. One manager argued that the tradition of promoting foremen from "the floor" (i.e. from among freezing workers) results in "poor junior supervisors". He said the industry requires an infusion of new personnel from "outside" but saw this as being unlikely until it "puts its house in order" and becomes attractive enough to gain the "best people". Others, however, argued that the system of promoting from the floor has worked well and is necessary for workers to have respect for the foreman's practical ability. Some saw the involvement of foremen in conflict as due to the "front line" position they occupy in relation to workers. Several, ironically enough, contended that foremen lack sufficient power and responsibility to gain the respect of the workers. Many would agree with the manager

97. Geare, "The Problem of Industrial Unrest", pp. 20-1.

98. Department of Agricultural Economics and Marketing, Lincoln College Submission, p. 71.

who stated that "departmental foremen keep this industry going", yet would also agree that foremen have less power now than in the past.

Several union officials, both in interviews and questionnaire responses, also argued that "incapable" or "inadequate" foremen lead to conflict. One shed secretary said "some assistant foremen don't know their job. This gets the men's backs up". He attributed this to a lack of training. A branch secretary argued that differences in stoppage levels among works were largely due to differences in supervisory personnel. He also saw difficulties arising from promoting from the floor - "A lot of foremen are ex-freezing workers. When it comes to handling people they aren't trained for it." He suggested that "they subconsciously realise their limitations" and that this "seems to upset their mental equilibrium and they react in strange ways". Several unions responding to the questionnaire cited a lack of training, knowledge and ability of foremen as a cause of strikes. One broadened the perspective in claiming that "management personnel from general manager to foremen" lack knowledge of "the industrial relations and human relations implications of their jobs".

There is obviously a strong body of opinion that many stoppages and other expressions of conflict involve foremen. The question again arises as to why this is so, the answers to which may be regarded as the basic causes of conflict. One might expect that, given their position and the many factors making for conflict in this industry, foremen will, irrespective of training and ability, necessarily be at the centre of many conflict situations. Moreover, due to the nature of the foreman's position, it is difficult to attract people to it, and those who do enter it find themselves subject to strong, conflicting pressures which would tax supervisors in any industry. While the quality of foremen varies among departments and works and this may help explain differences in conflict levels, this factor should be regarded as a precipitating one or a "catalyst" rather than as a basic cause.

16. The Nature and Operation of Unions

Many managers see the nature and operation of unions as a cause of conflict. In the first place, they argue that aspiring and incumbent officials and delegates have to demonstrate their "worth" in order to win elections. Such people are seen to do this by creating "trouble" with management, thereby "showing they are trying to achieve something". One manager argued that "there are a lot of frustrated union presidents about and they have got to get known. They do this by standing up to management." Secondly, they contend that the type of person wishing to become a delegate lacks training and is likely to be "anti-company". One manager claimed that "two extremes of names are put forward for delegates; either the weakest and softest, and they don't last, or those anti our way of life who always get elected because they push themselves forward". Another argued that the "good chaps don't last (as delegates). They are turfed out by those wanting more action." Some see the motives for wishing to become a delegate as being ulterior, especially as little or no financial gain is involved. One saw the main motive as being a "wish for personal grandeur". Thirdly, it is argued that many shed unions are "super democracies" within which the workers, rather than officials, have the power and exercise control. Some contended that officials lack power to make agreements and that they "won't move on anything they think the members will reject". One likened the officials to politicians "but more so". It was suggested that officials refrain from forcing members to abide by agreements for fear of losing their positions. One manager argued that "the union system is so democratic it's not practical". In particular, the yearly tenure of shed officials and delegates was stressed. One, however, argued that the officials used the need to report to members as a bargaining ploy in situations where they considered "the deal not so good" and did not "want to give way". Another expressed a preference for a "strong union organisation" arguing it was better to have "everyone home" than just a group. Considering these views expressed in interviews, some management responses to a question in the questionnaire were a little surprising and suggested that these feelings, while

widespread, are not held by all managers. In response to the question: "From a management point of view, do you consider that the control exercised by your shed freezing workers' union over its members is too strong, about right or too weak", 14 managements said "about right", 4 "too strong" and 9 "too weak".

These views are of course not shared by union officials and delegates. Many were proud of the democratic nature of their unions and one cited the opposite of the above argument. He said there is a greater need for liaison between officials (especially those at levels higher than the shed) and workers on the job in order for workers to avoid "feeling their leaders have lost touch". He likened the situation to a credibility gap which "causes frictions unless closed" and made the general observation that "unless officials suit the rank and file, they will take the law into their own hands". Several saw the election system as vital in avoiding such a gap between representatives and workers, although one commented that elections "can force compromise". One branch secretary saw the "quality" of delegates as varying, although stating it would "be a lot better if they had some instructions on what they are meant to do. At the present they learn by their mistakes."

It seems difficult to sustain the argument that the nature and operation of unions is in itself a cause of conflict. Aspiring or incumbent delegates and officials cannot make conflict out of nothing. The basis for it must already be there. Moreover, it seems that the delegates complained of by managements reflect the wishes of workers and so the more basic features of the employment situation. They, rather than other types of workers, get elected because they have the support of the majority of members and unless they become involved in conflict situations, are unlikely to last long in such positions. Similarly, it is necessary for union representatives in many sheds to report discussions and agreements back to the workers to avoid losing contact and being labelled as "company men". In other words, the characteristics of meat industry unions reflect more fundamental characteristics

of the industry itself which should more properly be regarded as the basic causes of conflict. In any event, views on the role of the nature and operation of unions in conflict depend largely on the frame of reference being brought to bear.

17. Overseas Ownership of Freezing Companies

Another possible influence on meat industry conflict commonly mentioned in some quarters is overseas ownership of meat freezing companies, two of the main strands of which have been outlined by the New Zealand Federation of Labour. First, it is argued that in foreign-owned companies the actual employers are overseas and are not aware of local conditions in New Zealand. They lack knowledge of local industrial practices and of conditions workers would normally expect to find in any New Zealand industry. This results in "an uneasy situation with the constant possibility of industrial disputes".⁹⁹ It is further suggested by the secretary of the NZMWU (F.E. McNulty) that these interests also show "no consideration for the people or workers of New Zealand except as a means of taking profits out of the country".¹⁰⁰ Overseas employers are also seen to "lack...sympathy" in the eyes of the NZFOL.¹⁰¹ The second strand is that managers of these companies in New Zealand lack normal negotiating powers and can only transmit decisions made overseas. Woods argues, although not specifically with regard to overseas-owned companies, that "remoteness of real top management" can exacerbate conflict.¹⁰² A third strand concerns worker resentment over the apparent fact that overseas companies are monopolies making large profits which are taken out of the country.¹⁰³ The "overseas ownership argument" appears to be most relevant to collective and some employer-initiated forms although it may have a bearing on particular individual forms

99. NZFOL Submission, p. 4.

100. As quoted in the *Evening Post*, 24 May, 1973.

101. NZFOL Submission, p. 5.

102. Woods, *op.cit.*, p. 20.

103. See NIFWF Submission, p. 6.

of conflict. It also seems to be most relevant to the explanation of company differences in conflict (and, to the extent that companies are grouped by regions, regional differences).

At various times calls for greater New Zealand ownership of freezing companies have been made by organisations ranging from the New Zealand Meat Producers Board,¹⁰⁴ to the Pork Industry Council.¹⁰⁵ Opinions among managers on the importance of the overseas ownership of companies as a cause of conflict varies. Several argued that it "does make a difference" and one suggested that overseas-owned companies placed greater emphasis on "trading and political aspects" while New Zealand companies were "more aware of industrial relations". A works manager, who had at one time worked for an overseas-owned company, noted an antagonism toward such companies in commenting that "it (the overseas company) treated long service workers better than we do yet the union used to hate it". A manager of an overseas-owned works argued that the domicile of ownership "makes no difference to the men working here" although he noted that his company has "a reputation for being hard" and that the union sometimes used the fact of overseas ownership in bargaining. An industrial relations manager of a New Zealand-owned company saw the overseas ownership argument as being "valid" especially as regards "remote control". He did, however, argue that remoteness of management can occur in New Zealand. On a related point, two managers - one of an overseas and the other of a New Zealand-owned works - complained of a lack of concern for or understanding of works by company head officers. One said he was "sometimes by-passed or pushed around by head office" while the other noted a tendency for "head offices to be divorced from works. They want nothing to do with them. Works are the most neglected part of the industry." Several other managers argued that overseas ownership has no effect on industrial conflict. One employers' representative called the argument "a myth - a

104. See Dai Hayward (ed.), *Golden Jubilee: The Story of the First Fifty Years of the New Zealand Meat Producers Board, 1922-1972* (Universal Printers, Wellington, 1972), p. 162.

105. Submission of the Pork Industry Council to the Commission of Inquiry into the Meat Industry, 1973, p. 19.

popular catch cry", contending that local managers have responsibility for industrial relations and that "remoteness of top management has nothing to do with it". An industrial relations officer of an overseas-owned works supported this view, commenting that the New Zealand operation was autonomous in all matters other than capital budgeting and staff or management salaries.

Many union officials and delegates see overseas ownership as an important cause of conflict. A senior official argued that it was more difficult for "top union officials and top managers to establish contact" with foreign than local firms. Moreover, he contended that "many times negotiators (for overseas companies) are frightened to go beyond a certain point". This feature was mentioned by others. Several noted a more "flexible" attitude and "more feeling for workers" on the part of New Zealand-owned companies. One secretary claimed that workers give better "co-operation" to New Zealand-owned works. A number commented on an alleged tendency of foreign companies to provoke stoppages to suit their international operations. One official claimed that large overseas-owned companies can afford strikes and even to "close down their New Zealand operations for two years and still make a profit internationally". A delegate contended that one such company "caused a strike" at one of its works "when the freezer (was) full". Referring to a change of ownership of the same works to a New Zealand-owned company, another representative said stoppage levels had fallen even though the workers and delegates remained unchanged. A branch secretary claimed that at certain times, "employers all over the country precipitate direct action in order to slow down on killing and bolster the market". He quoted in support a statement by a freezing company chairman that "on a national basis steps are being taken to slow-up shipments (of meat), which we hope will help to strengthen the market".

Unions and managements were asked to assess the importance of the remoteness of top management due to overseas ownership as a cause of strikes at their works. All managements, and several unions, from New Zealand-owned works either replied

5 (not important) or "NA". Looking at total management responses (Table 23), almost all rated it not important and, on the basis of the mean response considered it least important of the 23 assessed. Responses from just overseas-owned works displayed a similar pattern. Of the seven union responses from New Zealand-owned sheds, five replied 4 or 5 but two replied 1. On the basis of size of mean response for all responding sheds, the factor was rated by unions ninth equal in importance of those assessed. When only responses from overseas-owned sheds are considered, however, it was largely rated very important and the mean response was very much smaller; in fact the smallest of all and so, in a sense, the factor rated the most important. One of these sheds remarked that the company failed "to come up with quick practical decisions" and to give "due consideration" to local conditions. Management and union from the same works gave identical answers in three of seven cases. Two of the seven were overseas-owned works; for one the management replied 5 (not important) and the union 1 (very important), while for the other the management also answered 5 and the union 2.

TABLE 23

The Perceived Importance of Remoteness of Top Management Due to Overseas Ownership as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=27)	0	0	0	1	21 ^a	5	4.95	4.49
responses from overseas-owned works	0	0	0	1	4		4.80	
Union responses (n=16)	6 ^b	1	0	1	4	4	2.67	2.73
responses from overseas-owned works	4	1	0	0	0		1.20	

Notes: a Includes 7 "NA"s.

b Includes 2 not overseas owned.

Source: Management and union questionnaires.

To test whether overseas-owned works generally have higher levels of stoppage activity than New Zealand-owned ones, works were divided according to domicile of ownership and average stoppage measures calculated for each category. Results are presented in the following table:

TABLE 24
Levels of Stoppage Activity by Domicile of
Ownership, 1967-73

	Stoppage Frequency, seven years 1967-73	Man-days lost per worker per year	No. workers involved per year as % of No. employed
<u>Overseas-owned</u> <u>works (n=13)</u>			
No. per works	17.15 (14.40)	3.41	128.39
<u>New Zealand-</u> <u>owned works</u> <u>(n=24)</u>			
No. per works	13.21 (17.75)	2.30	97.68
<u>All works</u> <u>(n=37)</u>			
No. per works	14.59	2.69	108.47

Note: Figures in parentheses below frequency averages are standard deviations.

Source: Derived from Department of Labour strike returns (stoppage data) and Department of Labour six-monthly surveys of employment (employment data).

As can be seen, there was a marked difference in average stoppage levels for 1967-73 between overseas-owned and New Zealand-owned works, with those for the former being higher in terms of all three stoppage measures. While there was considerable variation in stoppage levels among overseas-owned works, it was less than the variation among New Zealand-owned ones, as can be seen from the standard deviations for the average stoppage frequencies. In fact, of the five works with highest

stoppage frequencies over this period, the first and second ones were both New Zealand-owned, and of the five with highest worker loss and worker involvement ratios, two and three respectively were New Zealand-owned. Variations in plant stoppage propensities were low for two of the multi-plant overseas-owned companies, but high for the other two. This suggests that the influence of company-wide factors such as the domicile of ownership and "style" of management and organisation are pervasive influences in some cases but not in others. In particular it appears that location and size of works could be "countervailing" influences which help explain variations in the stoppage levels of plants belonging to overseas-owned (and for that matter, New Zealand-owned) companies. Thus one such company owns two large "urban" works and two smaller "rural" ones and, while there is a difference between the stoppage levels of the two urban ones, they are both considerably higher than those of the rural ones.

While the link between overseas ownership and levels of individual forms of conflict is more tenuous, it might be argued that some of the factors mentioned above will lead to overseas-owned works having higher levels of such forms than New Zealand-owned ones. We are again only able to test this possibility for industrial accidents. Average accidents frequency rates for each category of works are given in Table 25.

TABLE 25

Accident Frequency Rates by Domicile of Ownership,
1964-69

Overseas-owned works (n=13)	Average	13.83
	Standard deviation	(2.76)
New Zealand-owned works (n=21)	Average	11.11
	Standard deviation	(5.65)
All works (n=34)	Average	12.15

Source: Derived from SIFCA data.

The average accident frequency rate for overseas-owned works is again markedly higher than that for New Zealand ones and the variation among the rates of foreign-owned plants (given by the standard deviation) is considerably less than that among those of locally-owned ones. The tendency for smaller rural works to have lower frequency rates than larger urban ones belonging to the same overseas-owned company was present but less marked than in the case of stoppages. Of the five works with highest accident rates over 1964-69, four were New Zealand-owned and three of these four belonged to the same company which suggests the operation of company-wide influences on accidents in that case.

There is a wide body of opinion among union representatives that overseas-owned works have higher levels of conflict than locally-owned ones. This view was also expressed by several managers, largely of New Zealand-owned works, in interviews. Managements of locally-owned plants naturally rated the above-mentioned factor in response to the questionnaire as not important as a cause of strikes at their works, although those of overseas-owned works shared this view. Our statistical analysis reveals that overseas-owned works generally have higher stoppage levels and accident frequency rates than New Zealand-owned ones, although there are exceptions to this rule. The domicile of ownership seems an important part of the explanation of variations in conflict levels as among plants and companies. In some situations though, this influence may be modified by others such as size and location.

18. Private Ownership of the Industry

A broader argument suggests that industrial conflict results from private ownership of the industry.¹⁰⁶ It incorporates some of the arguments already mentioned, but sees them as having their bases in this form of property ownership. Rosenberg stressed the economic conflict between employer and

106. See McNulty, *The Freezing Workers' Case*, pp. 42-4; W. Rosenberg, "Epilogue" in *ibid.*, pp. 59-61; and NZFOL Submission, p. 5.

workers, which he sees as resulting from private ownership, and the lack of participation of workers in the running of the industry. These factors also form the basis of McNulty's conclusion that: "The frequent and widely publicised industrial unrest in the freezing industry reflects the lack of confidence which freezing workers and others, operating in the industry, have in its present [private enterprise] structure and organisation".¹⁰⁷ This argument is consistent with both collective and individual forms of conflict and relates particularly to the industry-level pattern of conflict, although it does not explain why private ownership should apparently have so much more effect on conflict in this industry than in most others.

Many facets of this argument have already been discussed in other contexts. We have, for example, noted that some managers considered that certain workers engage in conflict in an effort "to see private ownership done away with". Such workers were regarded as "agitators" or "stirrers" and few managers felt the private enterprise system itself is an important cause of conflict in the industry. Moreover, most union representatives stressed factors not necessarily related to the nature of ownership as causes of conflict. One group of shed officials considered the ideal form of ownership to be a farmer-freezing worker owned co-operative, but saw the present structure as "O.K." if there was "more sharing in the results of labour".

Some officials did see the basic cause of conflict as lying in the nature of property ownership. They felt the "only way to get anything out of the employer is through direct action", and saw "co-operation" of all sectors as being impossible within the present structure. These officials supported the New Zealand Meat Workers' Union policy that freezing companies be nationalised with unions and farmers being involved in the running of them. As a second best alternative they favoured co-operative ownership of companies by workers (with shares vested in the union) and farmers. One

107. McNulty, *The Freezing Workers' Case*, p. 44.

branch secretary saw nationalisation as the best alternative, "given that the majority of people don't want the present system changed".

It is difficult to isolate the effect of private ownership from that of other influences. Relatively few union representatives and virtually no managers mentioned it specifically during interviews as a cause of conflict. It is conceivable that workers at certain plants have a distaste for private ownership and that this is an explanation of differences in conflict levels among works (and departments) but this is impossible to test empirically. In any event many of the factors making for conflict in this industry are not directly related to the nature of property ownership. At a broader level, we argued in Chapter I that the most fundamental and general causes of conflict - the economic conflict of interests and the unequal distribution of authority - are present irrespective of the form of property ownership, although antipathy toward the form itself can generate conflict and exacerbate that from these two causes.

19. Union Coverage

Another possible influence on meat industry conflict is union coverage. The 1973 Commission of Inquiry suggested that union coverage has an effect on "the amount of industrial unrest"¹⁰⁸ but other than to mention demarcation disputes, failed to specify the nature of this effect.

It is difficult to appraise an argument as lacking in development and substance as this one. If it is meant to imply that works covered by the New Zealand Meat Workers' Union have generally higher stoppage levels than those belonging to unions affiliated to the North Island Freezing Workers' Federation, the argument also lacks empirical support. As seen in Chapter IX, the Auckland region has a higher level of stoppage activity than, and Taranaki a similar level to,

108. *Report of the Meat Industry Commission*, p. 111.

regions forming branches of the NZMWU.¹⁰⁹ This is despite the fact that the Auckland managements generally consider the Auckland Freezing Workers' Union to be less "militant" than other meat industry unions and suggests that factors other than the attitudes and personalities of senior union officials are important in determining the amount of stoppage activity at both plant and regional levels. If the argument implies that the present union structure leads to a significant number of demarcation disputes it again has little empirical support. While, for example, the Department of Labour classified four meat freezing stoppages in 1972 as involving demarcation, none were of a sort normally regarded as demarcation stoppages, with three involving intra- rather than inter-union disputes and the other a protest at management killing calves. While demarcation stoppages occur in this industry, they are not common and do not account for a significant proportion of total stoppages.¹¹⁰

IV. CONCLUSION

While we have evaluated nearly 20 possible influences on conflict there are others which could have been mentioned. For example, the variability of profits in this industry may have an effect on conflict levels over time. The nature of this effect, however, is ambiguous in that while during prosperous periods unions may be more demanding, firms are better able then to meet these demands.¹¹¹ There are undoubtedly

109. The figures in the table on the regional distribution of meat industry stoppage activity (Table 6, p. 227) relate to 1967-73, whereas the NZMWU was formed only in 1971. A similar pattern, however, is found in the 1971-73 figures.

110. On the basis of information provided in the Department of Labour strike returns, in 1973, for example, there were at the most only three demarcation stoppages in the industry involving a total of 971 workers and 3984 man-days lost.

111. See Don J. Turkington, "Strike Incidence and Economic Activity in New Zealand", paper delivered to the 45th ANZAAS Congress, Perth, August 1973, pp. 3 and 8. In the questionnaires, managements and unions were asked to assess the importance of "fluctuations in demand for your product" as a cause of strikes at their works.

(Footnote 111 is continued on the next page.)

innumerable influences on this industry's conflict pattern, but those evaluated appear the major ones.

In attempting to ascertain the combined effect of these many influences we would ideally have liked to have used multiple regression analysis. Lack of data, aside from problems of a theoretical or statistical nature, precluded this possibility. Our evaluation has been of numerous separate influences, although we have shown certain connections between them. It remains now to attempt to bring these together into an overview of the determinants of the meat industry conflict pattern.

On the basis of the evaluation, the following factors appear important influences on at least one form of industrial conflict: the nature of the work and of the worker; the nature of the production process and of the product, and the formation of work groups; the hygiene regulations and heat; the physical environment of plants; payment systems and earnings relativities; the size of works; the location of plants; overseas ownership of freezing companies. Factors of some importance in particular situations as precipitating causes or "catalysts" include the complexity and ambiguity of the award, personality differences and changes in personnel, inadequate communications, and the "quality" of foremen. These influences generally have their origins in the more basic ones listed above. Other factors of limited importance are the predominance of male labour in the industry, and private ownership.

(Footnote 111 continued):

Responses were as follows:

	Scale of importance					No answer	Mean response	SMR
	1	2	3	4	5			
Management responses	0	1	3	4	13	6	4.38	3.97
Union responses	3	1	4	1	3	4	3.00	3.07

Source: Management and union questionnaires.

Unions clearly considered this factor to be more important than did managements, although even they, on the basis of size of mean response, rated it only fifteenth equal in importance of the factors assessed. Managements rated it nineteenth.

Ones of little or no importance include the presence of migrant workers in company hostels, any tendency for freezing workers to be isolated communities, racial frictions, and union coverage. The seasonal nature is widely regarded as an important influence and has undoubtedly led workers to attempt to gain greater control of the work situation. Furthermore, both stoppage activity and accident frequency rates display marked seasonal patterns. While seasonality may predispose the industry toward conflict compared with industries offering stable, permanent employment, there is little relationship between works' surge indices and works' stoppage levels and it is, if anything, a negative one. It appears, moreover, that high surge indices are associated with relatively low accident frequency rates.

Combining these factors into a composite pattern of determinants is difficult and the result must necessarily be a generalization. The technical conditions of the industry which produce monotonous, boring, repetitive, unpleasant, unfulfilling and sometimes dangerous jobs, and forceful workers seem to predispose it toward conflict, and variations in these factors do seem to produce variations in amounts of conflict at particular levels within it. Moreover, the sequential nature of the production process and perishable nature of the product have produced powerful work groups and help explain intra-plant differences in conflict levels. The hygiene regulations derive from technical and economic conditions and, in combination with other factors such as payment systems, have been a fairly general and increasing influence on conflict, especially in its collective forms. Similar conditions account for the nature of payment systems and earnings relativities prevailing in the industry, which in turn are important influences on conflict at departmental, plant and company levels. The seasonal nature of the industry has shaped attitudes and helps explain much of the behaviour of the parties. While it may create a climate conducive to conflict, its effect on conflict levels appears modified by other factors and, in particular, by the size and location of works. Some of the most highly stoppage and accident prone plants have low surge indices but are also large in size and located in urban

areas. Both of these latter factors seem to make for relatively high conflict levels. On the other hand, many of the works with high surge indices are in rural areas and are relatively small. Furthermore, it might be expected that the nature of the work would have even greater effect in works with low, as opposed to high, surge indices because, as one interviewee put it, "the workers are at risk longer".

Size, location and the domicile of ownership seem important determinants of plant and company differences in conflict levels. Moreover, their interaction appears in some cases to be an explanation of differences between works belonging to the same multi-plant company. Less systematic and less basic influences on conflict patterns include personality differences, inadequate communications, the quality of foremen and other management personnel and antipathy toward private ownership. The complexity and ambiguity of the award may also be a useful explanation of differences in amounts of conflict at most levels of aggregation.

The basic features of the meat freezing industry predispose it toward conflict. Variations in these features and the presence of other, less general, influences account for differences in amounts of conflict at departmental, plant, company and regional levels. All these influences are subject to changes over time, and these, along with changes in more widespread factors,¹¹² account for variations in amounts of conflict over time. Past events themselves seem to have an influence, to the extent that some works are traditionally conflict prone and others relatively conflict free. Memories of the past help shape habitual attitudes, which in turn influence behaviour.

Our analysis also has implications for proposals aimed at reducing conflict levels. For example, an organisational change such as the formation of separate North and South Island Freezing Works' Unions¹¹³ can be expected to have a negligible

112. For example, changes in unemployment and vacancy rates and in the institutional framework. See Turkington, "Strike Incidence", especially pp. 20-6.

113. See *Report of the Meat Industry Commission*, p. 111.

effect. Such a change involves no alteration in the fundamental technical and economic conditions which largely produce conflict. In any event, there is little relationship between union coverage, the personalities and attitudes of senior union officials and organisational structure and facilities on the one hand, and regional stoppage levels on the other. Another proposed change is the nationalisation of the industry with worker and farmer participation in its control.¹¹⁴ This may remove such sources of conflict as overseas and private ownership, and even lead to greater participation and involvement of workers in the affairs of the industry. Its effect on conflict may be unsubstantial, however, if it is not accompanied by significant changes in the nature of the work and production process. Unless the operation of the industry can be changed, a substitution of one form of ownership for another may have little effect. Other influences, such as size and location, and possibly even some precipitating ones like personality differences, would still be present, as would the general ones of the economic conflict of interests and the unequal distribution of authority which produce conflict irrespective of the ownership form.

At various times revised disputes procedures have been suggested as means of reducing conflict. Disputes procedures obviously are concerned with conflict regulation rather than generation and their existence could not be expected to change the fundamental conditions producing conflict. There was some disagreement among managers as to the worth of disputes procedures generally. Some saw them as reducing stoppage activity by providing an alternative channel for settlement. But others argued that they seldom resolve conflict because "no one is happy with decisions of disputes committees" and, yet others, that they exacerbate conflict either by encouraging the parties to "pass the buck" rather than resolving it themselves or by appearing to favour one of the parties. As one manager said, "we didn't do any good by starting to win too many disputes. It made the disputes committee look one-sided." There were also differences of opinion on the adequacy of

114. See McNulty, *The Freezing Workers' Case*, p. 52.

existing procedures. Some argued that they were very sound, while others that they were inadequate because of a lack of speed and flexibility, the size and composition of the committee and so on. Among union officials there were also diverse opinions ranging from those who considered the procedures sound in concept and practice to those who rejected them on both scores.

At the time of the questionnaires it appeared that neither managements nor unions were referring a high percentage of disputes to the Freezing Industry Disputes Committee (FIDC). When asked what percentage of local works disputes were referred to this committee, 25 out of 27 managements said five percent or less, including 12 which said zero or near zero.¹¹⁵ When asked how often local works disputes were referred to the FIDC, two unions said often, 10 sometimes and four never. Both parties were also asked to assess the importance of inadequate disputes settlement procedures as causes of strikes at their works. While several unions and managers considered it very important, unions overall accorded it greater significance.¹¹⁶

115. Numbers of disputes referred to the FIDC in the last five years of our period differ slightly as recorded by the MIEA and by the NZMWU as given in McNulty, *The Freezing Workers' Case*, p. 20. The figures in that order are: 1969: 62, 53; 1970: 73, 60; 1971: 48, 48; 1972: 63, 63; 1973: 20, 20. It is interesting to note that over the period 1 January 1963 to 31 July 1969, seven works accounted for 63.7% of all disputes filed with the FIDC. Most of these works were highly stoppage prone. There appears a positive relationship between the number of disputes filed and the level of stoppage activity.

116. Responses were as follows:

	Scale of importance					No Answer	Mean Response	SMR
	1	2	3	4	5			
Management responses	6	1	4	3	8 ^a	5	3.27	2.96
Union responses	6	1	1	2	2	4	2.42	2.47

a Includes 1 "NA".

Source: Management and union questionnaires.

On the basis of size of mean response, unions rated it eighth in importance of the factors assessed and managements twelfth.

However well designed and operated a disputes procedure is, it has no relationship to the sources of conflict and so cannot influence its generation but merely the form it takes. In an industry such as this, with so many factors making for conflict, it is, in any event, unlikely that the decisions of a disputes committee will be invariably, or even generally, accepted by both parties and so stoppages will not be prevented. The decisions and the procedure itself may, as in the past, even become sources of conflict.

Our analysis suggests it is very difficult to change conflict levels in this industry. Such a change would require alterations in the nature of the production process, work methods, the application of regulations, payment systems, standards of amenities and plant generally and the structure of work groups aside from alterations in such factors as plant size and location. It may be that managements regard such changes as not worthwhile because expected costs resulting from them exceed expected gains through lower conflict levels. It may also be, however, that managements have not even seriously considered the possibility of them. One works manager argued that this was indeed the case, contending that "the industry went to sleep about 50 years ago and is inward-looking and introverted". As he put it, "managements are always interested in how they should improve the mutton chain and not in whether they should have a mutton chain at all". Another was less scathing in arguing that managements have been unable to innovate and experiment in this area because they "have to run to stay still".

That high levels of conflict need not necessarily be a feature of meat freezing works has been demonstrated in the case of some of the recently built ones. These works tend to be smaller and more specialized (often only processing beef) than traditional ones and to be located in rural areas or agricultural centres. They are also modern, having facilities and equipment to match, and are often attractive by comparison with other works. Some of them do not even look like freezing works. These factors, combined with a lack of mutton processing and its high physical volume of throughput, have influenced

work methods. Moreover, employment tends to be all-year-round, or almost so, and workers are trained on induction. In some, the workers lack previous experience of the industry and so habitual attitudes toward it. Such works are indeed special cases in that managements and unions have had the opportunity to innovate in establishing them, and whether they stay relatively free of conflict as they develop remains to be seen. They, along with some other plants in the industry, however, point to the possibility that any predisposition toward conflict can, at least to some extent, be modified.

Chapter XI

THE BUILDING AND CONSTRUCTION INDUSTRYPATTERN OF CONFLICT

In Chapter VIII, stoppage and industrial accident figures for building and construction were placed within a comparative perspective. These statistics were aggregate ones for an industry composed of a diverse range of activities (see Chapter VI). In this chapter the conflict patterns existing within some of these activities are outlined. We shall concentrate on patterns within the building and construction projects section of the industry because it is there that most of its conflict, especially of a collective nature, occurs. It seems not only inevitable but also desirable that such an approach be adopted. Generalisations about industrial conflict are likely to be applicable only to a particular section and may be misleading when used in wider contexts. Moreover, so numerous and different are the activities grouped within the industry that a selective approach is necessary for detailed analysis to be feasible.

Building and construction differs greatly from meat freezing and consequently the structure of analysis used in Chapter IX is not applicable here. The focus of the section of the industry we shall be concentrating on is the project and this has a much shorter life than the factory establishment of meat freezing. The basic unit of study is therefore far more transitory. Moreover, organisations and bodies are often specifically created for a project and cease to exist on its completion. This feature makes it difficult to trace the conflict pattern of a company (or other organisation) over time. Our analysis will be at four levels - the activity, project, intra-project and company.

I. THE ACTIVITY LEVEL

For purposes of analysis we have divided the industry into three broad activities which we will call building and construction projects, the construction of large buildings, and other types of building and construction. The first category is composed of large projects which usually involve considerable civil and structural engineering. Numbered among the types of projects included are hydro-electric construction (e.g. the Tongariro and Upper Waitaki power developments); other power construction (e.g. the New Plymouth and Huntly power projects); large industrial construction (e.g. the Kawerau and Kinleith pulp and paper mill extensions); tunnels (e.g. the Kaimai tunnel); and large motorway and roading structures (e.g. the Shell Gully project). The construction of large buildings category includes high-rise or multi-storey construction and the building of industrial premises other than those very large ones classed as projects. The third category is a residual one and as such includes numerous construction types ranging from house building to general plumbing.

As mentioned in Chapter IX, stoppage statistics derived from Department of Labour (DOL) strike returns may differ from the published official ones. Sources of discrepancies were outlined in the Appendix of that chapter. One of particular relevance to this industry concerns the ability of the Department of Statistics (DOS) to classify a stoppage as belonging to an industry other than the one described by the DOL in the strike return. In some years for which we have detailed statistics, the DOS reclassified a considerable number of stoppages originally designated building and construction by the DOL, apparently on the basis of unions involved. These stoppages largely involved boilermakers or engineers (or both) and appear to have generally been incorrectly placed by the DOS within the engineering or boilermaking industries. For those years, stoppage levels in these industries were therefore overstated and those in building and construction understated. The fact that much construction project work is of a civil and structural engineering nature and involves engineers and boilermakers has been a source of considerable confusion in

the classification of stoppages. Table 1 contains three categories of figures: those for stoppages apparently classified by the DOS as belonging to building and construction (row 1); those for stoppages classified as building and construction by the DOL and reclassified by the DOS (after allowing for those incorrectly classified by the DOL - row 2); and those for total stoppages in building and construction (row 3, which is the sum of rows 1 and 2).

For the years 1967-69 the official statistics understate the level of stoppage activity in building and construction. In 1967, for example, the official statistics covered only 52.6% of the stoppages, 41.4% of workers involved and 35.7% of man-days lost classified as belonging to this industry in DOL strike returns.¹ To overcome this problem, we will largely use the total figures (row 3) for those years. By so doing we avoid classifying a stoppage involving labourers as building and construction and another on the same project but involving engineers as engineering.

The overwhelming importance of projects in the industry's stoppage activity is shown clearly in Table 1. In several years of our period the projects category accounted for over 90% of both workers involved and man-days lost, and a substantial majority of stoppages by number. For the period as a whole, it contributed 68.2%, 88.9% and 75.2% of the industry's number of stoppages, workers involved and man-days lost respectively. These figures are all the more surprising in view of the relatively small number of workers employed on projects. For example, in April 1972 the labour force of the Ministry of Works and of private contractors on projects numbered about 4,600 or only 7.4% of the April 1972 surveyed labour force of building and construction as a whole.² On the basis of these figures, the worker involvement ratio for

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1. Taking our figures in row 1 of the table as equivalent to the official ones. For a comparison of the official figures with our data see Appendix, p. 387.
 2. This figure is slightly understated as it does not include the labour forces of smaller sub-contractors at a few projects.

TABLE 1
Building and Construction Stoppage Statistics by Type of Activity, 1967-73

	ACTIVITY TYPE															
	Projects				Large Buildings				Other Construction				Totals			
	No. of stoppages	No. of workers involved	No. of man-days lost	%	No. of stoppages	No. of workers involved	No. of man-days lost	%	No. of stoppages	No. of workers involved	No. of man-days lost	%	No. of stoppages	No. of workers involved	No. of man-days lost	%
1967	1	6 (60.0)	860 (63.9)	2,299 (74.8)	2	(20.0)	464 (34.5)	668 (21.7)	2	(20.0)	22 (1.6)	106 (3.4)	10	1,346	3,073	
	2	7 (77.8)	1,852 (97.2)	5,417.5 (97.7)	1	(11.1)	43 (2.3)	118 (2.1)	1	(11.1)	10 (0.5)	10 (0.2)	9	1,905	5,545.5	
	3	13 (68.4)	2,712 (83.4)	7,716.5 (89.5)	3	(15.8)	507 (15.6)	786 (9.1)	3	(15.8)	32 (1.0)	116 (1.4)	19	3,251	8,618.5	
1968	1	19 (73.1)	4,161 (97.7)	7,928.5 (91.0)	6	(23.1)	76 (1.8)	704.5 (8.1)	1	(3.8)	20 (0.5)	80 (0.9)	26	4,257	8,713	
	2	10 (76.9)	939 (83.0)	2,817 (79.1)	3	(23.1)	193 (17.0)	743.5 (20.9)	0		0	0	13	1,132	3,560.5	
	3	29 (74.4)	5,100 (94.6)	10,745.5 (87.6)	9	(23.1)	269 (5.0)	1,448 (11.8)	1	(2.6)	20 (0.4)	80 (0.7)	39	5,359	12,273.5	
1969	1	18 (60.0)	3,493 (93.1)	11,692 (94.0)	7	(23.3)	109 (2.9)	259 (2.1)	5	(16.7)	150 (4.0)	489 (3.9)	30	3,752	12,440	
	2	10 (83.3)	1,338 (61.6)	4,297.5 (14.8)	0		0	0	2	(16.7)	835 (38.4)	24,834 (85.2)	12	2,173	29,131.5	
	3	28 (66.7)	4,831 (81.5)	15,989.5 (38.5)	7	(16.7)	109 (1.8)	259 (0.6)	7	(16.7)	985 (16.6)	25,323 (60.9)	42	5,925	41,571.5	
1970	1	9 (28.1)	1,134 (44.9)	7,119 (58.7)	16	(50.0)	449 (17.8)	4,201 (34.6)	7	(21.9)	940 (37.3)	810 (6.7)	32	2,523	12,130	
1971	1	27 (79.4)	4,340 (97.4)	20,158 (98.8)	4	(11.8)	82 (1.8)	123 (0.6)	3	(8.8)	34 (7.5)	128 (0.6)	34	4,456	20,409	
1972	1	24 (80.0)	5,927 (96.9)	13,887.5 (96.6)	4	(13.3)	159 (2.6)	356 (2.5)	2	(6.7)	29 (0.5)	136.5 (0.9)	30	6,115	14,380	
1973	1	50 (73.5)	9,416 (94.2)	29,619 (96.8)	11	(16.2)	283 (2.8)	798 (2.6)	7	(10.3)	295 (3.0)	188 (0.6)	68	9,994	30,605	
Av.	1	21.9 (66.6)	4,190.1 (90.4)	13,243.3 (91.1)	7.1 (21.6)	231.7 (5.0)	1,015.6 (7.0)	3.9 (11.9)	3.9 (11.9)	212.9 (4.6)	276.8 (1.9)	32.9	4,634.7	14,535.7		
1967	2	3.9 (79.6)	589.9 (79.3)	1,790.3 (32.8)	0.6 (12.2)	33.7 (4.5)	123.1 (2.3)	0.4 (8.2)	0.4 (8.2)	120.7 (16.2)	3,549.1 (65.0)	4.9	744.3	5,462.5		
-73	3	25.7 (68.2)	4,780.0 (88.9)	15,033.6 (75.2)	7.7 (20.4)	265.4 (4.9)	1,138.7 (5.7)	4.3 (11.4)	4.3 (11.4)	333.6 (6.2)	3,825.9 (19.1)	37.7	5,379.0	19,998.2		

Notes:

- 1 - stoppages apparently classified by the DOS as belonging to building and construction.
2 - stoppages classified as building and construction by the DOL and reclassified by the DOS (allowing for stoppages incorrectly classified by the DOL).
3 - total stoppages in building and construction (i.e. rows 1 + 2; for 1970-73, 1 = 3).
2. The percentages in brackets show the contribution of each type of activity to the total of the relevant stoppage measure for each row. For example, the 6 stoppages in projects in 1967 (row 1) were 60% of the total number of stoppages classified by the DOS as belonging to building and construction for that year (i.e. 10).

Source: Derived from Department of Labour strike returns.

projects in 1972 was 128.8% and the worker loss ratio 3.02.³ By contrast, in the same year the involvement ratio for the rest of the industry was only 0.33% and the loss ratio 0.0085. Reference to the "large buildings" and "other construction" categories of Table 1 shows that the construction industry, excluding projects, was virtually stoppage free in all years of our period except 1969, and possibly 1970.

It is not surprising therefore that in most years the level of stoppage activity in the industry is largely determined by that in projects. For example, in 1970 building and construction stoppage activity fell despite a substantial increase in such activity in industry generally. In that year there were relatively few projects in existence. The Maraetai II dam, Manapouri and Wairakei power projects and the Kapuni gas pipeline were all winding down, and while several were in full operation (e.g. the Tiwai Point smelter and the Tongariro and Upper Waitaki power developments), others had not yet started (e.g. the Kawerau pulp and paper extension - Project "Tane").

II. THE PROJECT LEVEL

Projects exist for the duration of a contract or contracts. Between 1967 and 1973, several were started and completed, others were completed and then started again in the form of a new stage or contract and yet others were in progress for the whole period. A project can consist of several contracts and so be undertaken by a number of contractors and sub-contractors. The largest ones, such as the Tongariro power development, last for many years and involve several clearly defined stages. Stoppage statistics for projects experiencing stoppages during the period are presented in Table 2.

It is clear that stoppage activity in this section of the

3. The worker involvement ratio is the number of workers involved in stoppages as a percentage of the number employed. The worker loss ratio is the number of man-days lost divided by the number of workers employed.

TABLE 2
Stoppage Statistics on a Project Basis, 1967-73

	1967			1968			1969			1970			1971			1972			1973		
	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML
Project 1	4	1,390	3,615	0	0	0	2	43	160												
Project 2	2	220	550	1	100	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project 3	3	460	1,693	12	1,095	3,910.5	9	2,447	9,551												
Project 4	2	593	995	8	1,055	2,814							7	568	2,550	14	3,159	9,006	21	5,755	16,207
Project 5	2	49	863.5																		
Project 6	0	0	0	2	18	123	3	379	2,057				12	1,393	4,574	5	2,586	4,548	16	1,731	3,293
Project 7	0	0	0	5	2,810	3,720.5	3	1,472	1,777	1	13	16									
Project 8				1	22	27.5	8	414	2,080	2	35	138									
Project 9							2	65	89.5	2	112	259	1	14	5						
Project 10	0	0	0	0	0	0	1	11	275	2	163	1,393	2	403	1,011	0	0	0	0	0	0
Project 11							0	0	0	2	811	5,313	3	1,901	11,464						
Project 12										0	0	0	2	61	554	1	75	25	6	1,029	5,657
Project 13																2	64	48.5			
Project 14				0	0	0	0	0	0	0	0	0	0	0	0	1	30	104	1	130	2,145
Project 15																1	13	156	1	70	558
Project 16																0	0	0	1	199	320
Project 17																0	0	0	4	502	1,439
Year totals	13	2,712	7,716.5	29	5,100	10,745.5	28	4,831	15,989.5	9	1,134	7,119	27	4,340	20,158	24	5,927	13,887.5	50	9,416	29,619

Note: Key to symbols: SF = No. of stoppages; WI = No. of workers involved; ML = No. of man-days lost; 0 0 means no stoppages in that year; NIO stands for "not in operation" and means the project is not operating at all or only on a very limited scale.

Source: Derived from Department of Labour strike returns and data supplied by companies and government departments.

industry (and, by extension, in building and construction generally) is confined to a relatively small number of projects. In none of the years covered in this table did more than seven projects experience stoppages. Moreover, in each year a few of these predominated. For example, in 1967 Project 1 accounted for 30.8% of stoppages by number, 51.3% of workers involved and 46.8% of man-days lost in the projects section; in 1970 the figures for Project 11 were 22.2%, 71.5% and 74.6% respectively and in 1972 for Project 4 were 58.3%, 53.3% and 64.8% respectively.⁴ Furthermore, Project 11 in 1970 accounted for 6.2% of stoppages, 32.1% of workers involved and 43.8% of man-days lost in building and construction generally, while the equivalent figures for Project 4 in 1972 were 46.7%, 51.7% and 62.6% respectively. Some projects, for example 4 and 11, figured prominently in more than one year.

While certain projects have numerous stoppages, others have relatively few. For example, while five projects had stoppages in 1967, the other eight in existence at that time did not. For the other years of our period, numbers of projects experiencing or not experiencing stoppages respectively were as follows: 1968 6(8); 1969 7(8); 1970 5(6); 1971 6(3); 1972 6(6); 1973 7(4). Of the 24 projects in operation for at least part of the 1967-73 period, 17 experienced one or more stoppages, while seven had none.

Labour forces vary greatly in size from 1,500 at peak for the largest projects to about 60 for the smallest. It is

4. As shown below, this tendency was present in each of the seven years of our period.

Percentage of Total Project Stoppage Activity Accounted for by Particular Projects:

			Stoppage frequency	Workers involved	Man-days lost
			Percentages		
1967	Project	1	30.8	51.3	46.8
1968	"	3	41.4	21.5	36.4
1968	"	7	17.2	55.1	34.6
1969	"	3	32.1	48.0	59.7
1970	"	11	22.2	71.5	74.6
1971	"	6	44.4	32.1	22.7
1971	"	11	11.1	43.8	56.9
1972	"	4	58.3	53.3	64.8
1973	"	4	42.0	61.1	30.8

interesting therefore to relate the involvement and time lost figures in Table 2 to number of workers employed. Results are shown in Table 3. The detail of the employment data used in their derivation varied from quarterly (or shorter period) figures for several projects, to estimates of annual average employment based on information in the strike returns and other sources for others.

Projects accounting for a high proportion of stoppage activity are seen to also be stoppage prone in terms of these measures. There are, however, some differences between the sets of figures in the two tables. For example, while Project 10 lost a significant number of man-days in 1970 and 1971, the number lost per worker employed was less than one in both years. Several projects in particular years were highly stoppage prone; for example, Projects 1, 2 and 3 in 1967 and Projects 4 and 6 in 1973. In fact, some of the involvement and time lost ratios are very high indeed, even by comparison with establishments in the meat industry (again, Project 4 in 1973 might be cited as an example). Other projects, however, had low levels of stoppage activity, especially when it is remembered that seven in existence for part or all of this period had no stoppages at all. Moreover, it seems the stoppage propensity of a project can change over time, such as in the case of Project 12.

III. INTRA-PROJECT LEVEL

Because a project may consist of a number of contracts or stages, several major contractors may be operating simultaneously within the project area. Even where there is only one major contractor there will often be numerous subcontractors, some of whom may have substantial labour forces. These features mean that intra-project patterns of conflict can be very complex. On certain projects, a stage with virtually no stoppages has been followed by one with many. This has occurred even when the same major contractor has undertaken both stages. On others, major contractors have simultaneously undertaken contracts and while some have experienced stoppages,

TABLE 3

Worker Involvement and Worker Loss Ratios, 1967-73

	1967		1968		1969		1970		1971		1972		1973	
	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR
Project 1	367.7	9.56	0	0	0	3.72	%	NIO	%	NIO	%	NIO	%	NIO
Project 2	220.0	5.50	100.0	1.50	0	0	0	0	0	0	0	0	0	0
Project 3	287.5	10.58	160.1	5.72	388.4	15.16	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO
Project 4	237.2	3.98	422.0	11.26	NIO	NIO	NIO	NIO	97.1	4.36	318.1	9.07	634.5	17.87
Project 5	128.9	22.72	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO
Project 6	0	0	NA	NA	157.9	8.57	NIO	NIO	253.3	8.32	258.6	4.55	315.9	6.01
Project 7	0	0	161.5	2.14	153.8	1.86	6.3	0.08	NIO	NIO	NIO	NIO	NIO	NIO
Project 8	NIO	NIO	100.0	1.25	122.1	6.14	100.0	3.94	NIO	NIO	NIO	NIO	NIO	NIO
Project 9	NIO	NIO	NIO	NIO	125.0	1.72	215.4	4.98	26.9	0.10	NIO	NIO	NIO	NIO
Project 10	0	0	0	0	0.9	0.21	11.0	0.94	23.1	0.58	0	0	0	0
Project 11	NIO	NIO	NIO	NIO	0	0	115.9	7.59	237.6	14.33	NIO	NIO	NIO	NIO
Project 12	NIO	NIO	NIO	NIO	NIO	NIO	0	0	12.3	1.12	8.7	0.03	110.4	6.07
Project 13	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	168.4	1.28	NIO	NIO
Project 14	NIO	NIO	0	0	0	0	0	0	0	0	3.2	0.11	11.9	1.97
Project 15	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	7.4	0.89	28.0	2.23
Project 16	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	0	0	156.7	2.52
Project 17	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	NIO	0	0	169.0	4.85

Note: Key to symbols: WIR = worker involvement ratio (No. of workers involved as % of No. employed); WLR = worker loss ratio (No. of man-days lost per worker); NA = employment statistics not available.

Source: Derived from Department of Labour strike returns and employment data supplied by companies and government departments.

others have not. There are even projects where the labour forces of two different contractors have worked virtually side by side but one has been stoppage prone and the other stoppage free. On still others, all stages have experienced high stoppage levels irrespective of the contractor involved. A final category concerns the opposite type of project where all stages are either completely or virtually free of collective actions.

Examples of each of these types of project existed during the 1967-73 period. Detailed information is presented in Table 4 which should be read in conjunction with Table 2. Prior to our period, a stage of Project 7 had been undertaken with virtually no stoppages. The next stage, however, experienced several in 1968 and 1969. On Project 10 some major contractors have been operating for many years without a stoppage while others have experienced one or two in particular years. In fact a single contractor, (10/1), has accounted for a majority of stoppage activity on this project. This tendency is even more pronounced in the case of Project 12 where one major contractor has experienced several stoppages and the other none. An example of a generally stoppage prone project is No. 4, which has traditionally had a high level of stoppages irrespective of the contractor or subcontractor involved. As mentioned earlier, there have also been several projects during this period which were stoppage free.

It is clear that on certain projects some stoppages are project-wide while others are specific to a contractor or subcontractor (for example, Project 6 in 1973). Even where they are limited to a particular contractor, they may still be related. For example, a stoppage of one contractor's labour force may lead to subsequent sympathy actions on contracts elsewhere on the site. The project worker involvement and loss ratios quoted in Table 3 may differ considerably from those for particular contractors on the project concerned. On Project 10, for example, Contractor 10/1 had an involvement ratio of about 200% and a loss ratio of about 5.1 in 1971 as compared with the equivalent figures for the project as a whole of 23.1% and 0.58 respectively. This difference arose because no other contractor or subcontractor there experienced

TABLE 4
Stoppage Information on a Contract Basis, 1967-73

			No. stoppages	No. workers involved	No. man-days lost		
1967	All projects - stoppages involved major contractor only						
1968	Project 3 - Contractor	3/1	6 ^a	942	2,435.5		
		Subcontractor	3/1	1	58	174	
		"	3/2	2	30	424	
		"	3/3	2	45	817	
		"	3/4	1	20	60	
	Project 7 - Contractor	7/1	2	1,091	1,091		
		Subcontractor	7/1	1	54	148.5	
		Contractors	7/1 & 2)	2	1,665	2,481	
		Subcontractor	7/1)				
	Projects 2, 4, 6, 8 - stoppages involved single contractor only						
	1969	Project 1 - Contractor	1/1	1	35	112	
			Subcontractor	1/1	1	8	48
		Project 3 - Contractor	3/1	6 ^b	2,357	9,223	
Subcontractor			3/2	1	12	6	
"			3/5	1	8	72	
"			3/6	1	70	250	
Project 6 - Contractor		6/1	1	31	155		
		All contractors and subcontractors		2	348	1,902	
Project 7 - Contractors		7/1 & 2	3 ^a	1,472	1,777		
Project 8 - Contractor		8/1	7	397	2,020		
		Subcontractor	8/1	1	17	60	
Project 10 - Subcontractor		10/1	1	11	275		
Major contractors and subcontractors stoppage free							
Project 9 - stoppages involved major contractor only							
1970		Project 10 - Contractor	10/1	1	149	1,043	
			"	10/2	1	14	350
		Project 11 - Contractor	11/1	1 ^c	700	5,250	
			Subcontractors	11/1 & 2	1	111	63
		Other major contractors and subcontractors stoppage free					
	Projects 7, 8, 9 - stoppages involved single contractor only						
	1971	Project 6 - Contractor	6/1	6 ^d	1,013	2,072	
			"	6/2	2	28	28
			Subcontractor	6/1	3	48	1,099
			All contractors and subcontractors		1	304	1,375
Project 10 - Contractor		10/1	2	403	1,011		
Other major contractors and subcontractors stoppage free							
Project 11 - Contractor		11/1	2 ^e	1,862	11,354		
		Subcontractor	11/1	1	39	110	
Project 12 - Contractor		12/1	2	61	554		
Other major contractor stoppage free							
Projects 4, 9 - stoppages involved major contractor only							
1972		Project 6 - Subcontractor	6/1	1	8	4	
			"	6/2	1	8	64
			All or most contractors and subcontractors		3	2,570	4,480
	Project 12 - Contractor	12/1	1	75	25		
	Other major contractor stoppage free						
	Project 14 - Contractor	14/1	1	30	104		
	Other major contractor stoppage free						
	Project 15 - Subcontractor	15/1	1	13	156		
	Major contractor stoppage free						
	Projects 4, 13 - stoppages involved major contractor only						
1973	Project 4 - Contractor	4/1	12 ^f	5,321	11,726		
		"	4/2	4 ^f	349	3,988	
		Subcontractor	4/1	4	73	445	
		"	4/2	1	12	48	
	Project 6 - Contractor	6/1	3 ^g	99	447		
		"	6/2	3	301	272	
		Subcontractor	6/1	1	121	76	
		"	6/3	2	67	326	
		"	6/4	1	17	97	
		All or most contractors and subcontractors		6	1,126	2,075	
		Project 12 - Contractor	12/1	6	1,029	5,657	
	Other major contractor stoppage free						
	Projects 14, 15, 16, 17 - stoppages involved major contractor (some along with subcontractors) only						

Notes: a One with a subcontractor; b Five with subcontractors; c With subcontractors;
d Two with subcontractor 6/1; e Both with subcontractors; f One with subcontractor 4/1;
g Two with other contractors or subcontractors.

Source: Derived from Department of Labour strike returns.

a stoppage in that year. Another example concerns Project 12. In 1973 Contractor 12/1 had an involvement ratio of about 381% and a loss ratio of about 21.0 but when the labour forces of contractors not experiencing a stoppage are included, the ratios for the whole project fall to 110.4% and 6.07 respectively. Clearly on several, but not all, projects some contractors have relatively much more stoppage activity than others. It also seems from Table 4 that the stoppage proneness of a contractor's labour force can change over time. Contractor 12/1 in the years 1971-73 again provides a good example of this phenomenon.

Up until now we have been concerned only with stoppages. As noted in Chapter VIII, official statistics on such individual forms of conflict as labour turnover and absence are not available for this industry. Information on some of these forms was, however, obtained through interviews or questionnaires (or both), as described in the next chapter. Statistics on the levels of various conflict forms experienced by 13 of 14 contracts in operation in mid-1974 are presented in Table 5 (one management was unable to supply such data because its contract had been operating for only a short time). The numbering system bears no relationship to that used previously.

The pattern of stoppages revealed in this table is similar to that seen in earlier ones. Some projects experienced numerous stoppages in 1973 while others had none. Moreover, within one project (7) several stoppages were experienced by one contractor and none by the other. In contrast, the labour forces of both major contractors on Project 5 were highly stoppage prone. As an aside, both Projects 3 and 4, which had up until 1973 been stoppage free, experienced at least one stoppage each in 1974.

The figures for turnover, absence and accidents also display considerable variation among projects, although less than in the case of stoppages. Without comprehensive statistics, it is difficult to say whether the turnover and absence figures in this table are relatively high or low. We can, however, say that the rates for Contractor 7/1 (136.4% and

TABLE 5
Levels of Various Conflict Forms, 1973

	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Project 7	Project 8	Project 9
					Contr. 5/1	Contr. 6/1	Contr. 7/1	Contr. 8/1	
					Contr. 5/2	Contr. 6/2	Contr. 7/2	Contr. 8/2	
SF	0	1	0	0	113 ^a	1	5	1	0
WI	0	30	0	0	32818	160	715	120	0
ML	0	60	0	0	14310	500	4869	2040	0
WIR %	0	75.0	0	0	3618.3	88.9	264.8	13.0	0
WLR	0	1.50	0	0	15.78	2.78	18.03	2.21	0
Lab. T %	156.8	57.0	NA	NA	25.3	36.7	136.4	56.6	25.0
Absent %	8.7	10.0	NA	12.0	13.3	3.0	13.2	NA	7.2
Acc. FR	10.0	19.4	21.5	16.0	22.7	NA	19.2	NA	8.0

Notes: a Includes 86 unauthorised stop work meetings.

1. Key to symbols: SF = No. of stoppages; WI = No. of workers involved in stoppages; ML = No. of man-days lost due to stoppages; WIR = worker involvement ratio; WLR = worker loss ratio; Lab.T = labour turnover rate ($\frac{\text{No. of terminations}}{\text{labour force measure}} \times 100$); Absent = absence rate ($\frac{\text{total man-days lost due to absence}}{\text{man-days worked}} \times 100$); Acc. FR = accident frequently rate (No. of lost time accidents per 100,000 man-hours worked); NA = not available.
2. Most of the above statistics were supplied already calculated. Some, however, were estimated on the basis of other data supplied.
3. Where more than one major contractor is involved, individual contractor figures are shown.
4. Statistics for most projects relate only to 1973. Those for one or two cover an annual period including part of 1974.

Source: Management questionnaire and data supplied by companies and government departments.

13.2% respectively) were considerably higher than those for the company of which it is a part (103.8% and 4.4% respectively). The accident frequency rates are almost invariably much higher than for building and construction as a whole. The industry's frequency rate was 6.74 in 1970 which is only a fraction of the highest one in Table 5 (29.5). In view of the size and complexity of projects one would expect their frequency rates to be higher than for the industry generally, but that the difference need not necessarily be great is indicated by the rates for Project 9 and Contractor 7/2.

It appears there is a relationship between a project's (or contractor's) level of stoppages and its absence and accident frequency rates. Ranking projects according to number of stoppages, and size of worker loss ratio, absence, labour turnover and accident frequency rates and testing the correlation between pairs of ranks by using Spearman's coefficient of rank correlation yields the following results:

TABLE 6
The Relationship between Pairs of Rankings of
Various Conflict Forms

Variables	Spearman's coefficient (r_s)	
No. stoppages, absence rate	0.532	(significant 0.10)
WLR, absence rate	0.464	(insignificant)
No. stoppages, acc. freq. rate	0.700	(significant 0.05)
WLR, acc. freq. rate	0.618	(" 0.10)
Absence rate, acc. freq. rate	0.715	(" 0.05)
No. stoppages, labour turnover rate	-0.224	(insignificant)
WLR, labour turnover rate	-0.285	(")
Absence rate, labour turnover rate	0.275	(")
Acc. freq. rate, labour turnover rate	-0.274	(")

Note: WLR = worker loss ratio; Acc. freq. rate
= accident frequency rate.

It can be seen that projects with relatively high stoppage frequencies also tend to have relatively high absence rates. The association is somewhat weaker when the worker loss ratio is used as the measure of stoppage activity. A fairly strong relationship exists, however, between stoppage rankings and one of accident frequency rates. Projects with a relatively high number of stoppages or a high loss of man-days per worker also tend to have relatively high accident rates. Moreover, there is a close relationship between rankings of accident frequency rates and of absence rates so that projects with relatively high frequency rates tend to have relatively high absence rates. No such significant positive association exists, though, between rankings of projects on the bases of labour turnover and of any of the other three conflict forms in Table 6.

The failure of labour turnover to conform to the general pattern is perhaps not surprising in view of the nature of projects. For example, a project may be running down and so have a high number of terminations relative to its average labour force, while at the same time having relatively low levels of accidents, absence and stoppages. Moreover, projects with high turnover rates in Table 6 were located in urban areas where alternative job opportunities existed. The others were in isolated areas or in small towns where alternative employment opportunities, especially in the construction industry, were limited. But it appears that, with the exception of turnover, there are positive relationships between a project's ranking in terms of various forms of conflict.

So far we have studied stoppage activity to the level of the individual contract. In view of the often large numbers of work groups engaged on a project or contract it is of interest to know if some groups are more stoppage prone than others. Because of the different types of work and, consequently, compositions of project labour forces it is difficult to generalise on this matter. In the questionnaire, managements were asked the following: "Of the members of your workforce, are some occupational groups more prone to take strike action than others?". Ten managements replied "YES" and four "NO".

Of the latter number, two had experienced no stoppages on their contracts. Of those answering in the affirmative, two said boilermakers and riggers were relatively more strike prone. Both contracts involved considerable structural and mechanical engineering, as did a third, the management of which said that scaffolders, riggers and labourers (all of whom belong to labourers' unions, except for engineering riggers who belong to engineers' unions) were strike prone. Three managements, all concerned with contracts having a heavy civil engineering emphasis, cited tradesmen or trades groups as more prone to take strike action. Two administering tunnelling contracts cited tunnellers and, of the remaining two which answered in the affirmative, one specified drivers and the other carpenters. Clearly most managements consider some groups more prone to strikes than others. The particular groups cited varied with the type of work and composition of the labour force.

TABLE 7
Number of Stoppages by Extent of Labour Force Involvement

Project or Contractor Number	Type of Stoppage		
	Sectional	Partial	Total
1	0	0	1
2	0	0	1
3	3	0	0
4	1	2	0
5/1 ^a	10	8	9
5/2 ^a	4	1	8
6/1	2	0	0
6/2	10	2	2
8/1	1	0	1
8/2	0	0	1

- Notes:
- a Statistics relate to 1973 only. Others relate to the whole life of the project or contract.
 - 1. Contractor 7/2 and Project 9 have had no stoppages while Contractor 7/1 did not answer this question.
 - 2. A sectional stoppage is confined to one part of a labour force; a partial one involves more than one section but not the total; a total one involves all the labour force.

Source: Management questionnaire.

Statistics provided in questionnaire responses, and presented in the above table, show a tendency on some projects for stoppages to be confined to a single section of the labour force and for others to involve more than one section but not the whole labour force. While this table gives an indication of the extent to which stoppages are confined to one or a few groups, it does not indicate which (if any) groups are more stoppage prone than others. Table 8 gives a breakdown of stoppages according to the occupational group involved. Stoppages involving a number of groups are included in the "several or all" category. The numbering of projects is the same as that used in tables prior to Table 5.

This table confirms some of the statements made by managements about the identity of stoppage prone groups. On projects involving considerable structural and mechanical engineering, boilermakers and labourers figured prominently, as did engineers in the case of Project 6. (In some districts, not including those containing Projects 4 or 6, boilermakers are classified as welders and belong to the Engineers' Union.) On one large structural project, boilermakers constituted about 44% of tradesmen and 23% of workers generally at peak, while during the "run-down" the figures were about 26% and 13% respectively. Labourers often constitute a large group, in this case accounting for 21% of the labour force at peak and 15% during the "run-down". On a related contract, boiler-makers constituted only 14% of tradesmen and 8% of workers generally at peak and 9% and 4% respectively during the "build-up", while labourers represented 16% and 18% of peak and "build-up" labour forces respectively. The number of boiler-makers employed depends greatly on the nature of the contract. For other projects different groups at each were involved in stoppage activity. While several stoppages in some of the above projects involved only one group, others involved most or all of the labour force. The groups figuring prominently on an individual basis were almost invariably also involved in the wider stoppages, as were most other groups working on the projects concerned. In some projects it was not uncommon to have seven or more occupational groups jointly participating in direct action.

TABLE 8

Stoppage Statistics on the Basis of Occupational Groups Involved, 1973

Occupational Group	Project 4			Project 6			Project 12			Project 14			Project 15			Project 16			Project 17		
	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML	SF	WI	ML
Boilermakers	3	358	1845	2	145	106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carpenters	1	58	58	0	0	0	0	0	0	1	130	2145	0	0	0	0	0	0	0	0	0
Drivers	0	0	0	1	22	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electricians	1	79	20	0	0	0	0	0	0	0	0	0	1	70	558	0	0	0	0	0	0
Engineers	1	10	40	8	801	1629	1	114	228	0	0	0	0	0	0	0	0	0	0	0	0
Labourers	5	154	246	1	7	5	2	212	524	0	0	0	0	0	0	0	0	0	1	12	0
Painters	0	0	0	2	87	517	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plumbers	1	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Several or all	9	5080	13982	2	669	1014	3	703	4905	0	0	0	0	0	0	1	199	320	3	490	1439
	21	5755	16207	16	1731	3293	6	1029	5657	1	130	2145	1	70	558	1	199	320	4	502	1439

Note: Key to symbols: SF = No. of stoppages; WI = No. of workers involved; ML = No. of man-days lost.

Source: Derived from Department of Labour strike returns.

It is interesting that most managements and union delegates and officials tend to view the strike activity on their part of the project as about the same or lower than that occurring on other large projects in existence. Of the 14 managements responding to the questionnaire, only one saw the strike activity on its contract as high in relation to other projects, while six saw it as about the same and seven as low. Of the 20 officials and delegates responding to the union questionnaire (representing 13 of the 14 projects or contracts covered), again only one rated strike activity on their contract or project as high relative to other projects, with six rating it about the same and 12 as low (one did not answer this question). Three managements overestimated the relative level of strike activity, while two underestimated. Delegates and officials from four contracts also underestimated. There was considerable disagreement in perceptions of managements and union representatives from the same project or contract. For example, at two highly strike prone contracts both managements answered "high" but most delegates "about the same". Management and union from the same project or contract had different perceptions of relative strike levels in six of 12 cases. Response patterns similar to those described above were given in answer to a question requiring the rating of local strike activity relative to that of projects completed in the last five years, except that three further managements answered "high" contending that such activity has increased in recent years.

Union representatives and, to a lesser extent, managements tended to underestimate the level of strike activity in building and construction relative to that in other New Zealand industries. One half of the 14 managements rated it about the same or low (2 and 5 respectively) as did 16 of the 20 union representatives (11 and 5 respectively). Both parties were more accurate in comparing strike activity on large projects with that in other branches of the industry. Only five managements (all from low or medium strike level contracts) now saw it as similar or low (4 and 1 respectively), as did 12 union representatives (7 and 5 respectively).

The parties were asked to also rank the levels of absence, labour turnover and industrial accidents on their contracts or projects relative to those of other large projects. Several managements (4) and union delegates (6) considered the local absence level relatively high, although the majority in both cases (7 and 10 respectively) saw it as about the same, with three managements and only one delegate seeing it as low. Two managements, and delegates from three contracts, overestimated their site's relative absence level, while one management and most of the six delegates from one contract underestimated. Perceptions of both parties from the same project or contract were in most cases identical. As regards labour turnover, four managements saw the level on their contracts as relatively high, two about the same and eight low. Delegates generally responded differently, with 12 rating it about the same, five high and one low. At least two managements and delegates from two projects underestimated, while two managements and delegates from five contracts overestimated. Not surprisingly, responses from given projects tended to differ as between the two parties. There was a general tendency to underestimate relative accident levels. Only two managements and three delegates saw theirs as high, while seven and five respectively regarded theirs as similar to those of others and five and eight respectively as low. Five managements and delegates from four contracts underestimated, while only one in each case overestimated. Again, responses from given projects tended to differ as between the two parties. Greater accuracy, however, was shown in comparisons of accident levels in the building and construction industry with those in other New Zealand industries. Nine managements (of a total of 12) and six union representatives (of 16) correctly answered "high".

IV. COMPANY OR ORGANISATION LEVEL

It is very difficult to speak of company patterns of conflict in this industry. Some companies exist only for the duration of a contract while more permanent companies may undertake contracts in consortia with others. For example, Downer and Company has undertaken some contracts alone and others in

consortia such as Downer-Comstock (Kawerau), Downer and Associates (Tokaanu tunnel), Downer Pan Pacific Constructors (Whirinaki pulp and paper mill) and so on. This pattern is common with other large construction companies such as Wilkins and Davies and Fletchers. An historical comparison therefore often involves the experience not of a single company but of several associated ones.

Few construction companies or government departments can be categorised as traditionally highly stoppage prone. Rather they often have some contracts with high stoppage propensities and others with low ones. For example, in 1973 a company undertook three major contracts, one of which experienced 12 stoppages, one only one and the other none. It appears that in most instances, organisation-wide influences on stoppage activity are either not strong or are modified by other factors. There may, however, be an exception to this rule in the form of the Ministry of Works. It seems that most, but not all, Ministry of Works' contracts have experienced less stoppage activity than private contracts on the same project, or for that matter, private contracts generally.

V. UNION INVOLVEMENT IN STOPPAGES

We have already noted that on certain projects some occupational groups are involved in sectional stoppages as well as wider ones. The multiplicity of unions in the industry makes it desirable to extend that analysis to union involvement in stoppages. A breakdown of stoppage statistics on this basis for 1967-73 is provided in Table 9. The results broadly conform with those seen for occupational groups in Table 8. The majority of project stoppage activity, measured in terms of worker involvement or time lost, involves several or all the unions on a contract taking joint action. These stoppages generally involve large numbers of workers and so man-days lost. The most frequent type of stoppage, however, is the sectional one involving a single union. Sectional stoppages accounted for nearly 59% of the total number over 1967-73. Such stoppages often involve relatively few workers and so

TABLE 9

Project Stoppage Statistics on the Basis of Unions Involved,
1967-73

<u>Unions of:</u>	No. of Stoppages	No. of workers involved	No. of man-days lost
Labourers	41 (22.8%)	3166 (9.5%)	13195.5 (12.5%)
Boilermakers	18 (10.0)	2399 (7.2)	8999.5 (8.6)
Engineers	18 (10.0)	1432 (4.3)	3832.5 (3.6)
Carpenters	9 (5.0)	359 (1.1)	2344.5 (2.2)
Electricians	8 (4.4)	322 (1.0)	1180 (1.1)
Drivers	6 (3.3)	67 (0.2)	468 (0.4)
Painters	3 (1.7)	157 (0.5)	767 (0.7)
General Workers	1 (0.6)	130 (0.4)	2145 (2.0)
Camp Kitchen Workers	1 (0.6)	282 (0.8)	1135 (1.1)
Plumbers	1 (0.6)	16 (0.0)	16 (0.0)
Sub-total: stoppages involving a single union	106 (58.9)	8330 (24.9)	34083 (32.4)
<u>Joint Two-Union Stoppages:</u>			
Labourers and Boilermakers	2 (1.1)	296 (0.9)	1145 (1.1)
Labourers and Engineers	4 (2.2)	173 (0.5)	597.5 (0.6)
Labourers and Drivers	3 (1.7)	285 (0.9)	810 (0.8)
Labourers and Carpenters	3 (1.7)	284 (0.8)	137.5 (0.1)
Engineers and Boilermakers	5 (2.8)	416 (1.2)	1761 (1.7)
Engineers and Electricians	1 (0.6)	83 (0.2)	42 (0.0)
Sub-total: two-union stoppages	18 (10.0)	1537 (4.6)	4493 (4.3)
Several or all unions on site	56 (31.1)	23593 (70.5)	66659 (63.3)
TOTALS	180	33460	105235

Source: Derived from Department of Labour strike returns.

account for a much lower proportion of total involvement and man-days lost. A third, and considerably smaller, category concerns stoppages involving joint action on the part of two unions.

Of unions involved in sectional stoppages, those of labourers, boilermakers and engineers figured prominently. These same ones also accounted for the bulk of joint, two-union stoppages. It is not possible to state precisely the degree of stoppage proneness of any particular union membership because of joint participation in stoppages involving several unions. But we can state that the above three unions, along with most others, are generally involved in such wider stoppages on projects where they are represented. While we cannot calculate worker involvement and loss ratios for individual union memberships, it is of interest to note the distribution by union of project labour forces. Of the total labour force⁵ of the 14 major contracts in existence in mid-1974, labourers accounted for 12.8%, boilermakers 2.1%, engineers 6.9%, carpenters 5.8%, electricians 1.5%, drivers 1.7%, painters 0.6%, general workers 66.8%, camp and canteen kitchen workers 1.3% and plumbers 0.4%. This breakdown of course applies only to that particular time and is not necessarily representative of the whole period 1967-73.

VI. FORMS OF INDUSTRIAL CONFLICT: COLLECTIVE FORMS AND EMPLOYER-INITIATED FORMS

On the basis of information in Department of Labour strike returns, it seems the forms of industrial conflict employed by parties in this industry, and in projects in particular, are less diverse than for the meat industry. Again, however, it must be pointed out that information on the form of conflict in the strike return is minimal and that the classification criterion adopted is: "an action will be classified as a strike unless the return clearly identifies it as something else". Statistics on collective forms of conflict are presented in Table 10.

5. Excluding supervisory, clerical, administrative and executive staff.

TABLE 10

Conflict Forms in the Projects Section of the Building
and Construction Industry, 1967-73

Form	Number	No. of Workers involved	No. of man-days lost
Strike	173 (96.1%)	31876 (95.3%)	103641.5 (98.5%)
Unofficial Strike	1 (0.6)	54 (0.2)	148.5 (0.1)
Overtime Ban	1 (0.6)	75 (0.2)	25 (0.0)
Ban on a type of work	1 (0.6)	12 (0.0)	0
Stop work Meeting	4 (2.2)	1443 (4.3)	1420 (1.3)
TOTALS	180	33460	105235

Source: Derived from Department of Labour strike returns.

While the strike figures are necessarily inflated, they show the paramount importance of the strike among collective forms of conflict in the projects section of this industry. As with meat freezing, almost all strikes were official although in a few cases they involved workers acting, at least initially, against the advice of the delegate or official. A feature of the projects section is the relatively high number of sympathy stoppages. In the above period, there were nine such stoppages, involving a total of 2670 workers and a loss of 5509 man-days. In some cases the group stopping in sympathy was on a different project to the group originally involved, while in others it was on the same one. An example of the latter (which illustrates how a stoppage can spread) concerns riggers stopping on 7 April in protest over the appointment of a foreman. On 10 April they were joined in sympathy by boiler-makers, and on 17 April by crane dogmen. All three groups remained on strike until 18 May. Demarcation stoppages are less frequent but not uncommon, with five occurring during this period (involving 360 workers and a loss of 1263 man-days).

It is sometimes very difficult to isolate the initiating party of an action with the result that the involvement of employers in conflict is probably understated. To illustrate, we refer to an example involving three actions classified by the Department of Labour as strikes. In the original one riggers demanded confined space pay rates and refused to work until they received them. Management responded by dismissing them. Later in the same day engineers stopped work in sympathy and in order "to see what action the riggers take". Three days later boilermakers were dismissed because riggers were not available to handle full oxygen bottles and alternative work was unavailable. The boilermakers then demanded reinstatement and an increase in wages.

The only other form of any significance was the stop work meeting, the number of which is understated because they often precede strikes and so are included in the strike statistics. The single "ban on a type of work" related to a demand for confined space rates for work in a particular area. While there were a few instances of other forms, such as the work to rule, in the rest of the industry, the pattern in the above table probably holds for building and construction generally.

Table 11 gives an indication of the number of projects experiencing particular conflict forms. It is based on responses to management and union questionnaires. The responses of the two parties were similar, except with respect to lockouts and go slows or work to rules. Both sets indicate a relatively narrow distribution of the conflict forms. Two other features of these responses are of interest. First, there was some diversity among the responses of delegates from contracts or projects for which several replied. For example, two delegates said a particular contract had experienced overtime bans but four others from the same one said it had not. Second, two managements classified a majority of stoppages on their contracts as unofficial, while another maintained that all strikes on its contract started off unofficial but soon became official.

TABLE 11

Project Experience with Conflict Forms

No. of projects or contracts experiencing particular forms during their existence

Form	Management Responses (n=14)	Union Responses (n=13)
Overtime ban	7	6
Go slow or work to rule	7	3
Unauthorised stop work meeting	6	5
Official strike	6	5
Unofficial strike	5	4
Lockout	0	4

Note: Where responses were received from more than one delegate on a project or contract, the answer of the majority was taken as the union response.

Source: Management and union questionnaires.

VII. CONCLUSION

The overall building and construction conflict pattern is far more complex than the industry-wide figures may suggest. While this industry is a very large one, most of its stoppage activity is confined to a relatively small part. During 1967-73 building and construction projects accounted for about 68% of the total number of stoppages, 89% of workers involved and 75% of man-days lost, while accounting for no more than seven to 10% of the industry's labour force. Stoppage levels, however, tend to differ among projects, with one or two in some years accounting for a majority of not only total project, but also industry, stoppage activity. Even within projects there is often diversity, with some contracts experiencing a number of stoppages and others none. On other projects, though, the stoppage experience of the various contracts tends to be similar. Stoppages may involve several or all unions on a

site or just one and it appears that some occupational groups or union memberships are more stoppage prone than others. Of

TABLE 12
A Comparison of Building and Construction Industry
Stoppage Statistics, 1967-73

	No. of stoppages		No. of workers involved		No. of man-days lost		Wages lost (\$)	
	%		%		%		%	
1967								
Official	10	(52.6)	1346	(41.4)	3000	(34.8)	23470	(36.6)
Own 1	10		1346		3073		23510	
Own 2	19		3251		8618.5		64039	
1968								
Official	26	(66.7)	4209	(78.1)	8037	(65.5)	95150	(71.8)
Own 1	26		4257		8713		95864	
Own 2	39		5389		12273.5		132569	
1969								
Official	30	(71.4)	3744	(63.2)	12440	(29.9)	118170	(30.9)
Own 1	30		3752		12440		118170	
Own 2	42		5925		41571.5		382877	
1970								
Official	32		2523		12130		161510	
Own	32		2523		12130		161510	
1971								
Official	35		4455		20453		313570	
Own	34		4456		20409		313520	
1972								
Official	30		6115		14380		222990	
Own	30		6115		14380		222990	
1973								
Official	68		9994		30605		503560	
Own	68		9994		30605		503560	

- Notes:
1. Own 1 row contains stoppages apparently classified by the DOS as belonging to building and construction; Own 2 row includes the stoppages in Own 1 row plus those classified as building and construction by the DOL and reclassified by the DOS (i.e. it gives "total" stoppages). For 1970-73 Own 1 = Own 2.
 2. The bracketed figures show the official statistics as a percentage of our "total" figure (i.e. those in Own 2).
 3. For the composition of the official figures see Chapter VIII, Table 2.

Source: Derived from Department of Labour strike returns and various Monthly Abstracts of Statistics.

Chapter XII

FACTORS SHAPING THE BUILDING AND CONSTRUCTION INDUSTRY

PATTERN OF CONFLICT

I. NATURE OF THE INQUIRY

Having outlined the building and construction projects' pattern of conflict we are now able to study the factors which have shaped it. In so doing, we are forced to rely heavily on material gained from fieldwork because of the very sparse literature on conflict in this industry. Interviews and visits were again an important source of information and knowledge. While the geographic distribution of projects made total visitation coverage difficult, visits were made to four major ones. These represented a fairly good cross-section of projects in existence and included a very large hydro-power development (Tongariro), a thermal power project (New Plymouth), a large industrial development (Tasman Pulp and Paper Co. Ltd. mill expansion, Kawerau) and a motorway and roading structure project (Shell Gully, Wellington). A brief visit was also made to the Bluff aluminium smelter (Tiwai Point) in the very early stages of the 1974 expansion programme. These visits were made over a period from September 1973 to July 1974. During the four major ones, management and union representatives from six contracts were interviewed, as was a representative of a client company. On the largest of these up to 10 members of management were interviewed, including the industrial relations officer, construction superintendent and project engineer or manager among others. Discussions and interviews were also conducted with site officials and delegates, including in three cases all or most of the members of the job committee. On several occasions informal discussions were held with other workers, either on the job or after work. With the exception of those to Shell Gully and Tiwai Point, visits lasted from two to four days during which time the project and associated facilities could usually be inspected.

Visits were also made to various off-site company and union offices. Discussions were held with managements of the three major companies undertaking projects in late 1973 and 1974, and with officers of the Ministry of Works. Officials of the following unions were also interviewed: the Northern and Taranaki Labourers' Union, the New Zealand Carpenters' Union, the New Zealand Workers' Union and the Southland Drivers' Union.¹ In total, interviews were conducted with about 50 people. No request for an interview was turned down and representatives of both managements and unions, as well as workers generally, were most helpful and hospitable.

As with the meat industry, visits and interviews were supplemented by two questionnaires, one for managements and the other for unions. Relevant preliminary drafts were studied by officials, delegates, managers and departmental officers, as a result of which several improvements were incorporated in the final versions. In June 1974 copies of the management questionnaire, addressed largely to industrial relations or administration officers, were distributed to construction projects. Copies of the union questionnaire were sent to officials and delegates on projects, one copy being supplied per union represented.²

Fourteen management questionnaires were distributed, one for each of the six government, and eight private, major contracts then in existence. All were completed and returned, giving a 100% response rate. Sufficient copies of the union questionnaire were distributed for each on-site official or delegate representing workers on these 14 contracts. A total of 20 were completed and returned from 13 contracts, with the largest number from any one being six. It is difficult to estimate how many union representatives were eligible to complete the questionnaire but the 20 returns probably represent a high response rate of about 60%.

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1. Discussions were held, either on or off site, with representatives of unions of labourers, electricians, engineers, boilermakers, plumbers, storemen and packers, carpenters, painters, drivers, hotel workers and government project workers (i.e. New Zealand Workers' Union).
 2. In the case of one project questionnaires were delivered by the author personally.

II. AN EVALUATION OF POSSIBLE INFLUENCES ON THE BUILDING AND CONSTRUCTION INDUSTRY PATTERN OF CONFLICT

1. The Nature of the Construction Project or Contract

A basic argument, from which several subsidiary ones follow, concerns the nature of the construction project or contract itself. Unlike a factory, the project is not a permanent employment unit. Rather it has a limited life, at the start of which workers may be hired and at the end dismissed. Moreover, it is mobile and located where the work must be performed which may not be where supplies of labour and other factors of production are readily available. These features mean that often large numbers of workers with different employment backgrounds are brought together for the first time in unfamiliar circumstances. Members of the management group may also not have worked together before. Conflict is seen to result from this situation for a number of reasons. First, an established employment relationship is lacking and so the parties may, at least initially, be reserved and hesitant in their dealings with each other, especially if there is a danger of establishing "undesirable" precedents.³ Also, because the workers do not know each other, the leaders initially chosen may be those able to gain the most attention, who "may not be the most competent and responsible leaders available".⁴ Second, most construction workers are employed on a casual basis and may be laid off at short notice. Often their prospective employment lasts at most for the duration of a contract. They therefore seek to gain as much as possible from the situation while it lasts. In such circumstances, the strike has been described as "a rapidly wasting asset"; it must be used while the contract, and so bargaining power, still exists.⁵ It is often argued that the employment of a larger proportion

3. See N.S. Woods, *Report on Industrial Relations Legislation* (Department of Labour, Wellington, 1968)p.19; and K.J.Prain, "The Pattern of Industrial Disputes in New Zealand, 1921-1966", M.Com. Thesis, University of Otago, 1970, p. 72.

4. Woods, *op.cit.*, p. 18.

5. H.D. Woods, *Labour Policy in Canada* (St. Martin's Press, New York, 2nd ed., 1973) p. 258.

of permanent workers would "improve" industrial relations.⁶ Third, it may be necessary to house considerable numbers of men in camps. Because these are usually of a temporary nature they have short-comings which produce conflict. This may be exacerbated if organised leisure activities are lacking.⁷ At a more general level, it is argued that everyday facilities such as canteens, lavatories and changing-rooms, are not easily provided to acceptable standards on construction sites.⁸ Some suggest that isolation also influences the conflict level of a project.⁹

The finite life of the project may establish a distinctive pattern of conflict over its duration. N.S. Woods suggests that conflict will be highest during the early stages when relationships are still new and initial short-comings of camps and other facilities have not been overcome.¹⁰ This may especially be the case where benefits gained by workers on a given site have no carry-over to other ones but must be established all over again.¹¹ Others seem to imply that relatively more stoppages will occur just before peak activity when the cost to the employer may be high due to the pressure of uncompleted contracts but that to the worker, in terms of net loss of work, may be low.¹²

The first and second facets of this argument are related, in that the larger the proportion of "permanent" workers in a

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6. See, for example, Commission on Industrial Relations, *Alcan Smelter Site*, Report No. 29 (HMSO, London, 1972) p. 28.
 7. See N.S. Woods, *op.cit.*, p. 19.
 8. See *Second Report on Efficiency in Road Construction; A Report by a Working Party of the Economic Development Committee for Civil Engineering* (HMSO, London, 1967) p. 9; and N.S. Woods, *op.cit.*, p. 19.
 9. See, for example, *Annual Reports of the Fletcher Organisation* for 1967 (p. 22) and 1968 (p. 23).
 10. N.S. Woods, *op.cit.*, pp. 18-19.
 11. See H.D. Woods, *op.cit.*, p. 252.
 12. See Daniel Quinn Mills, *Industrial Relations and Manpower in Construction* (Massachusetts Institute of Technology Press, Cambridge, Mass., 1972) p. 49. Mills develops this argument within the context of the seasonality of American construction although it appears to have broader application.

given labour force, the greater the likelihood that relationships at all levels will be well established, and the lesser the need for workers to press for maximum gains from existing contracts because they expect continuing employment on future ones. The argument suggests that conflict, especially in its collective forms, will be relatively high on contracts where workers and managers are new to each other and where the proportion of permanent workers is low. It also implies that contracts with relatively large and inadequate camps (and other facilities) will experience correspondingly high levels of collective actions. It further has implications for individual and employer-initiated forms of conflict.

a. Lack of Established Employment Relationship

This facet of the argument suggests that a high proportion of workers joining a project will be unfamiliar both with other workers there and with project management. There is evidence that most of the workers employed on a given project have no previous employment experience with the contractor concerned. When asked in the questionnaire what percentage of their labour force had been employed by their company or department on earlier contracts, 13 of the 14 managements said less than 50%. The assertion that workers are unfamiliar with a particular management therefore seems a reasonable one. There may also be a degree of unfamiliarity among workers, but at least some are likely to have worked together for another contractor on a previous project. Table 1 suggests that a high proportion of the labour force on most projects has had previous experience in the construction industry.

This lack of familiarity both among workers and between workers and managers was regarded as an important cause of conflict, particularly by managements. One also stressed the lack of familiarity and experience among members of management, arguing that project situations "throw a lot of people together, probably under a management team that is also thrown together". While this factor is likely to be most important at the start of a project it may have a continuing influence in that some

TABLE 1
Aspects of the Employment Experience of Project Labour Forces
 percentages
 (n = 14)

	10 or less	12	15	20	25	33 $\frac{1}{3}$	39	45	70
% of labour force employed by coy. or dept. on earlier contracts	2	1	2	1	3	2	1	1	1
	percentages								
	20	25	50	60	70	75	90	95	100
% of labour force with previous experience in construction industry	1	1	4	1	2	2	1	1	1

Source: Management questionnaire.

occupational groups join only after certain stages have been reached. Moreover, its effect is likely to vary among contracts in so far as the degree of past experience and familiarity also varies. It relates largely to the inclination to engage in collective and employer-initiated forms but may also have some bearing on individual forms of conflict. As a test of the influence of lack of familiarity, the percentage of the labour force on a project that had previously been employed by the contractor concerned was correlated with measures of stoppage activity. Correlation coefficients were found to be insignificant.¹³ Not too much emphasis should be placed on

13. Correlation results were as follows:

Variables	Correlation Coefficient (r)
% labour force previously employed, no. of stoppages	-0.221 (insignificant)
% labour force previously employed, man-days lost	-0.271 (")
% labour force previously employed, worker loss ratio	-0.200 (")

While the coefficients have the expected sign, little weight can be attached to this as none are significant. In these correlations the unauthorised stop work meetings on Contract 5/1 (see Table 5, Chapter XI, p. 372) were

(Footnote 13 is continued on the next page.)

this result, however, because of the inadequacies of the labour force variable as a proxy for a lack of familiarity both among and between the parties.

There was less support among those interviewed for the suggestion that workers may initially choose relatively incompetent leaders who are later replaced by more able ones. On many major projects those chosen as leaders were often delegates on previous contracts where they had demonstrated an apparent ability to extract concessions from the employer. One industrial relations officer even argued that "the leadership does not change" from one project to another. In several cases the delegates were said to be very experienced and "technically able", although it was claimed they were also "very militant". This facet of the argument appeared to apply in reverse on some projects where it was noted that little stoppage activity occurred in the early stages simply because "strong" leaders had not yet arisen and so organisation among workers was lacking.

b. The Finite Life of Contracts and the Casual,
Temporary Nature of Construction Employment

The argument that the impermanence of contracts influences conflict levels is a plausible one. It is reasonable that the temporary nature of the employment relationship will produce attitudes among both parties conducive to conflict. The limited life of the contract may influence not only the desire but also ability to engage in conflict. Workers gain bargaining power from the very fact that the contract has a strictly finite life. If the contract's completion date is not met, the cost to the employer, over and above any arising from concessions granted because of conflict action, may be high. The

(Footnote 13 continued):

included in the stoppage variables on the grounds that very short stoppages of a similar nature appeared to be included in the statistics provided by some other contracts. Exclusion of these meetings produces little change in correlation results (correlation coefficients, following the above order, become -0.236, -0.274 and -0.189).

cost to the worker, on the other hand, may be low, especially if he expects to be unable to find satisfactory work on the completion of the contract. In any event the cost of the action, in terms of unemployment benefit or other income foregone due to any postponement of completion date, will be offset to the extent that extra overtime work is scheduled because of it (aside from any benefits derived from concessions gained). Workers may consider it worthwhile taking an action while the contract still exists if they feel that concessions gained will apply on future ones. Paradoxically, the contract nature also influences the employer's ability to engage in conflict. In the early stages, the employer may be able to withdraw from a contract at a cost which is low relative to that of continuing with it. A manufacturer, on the other hand, may find it more difficult to quickly close a factory, especially if he wishes to continue in business elsewhere. The nature of the contract gives both parties bargaining power, the extent of which varies with the situation and duration of the contract.

Both managements and unions in interviews placed heavy emphasis on this factor as a cause of conflict. It was argued that the temporary nature of employment influences worker attitudes in several ways. The worker feels insecure, especially if there is a lack of continuity in the phasing of major projects. Insecurity is something he considers should be rewarded and results in his interpreting employer actions with suspicion. Moreover, knowing the job is temporary, workers seek to gain as much as possible from it while it exists. As one manager argued "the men seek to get as much out of a project while it's in existence, in the form of greater money and/or a longer contract time". A union secretary expressed similar sentiments in stating "the whole essence of big contracts is how much money you can earn". Because the work is terminating, the worker is seen to have no allegiance to his employer. A manager argued that everything on a construction site is assessed in terms of the degree of completion of the contract, something which constantly reminds the worker that the job must end. Several suggested that the more specific and widely known the completion date the more it

affects worker attitudes. A number of managers also contended that casual work attracts young, single men who have no commitment to the employer or locality and no hesitation in engaging in stoppages, in being absent or even in leaving. These factors might be expected to influence not only the worker's willingness to engage in conflict but also his desire to gain greater control of his work situation.

Many union representatives argued that the temporary nature of a contract also influences employer attitudes. The employer is seen to lack commitment to the workers, his only interest being to complete the contract (and so the employment relationship) as quickly as possible. It was contended that some employers are so keen to make progress that they start contracts and "worry about conditions later". This alleged lack of commitment was said to find expression on some sites in the employer frequently threatening mass dismissals. One delegate claimed to have been "sacked" by the same employer four times in 12 months. Certainly, dismissals are a feature of this industry. One company had a standard practice of dismissing all its workers at the end of the year and re-engaging them after the holidays. Another employer stated that his company had been prepared to give up a contract completely. One manager also suggested that the impermanence of the work even affects managerial staff who can be concerned about their own security. It appears the contract nature of employment influences both workers and managers in a way that reduces constraints on the willingness to harm the other party through conflict. Several managers and union representatives considered this factor the most important and fundamental cause of conflict in the industry.

Some on-site officials and delegates saw the contract nature as influencing conflict in other ways. Each contract is unique and conditions prevailing on one need not be replicated on future ones. Union representatives argued they are faced with the same "problems" over and over again so they have to fight the same "battles" many times over. Some managers partially agreed with this view, noting the lack of consistency in conditions among projects. Workers seek to

establish binding precedents, whereas some employers seem to use the demise of a contract as an opportunity to forget the conditions and wage rates prevailing there. On some contracts, key delegates are not among the first workers employed, with the result that they are faced with conditions and agreements, the formation of which they had no influence on. It seems they resent off-site officials making agreements with management which they consider inferior to ones they would have negotiated.

The temporary nature of the work is especially important when construction is taking place alongside existing premises operated by the client. In this situation, the contractor is under severe pressure from the client not to grant any concessions to construction workers which may set a precedent for production workers who are permanently employed in the existing premises. Any increased resistance by the contractor to worker demands is likely to produce conflict.

In the questionnaires, managements and unions were asked to assess the importance of the impermanence of employment due to the contract nature of construction work as a cause of strikes on their contracts. The range of opinions evident among both management and union responses (see Table 2) is difficult to explain in terms of a particular characteristic. It might have been expected, for example, that parties from government projects would consider this factor less important than those from private ones. The diversity among responses from government contracts was, however, similar to that among those from private ones. Despite this, five managements and one union considered it of above average importance and a further two unions regarded it as very important. One of these managements contended elsewhere in the questionnaire that impermanence had led to conflict on its contract through workers being hired whose "attitudes were formed when working for other employers". On the basis of size of mean response, managements rated this factor fifth in importance of the 19 assessed and unions eleventh equal. Perceptions of management and union from a given contract tended to differ, with the management in one case rating the factor not important (5) while the union rated it very important (1). Of the seven

contracts for which both parties answered, responses were identical for only one. There was also some disagreement in responses of delegates from the same contract in three cases.¹⁴ In one, most delegates rated it of above average importance (2) but one accorded it no importance (5), while in the other two, responses differed by a margin of only one.

TABLE 2
The Perceived Importance of the Impermanence of
Employment as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR ^a
	1 Very Import- ant	2 Above Average Import- ance	3 Average Import- ance	4 Below Average Import- ance	5 Not Import- ant			
Management responses (n=14)	0	5	3	1	3	2	3.17	2.60
Union responses (n=13)	2	1	1	1	2	6	3.00	3.05

Note: a SMR = Standard mean response.

Source: Management and union questionnaires.

When asked in the questionnaires to account for the apparent lower level of strikes among Ministry of Works' project workers, eight managements mentioned the greater continuity of work available on MOW projects. Six union representatives (from four projects) expressed the same view.

14. Completed questionnaires were received from more than one delegate in the case of three contracts. Where responses from a given contract were identical no difficulties in presenting a contract "union" response arose. Where they differed, a means had to be devised of presenting the contract response while still giving it only equal weighting to the single responses from other contracts. The method used in Table 2, and in subsequent similar ones, was to divide the response among ratings of importance according to the number of delegates specifying them. For example, if three of the six delegates from Contract X rated a particular factor very important (1) and three rated it of above average importance (2), that contract's union response would be apportioned $\frac{1}{2}$ to rating 1 and $\frac{1}{2}$ to rating 2. For most of the factors assessed this procedure gave rise to few rounding problems, but for a few rounding increased the number of union project responses by one.

Information from management questionnaires clearly shows that most employment on projects is casual. The low proportion of workers with previous employment experience with a given contractor was seen in Table 1. Managements were also asked to specify the percentage of their contract labour force they regarded as permanent or potential long service workers. Responses to this question reinforced earlier impressions. A majority of managements considered 25% or less of their employees to be permanent or potential long service workers.

TABLE 3

The Percentage of Workers Regarded as Permanent or Potential Long Service Employees

	Percentages								
	5 or less	10	15	20	25	30	45	50	70
(n = 14)	1	1	2	2	3	1	1	2	1

Source: Management questionnaire.

Information on length of service with the company or department of workers on projects was also requested. It can be seen from Table 4 that about 77% of workers had been employed by the same employer for less than five years. On several, the length of service of most of the workers was only as long as the contract has been in existence. Some, however, had a much higher proportion of long service employees than others, although some of these, such as Projects 10 and 12, have been in operation for many years. (The numbering system in this table bears no relationship to those in previous ones.) If Projects 10 and 12, two large, very long term projects, are excluded from consideration, only 155 of the 2145 workers (or 7.2%) employed by the other 11 contractors had lengths of service of more than five years.

Our earlier discussion suggested that the higher the proportion of long service or permanent workers in a contract's labour force, the lower will be its level of stoppages. In

TABLE 4

Length of Service of Project Workers

Project or Contract	Less than 6 months	6 months - 1 year	1-5 years	5-10 years	Over 10 years
(No. of workers)					
1	12	20	3	0	0
2	15	53	82	2	1
3	24	17	126	30	14
4	21	32	306	0	0
5	200	200	80	10	10
6	0	0	16	3	2
7	64	42	28	18	14
8	70	70	60	34	6
9	84	47	201	2	2
10	101	73	466	249	59
11	56	13	10	0	0
12	25	5	232	177	219
13	31	1	6	1	6
	703 (18.7%)	573 (15.3%)	1616 (43.1%)	526 (14.0%)	333 (8.9%)

Note: Figures for the projects listed relate to the following categories of employees:

Wage workers: Projects 1, 2, 5, 9, 10, 11.

Wage workers and supervisory staff: Projects 3, 4, 6.

Wage workers and all or most staff: Projects 7, 8, 12, 13.

Source: Management questionnaire.

testing this hypothesis, two variables, other than measures of stoppage activity, were used. These were the percentage of workers regarded by project managements as potentially long service or permanent, and the percentage of the contract labour force with a length of service of five years or more. These variables were correlated with several stoppage measures. Results appear in Table 5.

TABLE 5

The Relationship between Measures of the Permanence
of Employment and of Stoppage Activity

Variables	Correlation Coefficient (r)
% workers viewed permanent, ^a No. stoppages	-0.234 (insignificant)
% workers viewed permanent, man-days lost	-0.300 (")
% workers viewed permanent, worker loss ratio	-0.256 (")
% workers 5 years plus, ^b No. stoppages	-0.288 (")
% workers 5 years plus, man-days lost	-0.285 (")
% workers 5 years plus, worker loss ratio	-0.261 (")

- Notes: a The percentage of workers regarded by
 managements as permanent or potential long
 service employees.
- b The percentage of workers with five or more
 years service with a given employer.

Source: Management questionnaire.

All coefficients have the expected negative sign but little weight can be attached to this as none is significant. The relationship between the percentage of workers viewed as permanent and the percentage of the labour force with five or more years service on the one hand, and measures of stoppages on the other, is weak but possibly negative.¹⁵ These results do not, however, mean that the casual nature of the project employment has little or no effect on conflict. Neither proxy variable can be expected to incorporate all the possible influences of casual employment mentioned above. In particular, they say little about the effect of the nature of the contract on the ability to engage in conflict. Moreover, most workers are paid by the hour and employed on a casual basis irrespective of their

15. If the unauthorised stopwork meetings occurring on Contract 5/1 (Table 5, Chapter XI) are excluded from the stoppage variables, little change in the above correlation coefficients results. (They become, in the order of the above table, -0.241, -0.305, -0.245; -0.334, -0.281, -0.247.)

length of service. They may not see themselves as "permanent" workers even if their employer regards them as potentially such. Even if the proxy variables were adequate, the lack of significant relationship may merely mean that the effect of this factor on stoppage activity is counteracted or modified by that of others.

We noted earlier the possibility that the finite life of a contract might establish a distinctive pattern of conflict over its duration. One suggestion was that most conflict will occur in the early stages, and another that it will occur just before peak activity. Both are plausible. In the early stages, many of the influences on the inclination to engage in conflict (and especially in stoppages) are at their strongest. Any lack of familiarity will be at its greatest, inadequacies in the camp and other facilities at their most numerous, disagreement over wages and conditions of employment possibly at their most strident and so on. But the workers' ability to engage in stoppages may not be at a peak in the initial period, both because of deficiencies in organisation and cohesion, and a relative lack of bargaining power. Their ability may indeed be at its highest when activity is near its peak, in that the employer is then committed to the contract but faced with the pressure of having a large part of it uncompleted. It is, however, difficult to argue on *a priori* grounds that maximum stoppage activity will occur at either the start or peak of a contract. An equally plausible argument can be made in favour of the proposition that it will occur near the end of a contract. At that time workers may be uncertain about future employment prospects and so wish to extend the existing contract. They may also wish to use that period to establish conditions which may be transferred to new contracts. Moreover, while their bargaining power then may be not as high as at peak activity, it may still be very considerable if the employer is pressing to complete the job to avoid going into extra time and incurring penalty payments. It could further be suggested that stoppages will be high whenever a new trade or occupational group comes onto a contract, in that the new group may be dissatisfied with existing rates and conditions negotiated by representatives of other groups. It seems

difficult to assert that a given pattern of stoppages will generally occur on contracts.

There was a wide range of responses among both parties to the question "at what stage (or stages) in the life of a construction project do the most industrial stoppages occur?" (See Table 5). When asked to explain their answer, those managements which specified the early stages mentioned difficulties in "settling down" and establishing wage rates and conditions, especially as workers at that point are seeking to set "improved standards" for the contract. Those which specified peak activity argued that workers are then at their "maximum" strength, having also had the opportunity to organise and "sort themselves out". Several factors were mentioned by those specifying the latter part of the contract, including the insecurity of men who are uncertain about future employment and a desire by workers to make gains which become "starting points" on future contracts. As an aside, one manager argued that absence, in the form of sick leave, increases as the contract draws to an end. Some managements argued there was no set pattern to stoppage activity on projects.

Union representatives specifying the early stages also mentioned several factors in explanation. It was argued that the employers initially seek "to do jobs on the cheap" and "go out to break the men". It was further suggested that conditions gained on earlier sites are not automatically transferred to new ones, with the same conditions again having to be sought. "Bad" agreements made by union officials prior to the start were also mentioned, as was the tendency for workers to test management to "see what they can get". Some who specified peak activity argued that workers have a bargaining advantage then. Those specifying the latter stages mentioned the fear of redundancy, the desire of managements to have the project operating and the opportunity to establish improved conditions. Several representatives said stoppage activity is high at the beginning when conditions are being established, at the peak when new workers are dissatisfied with existing agreements and at the end when redundancy looms and the employer is pressing for completion.

TABLE 6
Stages in the Life of a Project when Most Stoppages are Seen to Occur

	Begin- ning	After "settling in"	Peak	Latter stages	Begin- ning, peak, end	Begin- ning, end	No pattern
Management responses (n=14)	2 ^a	2	3 ^b	2	0	1	4 ^c
Union responses (n=11)	3	1	1	1	3	2	0

- Notes:
- a One also specified times of change to type of work.
 - b Two also specified times of agreement negotiations.
 - c One mentioned a possible tendency for stoppages at the beginning, while another mentioned the end.

Source: Management and union questionnaires.

Management and union responses on this matter from the same contract were often different. Responses from delegates on the same contract were similar in one case, but in the other one delegate specified the beginning and end while the other delegate argued stoppages occur "all the time".

During interviews some managements argued that while not all, or even most, stoppages occur in the early stages, this period is the "crucial" one in that what happens then influences the operation of the contract for the rest of its duration. Early stoppages are likely to confirm workers in the belief that they must "fight for everything" and so establish a tradition of direct action which influences future behaviour. It was also argued that stoppage prone, earlier stages or contracts of a project are likely to produce the same type of tradition which influences stoppage levels on subsequent contracts there. These managements were on contracts that had experienced a high level of stoppages from the beginning.

As with the meat industry, it appears the casual nature of employment has prompted construction workers to attempt to

gain some control of their work situation. Actions used in so doing may be sources as well as forms of conflict. Workers see a casual employment system as creating possibilities for the employer to discriminate in hiring and firing and, in some cases, they have consequently sought to control this process. One means of doing so is to demand that employers hire only workers with a union "ticket". A more regulated method involves the operation of a roster, the order of which the employer must follow in hiring new workers. A roster prevents employers refusing to hire particular workers, and also serves to allocate work among members of any occupational group. The employer is faced with hiring workers in the order set out in the roster or hiring no workers at all. In some cases, rosters have been operated by unions but in others on an unofficial basis by a section of the membership. On some sites any tendency for employers to dismiss particular workers has also been restrained by the knowledge that such action is likely to result in a stoppage.¹⁶

Job demarcation on projects can largely be regarded as a reaction to the insecurity of casual employment. The trade or occupational group that is successful in establishing claim to certain work increases its employment prospects. Demarcation, along with the roster, union "ticket" and so on, emphasises the importance of the union or occupational grouping. Anything which may weaken the group is resisted. On some contracts, for example, workers will not accept directions from foremen other

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16. Several unions and some managements saw alleged wrongful dismissals to be a quite important cause of strikes. In the questionnaires they were asked to assess the importance of alleged wrongful dismissals as a cause of strikes on their contracts. Responses were as follows:

	Scale of importance					No Answer	Mean Response	SMR
	1	2	3	4	5			
Management responses	1	1	3	3	4	2	3.67	3.00
Union responses	3	1	2	2	1	4	2.67	2.71

Source: Management and union questionnaires.

On the basis of size of mean response, both parties rated the factor seventh equal in importance of the 19 assessed.

than the one directly concerned with their trade or occupation. Moreover, certain workers refuse to perform jobs they consider not theirs.

Such actions obviously have implications for manning, as do numerous others. For example, workers may form teams which, irrespective of the amount of work available, must remain together. They may further resist being transferred from one aspect of a site to another and may only perform certain work (such as job-and-finish)¹⁷ if stand-by workers are available for the whole time. Some workers also attempt to exercise control over hours worked and may specify to the employer the extent to which variation in hours (such as extra overtime or Sunday work) is permissible.

Workers may also try to influence the level of output and so duration of a contract. On some sites foremen, and other managerial staff, do not perform any physical work because of worker demands that they refrain from such work. Moreover, on numerous sites it is standard practice not to work in the rain. Some managements argue that workers can interpret "wet weather" in such a way as to make a contract last as long as possible.

Many of the above actions have been sources of conflict, with employers in some cases opposing them strongly. They are likely to continue to be so in that many workers regard them as necessary if they are to have any control over, what to them, is an otherwise casual, unregulated and discriminatory employment situation.

c. Camps and Other Facilities

This argument, as stated in the literature, largely concerns the standard of the camp and other facilities and so the desire or inclination to engage in conflict action. But it has other aspects relating to the ability to engage in such action.

17. That is, a job which, once started is carried on until completed irrespective of the hours involved.

The existence of a camp increases the worker's capacity to temporarily stop work either through a stoppage or by being absent. The cost of stopping to the worker may be relatively low if his food and shelter is still provided by the employer. A camp may in addition promote cohesiveness and unity among workers as their only contact either on or off the job is with their fellows. Such a situation may facilitate the development of leadership reputations and "personality cults". It might also be argued that camp inhabitants never leave the work environment but carry their work problems into their leisure time. Moreover, they are not subject to the same constraints on stoppage action as are local workers. Their allegiance is not to the local community but to their fellow workers and their dependents, if any, do not live locally.

The argument has intuitive appeal and virtually all managers and union representatives interviewed regarded the existence of a camp, in one way or another, as a very important influence on industrial conflict. Delegates and officials placed great emphasis on camp conditions, arguing that conflict will arise where they are inadequate. Some said all facilities on construction sites are temporary and of such a condition that "no one would put up with them". It was argued that workers may be engaged on a project for a number of years but are expected to use facilities intended to be only temporary. Several contended that Ministry of Works' contracts have relatively low stoppage levels due to Ministry camps being superior to those provided by private contractors and to a far higher proportion of workers living in employer-provided houses with their wives and families. One senior delegate even argued that the provision of good quality camps would "solve half the problems" on projects.

A number of camps were inspected during visits to projects. They usually took the form of rows of fairly small and basic huts, a cookhouse, amenities blocks and, possibly, a recreation hall. The quality of the camps varied. The poorer ones lacked paved walkways or roading, adequate recreation facilities, lawns and vegetation generally and were unattractive places. None of those visited were anywhere near the standard of a motel and

all had a temporary air. On most projects, staff live in houses provided by the employer or, in some cases in small, motel-style camps. On MOW projects most married workers also live in houses.

The lack of generally accepted minimum camp standards seems a major source of conflict. Delegates argue that they have to fight for the same conditions over again on each new project. They see this as due to the temporary nature of projects. One delegate contended that "firms know the job will last only two or three years and are only interested in getting it done. They don't care about people at all." Delegates particularly resented having to use camps they considered sub-standard but the use of which was consented to by off-site officials before the project began. Complaints were especially numerous about camps actually located on the construction site and near existing industrial premises, the effluent of which aggravated already difficult conditions arising from dust and dirt. A lack of facilities for leisure activities was also a common source of complaint.

Other aspects were mentioned by union representatives. One official stressed the "unnatural nature" of camps, arguing that they form "a congregation of men like an army" with "no home association". Another called camps "breeding grounds for trouble" where men have nothing to do with their leisure time except discuss their problems. He further emphasised the fact that camps are only for single men, so that their inhabitants either have no dependents or are separated from them. One secretary said even a camp with very high standards can be "a source of trouble".

Numerous managements also said camp conditions can be a source of conflict. Several called their camps "hotbeds of trouble" and one said contractors are "mad to do jobs with camps", labelling them "disasters". Some acknowledged that their camps were sub-standard and it was generally agreed that future ones "must be of the highest possible standard". Moreover, it was argued that camps produce the unity among workers necessary for effective collective action. The very fact of

workers having shared circumstances was considered to build unity, as was the ability "to have a union meeting over dinner". Within this environment, strong and respected leaders develop. It was argued that men on construction sites are in search of leaders who are often found among camp inhabitants rather than among other workers or members of management. The isolation of workers from managers is due not only to the lack of an established employment relationship but to the social isolation of camp inhabitants from managerial staff who live in houses elsewhere and often never venture into the camp.

The job was also seen to "spill over" into the private lives of workers who "do not go home but to the camp" after work. The result was described as "camp sickness" which finds expression in workers "sitting around dreaming how to get at the company". Camps were also regarded as enhancing the economic capacity of workers to engage in conflict. It was argued that the cost to camp inhabitants of stoppages or absence is relatively low because contractors are unable to evict them from the camp nor to withhold services or provisions such as meals (which, on private contracts, are usually free of charge). Managements seemed to fear that the contract would be "blackened" if such action was taken and one cited a case where an alleged attempt was made to burn a cookhouse because it had been shut during a strike. Camps therefore provide not only almost guaranteed food and shelter for workers but also represent a cost to the employer which continues despite stoppages.

Numerous managements, both in interviews and questionnaires, suggested that MOW projects often have relatively low stoppage levels because of the provision of houses for married workers who form a high proportion of the Ministry's labour force. This, along with the provision of other facilities such as schools, halls, shops etc., was seen to create a "home environment" within which conflict is less likely to arise.

Management and union questionnaires contained several questions relevant to this argument. The parties were asked to

assess the importance of large numbers of men living under camp conditions, geographic isolation and any tendency for construction workers to be separate communities with few outside social contacts as causes of strikes on their contracts. It will be seen from Table 7 that both parties generally considered the presence of large numbers of men in camps of some importance as a cause of strikes. If responses only from projects with camps are considered, managements, on the basis of size of mean response, rated this factor second in importance of the 19 assessed as causes of strikes and unions tenth.¹⁸ Several delegates, in response to another question, attributed the relatively high level of strike activity in the construction industry, at least in part, to workers having to live in camps away from home. The three managements and two unions rating it very important all came from projects with a high proportion of the labour force living in camps. Management and union from a given contract tended to attach similar importance to this factor, although in one case the management rated it not important (i.e. 5) and the union very important (1).

It is clear that any tendency for construction workers to be separate communities with few outside social contacts was regarded by both parties as a less important cause of strikes than the factor just looked at. All three managements according it above average importance, however, were from projects with camps, two being also from geographically isolated ones. Both unions rating it very important came from projects with camps, one of which was isolated. In terms of size of mean response, managements rated the factor tenth equal of the 19 assessed and unions fifteenth. Management and union from the same contract gave identical assessments in only two of seven cases. Delegates from a given contract assessed it differently in two cases. In both, one-half of the delegates rated it very important (1),

18. If responses from all projects are considered, managements rated this factor fourth in importance of those assessed (with the obvious slight consequent effect on the ratings of the two intervening factors). The union rating is the same irrespective of whether total responses, or just those from projects with camps, are considered.

TABLE 7

The Perceived Importance of Factors Relating to Camps and
Social and Geographic Isolation as Causes of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very	Above	Average	Below	Not	No	Mean	
	import-	import-	import-	import-	import-	Answer	response	SMR
	ant	ance	ance	ance	ant			
<hr/>								
1. <u>Large Numbers</u> <u>in Camps^a</u>								
Management responses:								
- those with camps	3	1	3	0	1		2.37	
- total (n=14)	3	1	3	0	4	3	3.09	2.53
Union responses:								
- those with camps	2	0	2	1	1		2.83	
- total (n=13)	2	0	3	1	1	6	2.86	2.91
2. <u>Few Social</u> <u>Contacts^b</u>								
Management responses	0	3	2	1	6	2	3.83	3.14
Union responses	2	0	2	0	4	5	3.50	3.56
3. <u>Geographic</u> <u>Isolation</u>								
Management responses	0	3	2	2	5	2	3.75	3.07
Union responses	3	0	3	0	3	4	3.00	3.05

Notes: a Large numbers of men living under camp conditions.

b Any tendency for construction workers to be separate communities with few outside social contacts.

Source: Management and union questionnaires.

while the other half rated it of above average importance (2).

In view of the different locational characteristics of projects, it is not surprising that assessments of the importance of geographic isolation varied among both parties. Nevertheless, a greater proportion of unions rated this factor very important than did managements. There was a tendency in union responses for it to be rated of greater importance, the more

isolated the project. While the tendency existed among managements it was less strong, with one from a very isolated contract according the factor no importance. On the basis of size of mean response, unions rated it eleventh equal in importance of those assessed and managements ninth. Perceptions of the two parties from the same contract again tended to differ, with the same assessment being given for only two. Also as with the previous factor, there were differences in the perceptions of delegates from the same contract in two cases. For one, approximately two-thirds of the delegates considered it very important while the other third rated it of only average importance. For the other, one delegate considered it not important and the other delegate of below average importance.

There is obviously a strong body of opinion that camps, in a variety of ways, are potential sources of conflict. While less emphasis was placed on geographic isolation and a lack of outside social contacts among construction workers, these factors are to an extent related to the existence or otherwise of a camp. Most projects situated away from centres of population require camps to house workers who, because they come from other areas, have few contacts with the local community if one exists. It is difficult to isolate these influences and it appears in practice they are often not viewed separately but identified with the existence of a camp.

There are a number of hypotheses relating camps to conflict that might be statistically tested. Much of the above discussion suggests that the larger the camp, the higher the level of stoppage activity on a project. As a test of this hypothesis, numbers of camp inhabitants when the labour force was at its peak were correlated with measures of stoppage activity. The discussion also suggested that the greater the proportion of the labour force living in camps (as opposed to houses), the higher the level of stoppage activity on a project. To test this hypothesis, the percentage of the peak male labour force housed in camps was used as one variable and a measure of stoppage activity again as the other. Correlation results are presented in Table 8.

TABLE 8

The Relationship between Measures of Camp Size and
Stoppage Activity, 1973

Variables	Correlation coefficient (r)
no. in camp, ^a no. of stoppages	0.873 (significant 0.001)
no. in camp, man-days lost	0.846 (" 0.001)
no. in camp, worker loss ratio	0.402 (insignificant)
% labour force in camp, ^b no. of stoppages	0.511 (significant 0.10)
% labour force in camp, man-days lost	0.504 (" 0.10)
% labour force in camp, worker loss ratio	0.320 (insignificant)

Notes: a Number of workers in the camp at peak labour force.

b Percentage of peak male labour force living in the camp.

Source: Management questionnaire.

The relationship between the number of camp inhabitants on the one hand and the number of stoppages or man-days lost on the other, is a strong, positive one. The number of camp inhabitants, for example, explained 76.16% of the variation in stoppage frequency. Apparently, the greater the number of workers living in camps, the greater the number of stoppages and man-days lost on a project.¹⁹ When the worker loss ratio is used as the measure of stoppage activity the relationship is much weaker.²⁰

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19. Of the 14 contracts in existence in mid-1974, nine had camps the largest of which housed 801 men at peak labour force and the smallest 43. The average peak camp size was 231 inhabitants. On these nine contracts, the percentage of peak male labour force housed in camps ranged from 89% to 20.7%, with the average being 38.5%. Of the four projects with no camps, only one experienced a stoppage in 1973 (a further contract began in early 1974). Incidentally, on the largest government hydro-power schemes up to 1,000 workers at peak are housed in departmental housing.
20. If the unauthorised stopwork meetings occurring on Contract 5/1 (Table 5, Chapter XI) are excluded from the stoppage variables, little change in the above correlation coefficients results. (They become, in the order of the above table, 0.838, 0.820, 0.412; 0.541, 0.493, 0.293.)

A positive, but less significant, relationship exists between the percentage of the peak labour force housed in camps and the number of stoppages or man-days lost on a contract. Again, it seems that the higher this percentage, the greater the number of stoppages and man-days lost. When the worker loss ratio is used as the stoppage measure, the relationship is not significant. This could possibly be the result of a downward bias arising from a measure of the labour force being the denominator in both variables in the regression.

The apparent conclusiveness of these results is a little surprising in view of the inadequacies of the two variables used as proxies for the influence of the camp. The size of the camp, either in terms of number of inhabitants or the percentage of the labour force it houses, takes no account of its condition, location or many of the other factors discussed which seem to influence the level of stoppages.

It was suggested that the existence of a camp may also influence absence rates by increasing the ability of its inhabitants to be absent. As a test of this hypothesis, the same two measures of camp size were correlated with the absence rate. The correlation between the number of camp inhabitants at peak labour force and the absence rate was $r = 0.529$ (significant 0.10), and that between the percentage of the peak labour force housed in camps and the absence rate was $r = 0.267$ (insignificant). The relationship in both cases is positive but is significant in only one. Projects with large camps may have relatively high absence rates.

The existence, size, location, condition and so on of a camp appear important influences on project levels of stoppages. They may also influence levels of absence. In some situations these features may reinforce each other, while in others they may counteract. A project with a large, poorly located and equipped camp could expect higher levels of these conflict forms than one with an equal sized but well located and equipped camp. In particular, it seems that where the camp is an integrated part of a wider community any predisposition toward conflict is counteracted to some extent.

2. The Nature of the Work, Working Conditions and the Worker

An argument related to the "nature of the project" one concerns the nature of the work, working conditions and the worker. It is suggested that the work on projects is complicated, arduous and frequently hazardous. Aside from other effects, these features open up numerous possibilities for argument over the interpretation and application of collective agreements and awards.²¹ Moreover, while the work is arduous and exposed to the weather, facilities and other conditions are often inferior to those in industries providing more pleasant and settled work.²² It might be expected that such work would attract or produce forceful workers prepared to engage in conflict action.²³ The influence of these factors is likely to be a general one, although it may vary among and even within contracts in so far as the type of work and associated working conditions also vary. While the argument is framed in terms of collective forms, it also appears relevant to individual forms of conflict.

In interviews, the emphasis placed on particular factors varied among projects. On several, the arduous and complex nature of the work was not mentioned as a cause of conflict. Where it was seen important, the work was often very unpleasant and performed in difficult weather conditions. In several questionnaire responses, very cold or wet weather was specifically noted as an important cause of strikes, and in one, of turnover.²⁴ On some sites, conflict had arisen through con-

21. See N.S. Woods, *op.cit.*, p. 19.

22. See *Second Report on Efficiency in Road Construction*, p. 9; and *New Zealand Building Worker*, The New Zealand Carpenters' Union, Nov./Dec., 1974, p. 6.

23. See Howard G. Foster and George Strauss, "Labor Problems in Construction: A Review", *Industrial Relations*, Vol. 11, Oct. 1972, p. 311.

24. There appears to be a seasonal pattern to stoppage activity in the projects section of the construction industry. A seasonal index for stoppage frequency for 1967-73, derived in the usual way, shows frequency to be highest in the mid-winter (July-September) and summer months (Jan.-March).

(Footnote 24 is continued on the next page.)

struction workers having to work in operating areas of existing premises where conditions were unusually hot and noisy. Dangerous work was a more frequently mentioned factor, although the importance attached to it varied with the type of work. Greatest emphasis was placed on it where high structures were involved. Two effects of danger were noted. First, where the work involved danger there was a high potential for disagreement over safety. Second, dangerous work is seen to attract or produce aggressive workers who have little allegiance to the employer. As one construction superintendent argued: "These people constantly live with danger. When they come to work, they take their lives into their hands. It means the men take a casual attitude to their job - they live from day to day." Danger was also seen to promote group cohesion. The role of the weather in arguments over safety was often mentioned.

Several managements and union representatives argued that facilities on projects are "not good enough". One industrial relations officer said construction workers now expect their working conditions to be as good as those of "people in offices" and saw this expectation not being fulfilled, and conflict resulting, because "management has not caught up with problems" such as "poor conditions". Several managers could see the point of worker claims for better facilities, especially as workers on projects spend more time working outdoors than do even those in other sections of the construction industry.

A number of managers contended that the nature of some of the work attracts "young, aggressive" workers, oft cited examples of which work were rigging and steel erection, and scaffolding. It was suggested that delegates elected by those

(Footnote 24 continued):

Seasonal Index, Stoppage Frequency

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
108.25	120.33	121.91	80.76	95.12	93.62	143.67	167.92	120.73	76.95	65.76	4.98

Source: Derived from Department of Labour strike returns.

A possible explanation of this pattern is that the hot and dry conditions of summer and the cold and wet conditions of mid-winter increase the probability that stoppages will occur in those months.

performing such work reflect the workers' aggressiveness. A union official argued that entrant riggers are not aggressive but soon become so. One manager contended that all construction employees, including management, are forceful by nature and that this is a major cause of conflict.

The union and management questionnaires contained several questions relevant to the "nature of work argument". Both parties were asked to assess the importance of the forceful, combative character of construction workers, disagreements over safety matters, dangerous work and dirty work as causes of strikes on their contracts. As can be seen from Table 9, a majority of unions attached considerable importance to the forceful character of construction workers. Both the unions considering it of no importance (i.e. 5) were from low stoppage level contracts. Most managements also rated the factor of at least average importance. On the basis of size of mean response, unions rated it seventh equal in importance of the 19 assessed, and managements sixth. In most cases there was considerable agreement between management and union responses from the same contract. There was, however, disagreement in the responses of delegates from one contract, with equal numbers rating the factor very important (1), of average importance (3) and not important (5).

There was a sharp difference between management and union assessments of the importance of disagreements over safety matters. A majority of managements considered them of no importance, while a majority of unions regarded them as very important. Moreover, there was a fairly high degree of concordance among the responses of either party. On the basis of size of mean response, unions accorded the factor very high importance (second equal of the 19 assessed), while managements gave it very low importance (sixteenth). Not surprisingly, management and union responses from the same contract tended to differ, with the union generally according it more importance than did the management. There was also some disagreement among delegates from the same contract. In one case, three delegates considered it very important, one of above average importance and two of average importance. In two

TABLE 9

The Perceived Importance of Factors Relating to the Nature
of the Work as Causes of Strikes

		Scale of importance						
		1	2	3	4	5	No	Mean
		Very	Above	Average	Below	Not	Answer	response
		import-	import-	import-	import-	import-		SMR
		ant	ance	ance	ance	ant		
1. <u>Forceful</u>								
<u>Character</u> ^a								
Management								
responses								
(n=14)		0	2	6	2	2	2	3.33 2.73
Union responses		2	3	2	0	2	4	2.67 2.71
(n=13)								
2. <u>Safety</u>								
<u>Disagreements</u> ^b								
Management								
responses		0	1	3	2	6	2	4.08 3.34
Union responses		5	1	4	0	0	3	1.90 1.93
3. <u>Dangerous Work</u>								
Management								
responses		0	2	2	4	4	2	3.83 3.14
Union responses		4	0	2	2	1	4	2.56 2.60
4. <u>Dirty Work</u>								
Management								
responses		0	2	2	3	5	2	3.92 3.21
Union responses		3	1	3	2	1	3	2.70 2.74

Notes: a The forceful, combative character of construction workers.

b Disagreements over safety matters.

Source: Management and union questionnaires.

others, one delegate rated it very important and the other of only average or less importance.

The difference between management and union assessments of the importance of dangerous work, while pronounced, is less sharp than in the case of disagreements over safety matters. Some unions considered dangerous work less important than

disagreements over safety, while some managements saw the reverse to be true. In terms of size of mean response, unions rated the factor sixth in importance of those assessed and managements tenth equal. Management and union from the same contract assessed the importance of this factor differently in all but one case. Responses of delegates from the same contract, however, were alike. Both dangerous work and disagreements over safety matters were included in the questionnaires as the former embraces other possible influences on strikes than the latter, for example, the attracting or producing of aggressive workers mentioned above.

Management and union assessments of the importance of dirty work were similar to those for dangerous work, with unions again attaching relatively more importance to it. On the basis of size of mean response, unions rated this factor ninth in importance of those assessed and managements thirteenth equal. Again, responses of management and union from the same contract tended to differ, although in this case responses of delegates from the same contract also were generally different.

Factors associated with the nature of the work often seem important causes of stoppages and of some individual forms of conflict. Some are present to an extent in all construction work. For example, almost all facilities are temporary and most workers are at some stage exposed to the weather. While this may create a predisposition toward conflict, the variable influence of these factors is likely to produce different levels of conflict both within and among projects. Some projects are more dangerous than others just as certain jobs within a given project involve greater danger than others. The high level of danger associated with rigging and scaffolding is likely to be a major factor in accounting for the stoppage proneness of riggers and scaffolders. Similarly, complexity, arduousness and unpleasantness vary with the type of work and can be expected to produce variations in amounts of conflict at intra- and inter-project levels. To the extent that these factors differ among jobs, the forcefulness of various types of workers can also be expected to

differ. In this section of the construction industry, the nature of the work differs significantly both among occupational groups and projects and probably accounts for much of the difference in amounts of conflict at those levels.

3. Cohesiveness, Mobility and the Kerr-Siegel Hypothesis

Several important elements of the Kerr-Siegel hypothesis, such as isolation, a homogeneous and cohesive group of workers and internal immobility, appear relevant to the projects section of the construction industry. On many projects, a high proportion of workers live in camps separate from the wider community and numerous sites are geographically isolated. Workers are also often cohesive in a conflict with the employer. In the questionnaire, managements were asked: "Is your workforce generally cohesive in the event of a stoppage. For example, if a group of workers, e.g. carpenters, goes out on strike, does the rest of the workforce normally give them support?". Unions were asked a slightly different question, namely: "Is the membership of your union cohesive in the event of a stoppage at this project? For example, if a group of your members goes out on strike, does the rest of the membership give their support?". Responses were as follows:

TABLE 10
Responses to the Question "Is Your Workforce Or
Membership Cohesive?"

	Unqualified YES	Qualified YES	Qualified NO	Unqualified NO	"Varies"
Management responses (n=14) (workforce cohesion)	5	4	1	3	1
Union responses (n=11) (member- ship cohesion)	8	1	1	1	0

Source: Management and union questionnaires.

Most managements said their workforces were always or generally cohesive. The four that said theirs were not all came from contracts with low stoppage propensities. Almost all unions said their memberships were invariably cohesive in the event of a stoppage. The two answering with qualified or unqualified "NO"s came from contracts where managements also reported a lack of cohesion. While workers are generally cohesive they are not homogeneous. Rather, they are differentiated along occupational lines.

There is also a widely held view among union officials and delegates that workers and managements in the projects section of the industry are on different "sides" and that conflict is inherent in industry.²⁵ As can be seen from Table 11, only four of 12 responding project unions saw managements and workers to be on the same "side". Three of these came from low stoppage level contracts and the other from a moderate stoppage level one. Responses from more than one delegate were received from three contracts, but in each case they were identical. Most managements, however, consider the two parties to be on the same side, with only four seeing them to be on different sides. Of this latter number, three came from highly stoppage prone contracts. Unions were also asked to say whether they thought members of their project's management would answer in the same way as they did. Of the nine which said management would, two were incorrect. Only two unions said that management would answer differently, and one of these was incorrect. From one other contract, one-half of the delegates said "YES" to this question, and the other half "NO". All managements but one felt their workforce would definitely or probably give the same answer as they did. Four were incorrect in their judgments. As regards responses from the same contract, in four cases the management said the parties were on the same side while the union said they were on different sides. Unions generally considered the parties to be on different sides but managements considered them to be on the same side. Both unions and managements, however, usually felt that the other party on the contract would answer the same as they did.

25. No definition of side or conflict was supplied, it being left to each respondent to interpret these terms.

Response patterns were much more similar when managements and unions were asked whether conflict is inherent in industry. A big majority in both cases said conflict was inherent. Reasons given for their answers by managements responding in the affirmative included:

- "Where one section is asking the other continually for improved conditions and wages and the other is in business to show a profit, two opposing forces are at work and conflict is often the way compromises are reached."
- "As long as there are employers and employees conflict can only be reduced and not eliminated. Elimination would require a change of human nature."
- "Because of our industrial history the workers' lot is improved only by dispute...nothing is given without asking (or demanding). Things given are treated with suspicion and leave the feeling: 'There must be some more there to give'."

Some of the reasons given by unions answering in the affirmative were:

- "Workers create the asset for the bosses and realise this. Therefore they must engage in struggle to obtain their rightful share of the asset."
- "The bosses are always trying to push the men as far as they will go."
- "...the unfair system."

It is curious that seven managements said workers and managements are on the same side but that conflict is inherent in industry. Two unions also answered in that way. It may be that they saw the parties as on the same side in the undertaking of a project but as in conflict over the distribution of the rewards associated with it. One management and one

TABLE 11

Perceptions of the Existence of Conflict

	Workers and managements on projects are:			Is conflict inherent in industry?	
	On same "side"	On different "sides"		YES	NO
Management responses (n=14)	10	4	(n=12)	8	4
Union responses (n=12)	4	8	(n=12)	9	3

Source: Management and union questionnaires.

union said workers and managements are on different sides but that conflict is not inherent in industry. Management and union from the same contract held different views on whether conflict is inherent in four cases. For contracts from which more than one delegate replied, responses of delegates were identical in two of three cases.

Concerning occupational mobility, a high proportion of foremen on several contracts were appointed from among the employer's manual workers. Eight managements said 65% or more of their foremen had been appointed in this way.²⁶ But it appears a lower proportion of managerial staff above the foreman level began in the industry as manual workers. When asked how many manual workers in the last few years had been appointed foremen and how many people who began as manual

26. The following responses were received to the question: "Of foremen on this contract, what percentage has been appointed from among your company or department's manual workers?":

	Percentages										
	0	2	10	25	40	50	65	75	80	90	100
Management responses (n=13)	1	0	1	2	1	0	1	1	1	1	4
Union responses (n=8)	2	1	0	0	0	1	2	0	0	0	2

Source: Management and union questionnaire.

workers had been appointed to management positions above the foreman level, responses were as follows:

TABLE 12
Extent of Appointment to Foreman Level or Above

	MANY	FEW	NONE
<u>No. appointed foremen</u>			
Management responses (n=12)	3	8	1
Union responses (n=9)	4	5	0
<u>No. appointed above foreman level</u>			
Management responses	2	6	4
Union responses	2	4	3

Source: Management and union questionnaires.

Some of the conditions necessary for the development of an isolated mass are present in the projects section of the construction industry. As regards the nature of the work and worker aspect of the Kerr-Siegel hypothesis, we have already noted the importance of such factors as arduousness and unpleasantness, danger, casuality, the forceful character of construction workers and so on. While some of these factors, along with those making for isolated masses, are certainly important influences on conflict, we have studied them in contexts other than the Kerr-Siegel hypothesis. Most have their origins in technical conditions of the industry which are among the fundamental causes of conflict rather than in the essentially secondary ones constituting the Kerr-Siegel hypothesis.

4. Multiplicity of Unions

Construction work, especially on large projects, calls for a wide range of skills and so a labour force composed of numerous occupational groups. The identity of these groups is manifested in the form of numerous craft unions. The consequent multiplicity of bargaining relationships is itself

seen as a possible source of conflict.²⁷ Furthermore, the existence of several unions each with claims to particular aspects of the work opens up possibilities for jurisdictional and demarcation disputes.²⁸ It also gives rise to numerous possible earnings relativities.²⁹ Employers bid up the wages of groups in short supply or strategic positions with the result that disparities are created and pressure is exerted by others to restore established relativities. It is even suggested that each union may, by a process of "leapfrogging", attempt to better the settlements achieved by others.³⁰ This argument, which might be called the "multiplicity of unions" one, appears to relate largely to collective and certain employer-initiated forms. While it has its basis in the nature of construction work it also owes something to the tradition of craft unionism in the industry. It is conceivable that all workers, at least on projects, could belong to a single union. The argument suggests that the greater the number of unions, the stronger their individual identities and claims to certain work, and the more numerous and rigid the earnings relativities, the greater will be the level of conflict on a project. It may have wider implications in so far as relativities of earnings and conditions exist among projects and as demarcation disputes may lead to sympathy actions by union members on other projects.

The number of unions represented in a workforce varies considerably among contracts. Numbers of unions on the 14 contracts covered by the questionnaires ranged from one to 11. As a rule, private enterprise contracts have more unions represented than do government ones. On one of the private contracts surveyed, however, all unions had merged for its duration to form a "combined" union, while on another, one of

27. See Foster and Strauss, *op.cit.*, p. 311.

28. See Foster and Strauss, *op.cit.*, p. 311; and Mills, *op.cit.*, pp. 48-9.

29. See Stuart Jamieson, "Regional Factors in Industrial Conflict: The Case of British Columbia", *Canadian Journal of Economics and Political Science*, Vol. XXVIII, Aug., 1962, pp. 413-414; and D. Quinn Mills, "The Construction Industry", *Proceedings of the Industrial Relations Research Association*, Spring 1970, p. 502.

30. Mills, "The Construction Industry", p. 502.

the unions represented its own members and also those of another union. Under a combined union of this sort the individual unions do not lose their identity, but for the purposes of the project combine to set up a single union agency to operate on behalf of them all. On government contracts all hourly-paid workers belong to the New Zealand Workers' Union (NZWU), while clerical, supervisory, and other "staff" personnel may belong to the Public Service Association (PSA). Details of numbers of unions on contracts at peak labour force are presented in the following table:

TABLE 13

Number of Unions Represented on Surveyed Contracts

	No. of Unions:					
	1	2	3	5	10	11
Private contracts (n=8)	1 ^a	1	2	2	1	1
Government contracts (n=6)	1	5	0	0	0	0

Note: a A "combined" union.

Source: Management questionnaire.

a. Multiplicity of Bargaining Relationships

Bargaining relationships on construction sites are potentially very complex and numerous. Not only are there often several unions but also several employers in the form of contractors and subcontractors. Moreover, the client may be an indirect party to such relationships. Each employer may make a separate agreement with each union represented in the workforce, and in some cases each such agreement must be acceptable to the client. It is reasonable that the more numerous the bargaining relationships, the greater is the potential for disagreement, and so conflict, between the various parties.

Several managements argued that conflict would be reduced

if there were only one employer dealing with one union. It was suggested that MOW projects often have lower stoppage levels than private enterprise ones because they are covered by a single, all-embracing agreement negotiated between the employer and a single union.³¹

It might also be suggested that conflict resulting from multiple bargaining relationships may be reduced by the negotiation of a single, composite agreement between all unions and employers on a particular contract. Such agreements are in fact now quite common. However, they do not eliminate bargaining relationships so much as change their form. Unions must now agree among themselves on a common set of claims and the personnel to represent them before they enter into negotiations. Employers also have to reach common ground among themselves as a prerequisite to negotiations. It may be of course that it is easier for several unions (or employers) to agree among themselves and present a united front in negotiations than for each of them to reach a separate agreement with the employer or employers (or unions). On some sites unions are combined, especially for negotiating purposes, in the form of either a combined union or a job committee. Even with a composite agreement, however, bargaining relationships may still be complex if individual unions later seek above-agreement conditions and rates for the performance of certain work.

b. Job Demarcation

Different types of construction work require different skills and result in different occupational specialisms. In some cases a separate union exists for each major occupational

31. This agreement (Document 1083 and variations) is negotiated between the State Services Commission and the New Zealand Workers' Union, except where inter-service considerations are involved in which case the negotiating parties are the State Services Co-ordinating Committee and the Combined State Services Organisation. The legislation governing registration of unions and the making of agreements and awards in the private sector does not apply to government employees.

grouping, while in others a single union covers several occupations. Where there are separate unions, strong lines of demarcation, defining the preserves of each occupation, are likely to exist. When these lines are threatened or crossed by members of another union, conflict results. Even where there is a single union, lines of demarcation may still exist between the work of various groups of members. It might be expected that the greater the number of unions and/or occupational groupings represented on a site, the greater will be the potential for conflict over demarcation.

The extent to which lines of demarcation exist and are enforced varies among projects. Several managers argued that certain unions, such as those of boilermakers, maintain their bargaining strength by rigidly enforcing demarcation lines. Boilermakers, for example, are seen to possess a relatively scarce skill of which they are "proud" and will allow no "dilution". They protect the value of their skill by ensuring no other workers perform "boilermakers' work". Demarcation is considered particularly important on projects employing boilermakers, riggers, engineers and some other trade groups.

Even on contracts where demarcation is important, however, managements often noted that relatively few stoppages result from it. While there can be 10 or more unions represented, the delegates often form job committees which settle many demarcation matters. As one industrial relations officer observed: "We have few demarcation strikes, but demarcation is everywhere". Another claimed only one demarcation stoppage, noting that such disputes were "normally settled on site by the job committee". Certainly members of job committees interviewed said such matters are generally handled by the committee and that there are few unsanctioned stoppages over them. Most job committee members, and on-site union representatives generally, claimed relations between their unions and others on the project were good. Of unions responding to the questionnaire, 16 from nine contracts described their relations with other unions on the site as good, only two unions from two contracts described their inter-union relations as fair and none described them as bad. For three of the first-

mentioned nine contracts, respondents almost invariably accredited their good relations to the existence and operation of a job committee.

On some projects, managers said "no tight demarcation" existed and consequently few or no demarcation stoppages had occurred. On two of these there was only one union, but on one other several unions were represented.

In the questionnaires, managements and unions were asked to assess the importance of frictions between unions as a cause of strikes on their contracts. Responses confirmed impressions gained from interviews, with almost all responding managements and unions considering this factor of little or no importance (see Table 14). On the basis of size of mean response, managements rated it only seventeenth in importance of the 19 assessed and unions eighteenth. Management and union responses from the same contract were either identical or similar in all cases. Responses of delegates from the same contract were also alike in two of three cases. In the other one, however, one delegate rated the factor not important (5) and the other delegate very important (1). This divergence could possibly be explained in terms of the very different types of trades represented by the two delegates.

TABLE 14
Perceptions of the Importance of Frictions between Unions
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	0	0	2	3	6	3	4.36	3.57
Union responses (n=13)	1	0	0	2	5	5	4.25	4.32

Source: Management and union questionnaires.

It was noted in the last chapter that five of 180 stoppages on projects over 1967-73 apparently involved demarcation issues. This gives some indication of the relative infrequency of demarcation stoppages. It appears that while demarcation lines are strict on some projects, potential conflict seldom becomes actual, often because of the joint action of unions.

c. Earnings Relativities

There is a potential multitude of earnings relativities on a construction site. Workers on a particular project will seek to maintain relativities with those on other projects and in other branches of the construction industry. Some may even maintain a relativity with related workers in other industries. On a project, relativities will exist between employees of the various contractors and subcontractors there. Within the labour force of a given employer they will also exist among all the unions represented, and may even occur between various groups within the same union. While relativities of earnings may be the most important, comparisons and relativities may also exist with respect to working conditions and other facets of a worker's "total remuneration". An increase in earnings or conditions in any of the above areas is likely to result in pressure being exerted in other areas for it to be applied there also. Should the employer resist this pressure, conflict will result.

On a number of contracts, relativity claims had led to stoppages. These contracts usually involved several unions. A union official who had been involved with one of them outlined the motive behind workers striving to maintain relativities in saying "it's a matter of pride. A worker has a personal stake in what others get. He feels downgraded if another group gets more." Stoppages over relativities can even occur on contracts where only one union is represented. Comparisons with similar workers elsewhere will still be important. An example concerns the carpenters in a particular labour force receiving the lowest tradesmen's rate there at a time when carpenters elsewhere were earning 20 cents per hour

more than them. These carpenters undertook stoppage action in an effort to restore this "external" relativity. It may be argued, however, that the greater the number of unions and separate agreements on a contract, the greater will be the number of relativities and so the potential for conflict.

The way in which earnings are determined on many construction sites itself produces possibilities for conflict over relativities. Often an agreement is merely the starting point for continuing negotiations. These frequently take place in an informal way between a foreman and delegate and concern rates and conditions for the performance of work in specific circumstances not necessarily envisaged or covered in the agreement. The result is a proliferation of "informal" agreements and deals, each one of which sets a precedent and disturbs existing relativities. As one industrial relations officer said, "we have allowances for everything. They grow and people become bush lawyers." Informally negotiated allowances can be not only numerous but also substantial, as on one site where such an allowance added \$40 to \$100 to workers' weekly earnings. Informal negotiations can occur even where a composite agreement has been made prior to the start of a contract. In one case, an industrial relations manager claimed that "unions wanted more negotiations on site. Deals were done left, right and centre". Such deals are seen to create precedents, the effect of which never completely disappears.

A number of managers and union representatives saw the fundamental difficulty as the way in which a worker's remuneration is arrived at. The basic hourly wage rate is considered unrealistically low with the result that numerous allowances are used to bolster earnings.³² Both the negotiation of these

32. Long hours are a feature of work on many projects. Some delegates claimed that the number of hours that have to be worked to earn a "reasonable living" can itself be a source of conflict. The numbers of hours regular overtime a week worked per man (usually over and above a 40 hour week) on the 14 contracts surveyed were as follows:

	Regular Overtime Hours a Week per Worker							
No. hours	4	7½	8	12	13	14	17	26
No. contracts (n=14)	2	1	4 ^a	2	2	1	1	1

Note: a Includes one "8 hours plus", and one 4 and 12 in alternate weeks.

Source: Management questionnaire.

allowances and the complexity of resulting awards and agreements can lead to conflict. One manager argued that the existence of a host of allowances produces a "philosophy" whereby "workers are always thinking 'what are my extras for that?'". He said "all sorts of things" are the subject of allowances including the working of overtime and shifts, manning, meals, transport, working in certain areas and so on. Another contended that allowances should be "scrubbed" and incorporated in a much higher basic wage.

In the questionnaires, managements and unions were asked to assess the importance of the bases on which wages are calculated as a cause of strikes on their contracts. As can be seen from Table 15, unions placed particular emphasis on this factor. Those from both government and private contracts tended to consider it important, although only one of the five rating it very important came from a government contract. On the basis of size of mean response, unions accorded this factor second equal in importance of the 19 assessed. There was a diversity of management responses from both private and government contracts. Of the three considering it very important, one came from a government project as also did two of the six which considered it of below average or no importance. On the basis of size of mean response, managements also considered the factor important, rating it fourth of those assessed. There were several contracts for which both management and union assessments were identical, although for four others the union rated it more important than did the management. There was some disagreement in responses of delegates from the same contract. In one case, three delegates considered it very important while two others accorded it below average importance.

On some projects the client was seen to be deeply involved in the relativities question. Where the client employs large numbers of workers in production facilities adjacent to the construction site, he exerts pressure on the contractor to avoid establishing precedents which might "flow-on" to the production workers. The contractor sees this pressure as lowering his bargaining flexibility, in that "we must complete

TABLE 15

The Perceived Importance of the Bases on which Wages
are Calculated as a Cause of Strikes

	Scale of Importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	3	2	1	4	2	2	3.00	2.46
Union responses (n=13)	5	2	2	1	0	3	1.90	1.93

Source: Management and union questionnaires.

the work by the due date but not set any precedent". One manager saw conflict resulting because "its difficult to make deals as they may not always be acceptable to the client". In such situations, however, it is difficult to avoid setting precedents as construction workers are often forced to work in production areas with an alien environment of heat, steam and so on. For performing such work they claim "enormous allowances" which, if paid, "embarrass the client". The workers are also seen to derive a bargaining advantage from the presence of fellow union members among the production employees who could stop work in sympathy if requested.

Several managers and union representatives suggested that Ministry of Works' projects often have lower stoppage levels because of the existence of fewer informal allowances and agreements and fewer potential earnings relativities. Among MOW "wage" workers there is only one union which negotiates a comprehensive agreement covering all projects with the State Services Commission. This agreement covers rates and conditions for all workers and individual project managements and union officials are unable to make additional informal deals. Any variation in the agreement must be negotiated

between the NZWU and State Services Commission. The number of allowances is therefore strictly limited and precedent seldom arises through new ones being negotiated in particular circumstances. Moreover, the earnings of all workers are adjusted regularly as the result of the tradesmen's ruling rates survey which is employed in an attempt to maintain relativities with the private sector. The possibilities for disputes to arise over relativities in such a system are limited but not eliminated. A particular group of workers may still feel its earnings are falling relative to those of counterparts in the private sector (and so relative to other groups within the MOW).

The diverse range of work on a construction site can be the basis for a multitude of allowances and earnings relativities. Both the number of such relativities and the probability that they will be disturbed appear higher on some sites than on others. It might be expected that the variation in the number of relativities, and degree to which they can be upset, is a significant factor in explaining why some projects are more stoppage prone than others. Moreover, the disturbance of particular relativities may help why certain groups are relatively stoppage prone at a point in time.

5. The Work Group

We have implied in several places that the technology of construction projects produces distinct work groups. In some cases the group may be synonymous with the union but in others may form only part of a union. For example, both riggers and scaffolders constitute identifiable work groups although they, along with other types of workers, belong to the same union. Differences in work performed by groups result in differences in experiences, outlooks, loyalties and bargaining power. Some matters on a project concern only the members of a particular group and its representative may take them up directly with management. It would not be surprising, therefore, if a considerable proportion of stoppages involved only a

section of the labour force.³³ Of stoppages reported by managements in the questionnaire, 46% involved just one part of the labour force while another 19% involved more than one section but not the total. It is interesting that while government contracts involve only one union (or two, including the PSA) sectional stoppages constitute possibly an even higher proportion of all stoppages on government contracts experiencing such actions than they do on private ones. Sectional stoppages accounted for 68% of all stoppages on government contracts, as opposed to 36% of those on private ones. While the presence of sectional stoppages is symptomatic of the existence of work groups, it does not necessarily indicate a lack of cohesion among workers. We have already noted that most managements consider their workforces cohesive, as do union representatives their memberships. On many projects, a section of workers on strike is supported financially and/or through sympathetic action by other sections of the labour force. Financial support from fellow workers appears a major influence in some situations on the ability of workers to take conflict action. On some sites it seems that regular or special contributions ("levies") are made by workers toward a fund that can be employed in support of strikers. The total size of such contributions can be substantial, amounting possibly to \$5,000 a week on a large site (1000 workers each contributing \$5). They can be used to support

33. Most managements considered the decision to take strike action to be usually made at job or project level. Management responses to a question on the location of the strike decision are reported below. Unfortunately, this question was printed slightly differently in the union questionnaire, so that it included the additional word "other" in the statement "when other workers decide to take strike action...". Despite this, union responses are also reported.

	<u>Perceptions of Where the Decision to Strike is Made</u>				
	LEVEL				
	Job	Project	Job/Project	District	National
Management responses (n=14)	7	4	2	1	0
Union responses (n=12)	5	3	0	3	1

Source: Management and union questionnaires.

workers on other contracts as well as those on the one where they were contributed.

Some groups might be expected to take direct action more often than others for a number of reasons. First, the nature of the work and workers varies among groups. As noted, the work of riggers and scaffolders is particularly dangerous and this influences their inclination and ability to engage in conflict. Riggers are often seen to regard themselves as "iron men" or "kings" of the construction industry. Moreover, the work of boilermakers is often very dirty. It is also frequently alleged that the stoppage proneness of riggers and boilermakers derives in part from their occupational and cultural origins. Riggers are said often to be former seamen who, along with most boilermakers, come from Britain where notions of class are seen to be stronger than in New Zealand. While figures are not available, it appears from discussions that a high proportion of riggers are New Zealand-born and have never been seamen. The proportion of Britons among boilermakers though seems quite high. Some managements were sceptical of this argument, contending that New Zealand-born workers in these occupations are at least as "militant" as those from other countries. They suggest the nature of the work is the crucial variable and not the origin of the worker. This suggestion is appealing in that a considerable proportion of workers in some other trade groups are also from Britain yet these groups are not high stoppage ones.

A second reason why some groups are more stoppage prone than others is that bargaining power varies among them. Some are more "strategic" to the production process than others in that their absence can disrupt site operations more quickly. At certain times, for example, a contract will be able to continue operating longer in the absence of general labourers than it could in the absence of crane dogmen, riggers or boilermakers. Moreover, groups such as the latter two, which have some control over which workers in their occupational area the employer can hire, are sure of not losing any work "postponed" by a stoppage through the employer hiring others to do it. Demarcation also serves to "protect" work from

other groups. As an aside, because most construction work must be performed on site, construction workers are unlikely to lose as much future work to other workers in the event of a stoppage as are freezing workers who may lose stock to other works. While strong bargaining power does not necessarily produce stoppages, the employer is unlikely to yield to it without it being exercised if wide ranging precedents may be established by so doing.

In many situations the work group is the key unit on a construction site. It might be expected therefore that the strongest loyalties of members will be to their group and that these might at times come into conflict with those of members of other groups. Relations on most sites, however, are claimed to be good not only among unions but also work groups. Few managers or union representatives interviewed noted the existence of significant inter-group conflict. In the questionnaires, managements and unions were asked to assess the importance of friction between occupational groups as a cause of strikes on their contracts. It can be seen from Table 16 that both parties tended to consider this factor of little importance, although they rated it of more importance than they did frictions between unions. The one management which rated it of above average importance, for example, considered frictions between unions of no importance. Similarly, the union rating it very important considered frictions between unions not important. On the basis of size of mean response, unions rated this factor only seventeenth in importance of the 19 assessed and managements thirteenth equal. Management and union responses from the same contract were similar or identical in six of seven cases. Responses of delegates from the same project also tended to be alike except for one where a delegate rated the factor not important while the other delegate rated it of average importance.

6. Delegates, Officials, and Unions on Projects

Often projects are situated some distance from centres of population and so from union district or head offices. It is

TABLE 16

The Perceived Importance of Friction between Occupational
Groups as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	0	1	1	8	2	2	3.92	3.21
Union responses (n=13)	1	0	3	0	5	4	3.89	3.95

Source: Management and union questionnaires.

suggested that the consequent occasional unavailability of union officials has led to stoppages.³⁴ The implication is that delegates and workers are more prone to take stoppage action in the absence of officials than otherwise. It appears the key union representatives on projects are those located on-site rather than elsewhere. This results largely from the nature of the industry. Difficulties arising from the geographic remoteness of projects are compounded by the many commitments of officials which make it hard for them to devote the time required to adequately deal with project matters. On sites where many unions are represented, the potential for non-availability is even greater because of the number of officials concerned. Even where a project is located close to a population centre these difficulties may still exist. Officials are often few in number and hardpressed to meet even their regular commitments. Moreover, the size and complexity of some projects makes it difficult for an off-site official to readily establish contact with his members.

The basic difficulty is that while many officials are located off site, anything of importance occurs on site. The

34. See, for example, *Challenge Newsletter*, Northern and Taranaki Labourers' Union, Feb. 1974, p. 5.

needs of the project can only be met there and it seems inevitable that local union leadership, in the form of on-site officials or delegates, will develop. It also appears inevitable that these representatives, rather than off-site officials, will be regarded by the workers as their leaders. This indeed seems the case on most projects. As one manager argued, "the situation throws up leaders and these are usually strong men". Several delegates contended that only workers on site "know what is happening" and only at this level can most matters be handled. Speed is the essence and this is something on-site representatives can supply.

Judging by the experience of several projects, delegates and on-site officials have become powerful primarily because they are best able to meet the needs of members. When workers seek representation they naturally turn to their delegate who is available and will act on their behalf. Delegates, as opposed to off-site officials, are seen to "deliver the goods". As one argued: "The job committee gives service. To get things done you have to have power at the shop floor." Some delegates are seen by managements to have "fought well for their members", despite their having used "every weapon at their disposal". The process of selection by performance appears to have produced some very able on-site union representatives. One delegate described the process in saying "some delegates here have been ones elsewhere and have shown they're capable". Another said "delegates move from job to job. The men know who the experienced ones are." A number of managements and union officials commented that some delegates are very able, "clever" and experienced. They are also often considered "very militant". One manager even argued that some union officials are of "lacklustre calibre" by comparison. It is not surprising that such delegates assume powerful positions. A personnel officer went as far as to say that a particular delegate "is the most powerful union man in the country". Certainly on some sites, power is vested solely in the delegates. As one said "the men run this job not union officials", and another that "the men take far more notice of the job committee than they do of union officials".

On some contracts with several unions, delegates and on-site officials are formed into job committees. This committee is effectively the policy-making union body for the contract. It handles inter-union matters as well as some of the negotiations with management and generally provides co-ordination for union activities. Delegates see it as a means of gaining "strength through unity" and appear to owe it considerable allegiance. One industrial relations officer even argued that the "delegate's first and last loyalty is to the job committee. There is not even a second loyalty to trade unions". It appears the workers also often give allegiance to the committee. On a number of sites delegates said the job committee is well respected and supported by the workers, claiming, often along with managements, that the committee is "in control" of the site.

For the contracts covered by the questionnaires, numbers of delegates and on-site officials ranged from two to 40 with the average number for a contract being 13. On smaller private enterprise contracts there tends to be one delegate for each union although sometimes a delegate will represent two or more unions. On larger private ones, there is often a delegate and a co-delegate for each union. In some cases the delegate is also a union official, in the sense of being part-time secretary or president of the local branch or sub-branch. On government contracts, there is usually a local secretary of the New Zealand Workers' Union along with several delegates. On larger ones the secretary is full-time and there are also "check inspectors" for each residency providing an intermediate level between the secretary and delegate. On private contracts the percentage of the typical delegate's working week spent on union business varies. On large ones he is often almost or completely full-time on union business but on small ones is so engaged for five per cent or less of the week. From questionnaire responses, it appears most of the time spent on union business by delegates or on-site officials is paid for by the employer. Incidentally, managements were asked to comment from their point of view on the desirability of union delegates/officials being engaged full-time (or almost full-time) on union business. Reactions

varied from the six which considered it generally desirable to the three which saw it as undesirable. Some of the first mentioned six said, however, that the project would have to be of sufficient size to warrant it. Some of the advantages claimed included "speedy contact" between management and union and the recognition it gives to the union. Four managements saw both disadvantages and advantages with full-time delegates. One of the disadvantages mentioned was a tendency for delegates "to find problems to justify their existence". A manager said he would "dread the day when... a project...would warrant it". One management said it had "no say" in the matter, but nonetheless appeared to tolerate it.

In the questionnaires, managements and unions were asked to assess the importance of the inaccessibility of union officials due to the locality and project nature of the job as a cause of strikes on their contracts. It is clear from Table 17 that most unions considered this factor of some importance. Two of those rating it very important came from relatively small projects, only one of which was geographically isolated. While no union from a government project rated it very important, two such unions considered it of above average importance. Most delegates from two contracts with large job committees rated it of above average or average importance. Several managements also accorded the factor some importance, although the bulk clearly did not. Of those rating it very important or of above average importance, two came from contracts with job committees and all were from relatively isolated ones. While one government contract was in this group, managements of most other government ones, along with those of three private ones, rated it of no importance. On the basis of size of mean response, unions rated this factor fifth in importance of the 19 assessed and managements seventh equal. Management and union responses from the same contract were invariably different with, in two cases, the management answering "not important" and the union "very important". A similar disparity was present in the responses of two delegates from the same project, although in the other two cases where more than one delegate responded, answers were similar.

TABLE 17

The Perceived Importance of the Inaccessibility of Union
Officials as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	2	2	1	0	7	2	3.67	3.00
Union responses (n=13)	3	3	1	0	2	4	2.44	2.48

Source: Management and union questionnaires.

In interviews, some managements and union representatives mentioned a lack of contact between officials and delegates. In some cases there appeared to be animosity between them. One manager claimed that "officials have refused to come here. They are afraid of being embarrassed by the delegates. They won't battle the delegates." It was even alleged that a union secretary was barred from a site by the membership. Another manager contended that officials "can't face up" to some delegates who might "humiliate them". One set of delegates said that while officials did not control the job, they kept in "constant contact" with officials and "did not usually go against them". Another set said union officials "don't know what's happening" on site and "get out of touch". In particular, it was mentioned that some unions have a small proportion of members working in the construction industry and so their officials do not concentrate on its "problems". In this respect, a single industrial construction union with each trade maintaining its identity, was considered desirable.

In the union questionnaire, project representatives were asked whether they would describe the links between their delegates and officials on the site and district officials as strong, fairly strong or weak. Respondents from six contracts

said their links were strong, sometimes mentioning the availability of a local full-time secretary or frequent contact with a district official. Of these, four were government contracts. Representatives from two sites said links were fairly strong, while that from one said they were weak and implied that officials were too busy with "major matters" to worry about project matters. Responses from three other contracts varied. In one case, four delegates said links were weak, one that they were fairly strong, and another they they were strong. Most of the first four delegates mentioned problems of location, while one said his union was "mainly concerned with light industry and does not seem to be in rapport with conditions on a construction site". In the other two cases, one delegate said links were strong while the other said they were fairly strong, one mentioning the relative lack of availability of the union organiser due to the wide area he had to cover. Some diversity in responses from contracts with several unions was to be expected.

Union respondents from nine contracts said they often consulted the union district office on matters relating to local project disputes, while those from three said they sometimes did. Several of those replying "often" also said, however, that links were weak or only fairly strong. As regards contact with head office, respondents from six projects said they often consulted national office on local disputes, those from three said they sometimes did, those from two said never, while one of the two delegates from a particular project said "often" and the other "sometimes". Those replying "never" were from relatively small projects, one of which also reported weak links with district officials.

Managements were also asked to comment on the links between union officials and their members. Specifically, they were asked whether, from a management point of view, the control exercised by union officials over their members in the project labour force was too strong, about right, or too weak. Responses were as follows:

TABLE 18

Management Assessments of the Control Exercised by
Union Officials

	Too Strong	About Right	Too Weak
n = 14	0	5	9

Source: Management questionnaire.

Significantly, no management regarded the control exercised by officials as too strong. Of those considering it too weak, six came from private contracts and three from government ones. Comments given in explanation by some of these included: "The formation of a 'job committee' under strong and experienced site leadership seems to scare off officials"; officials "have no control whatsoever"; "officials have been called in (after direct action has been taken) and ... told 'agree or clear off'". All managements from projects with large job committees were among those considering the control of officials too weak. Of the five managements regarding the control as about right, three were from government contracts and all from low stoppage level ones.

Managements were also asked to assess the control exercised by delegates over their members. As can be seen from Table 19, three considered this control too strong. Comments given by these managements, all of which also saw the control of officials to be too weak, included: "delegates ... see their allegiance as primarily to the job committee rather than to their union office"; and "the delegates tend to use direct action more frequently and more readily than would the officials". Two of these were from highly stoppage prone contracts with job committees. Four of the five managements considering the control of delegates about right assessed the control exercised by officials in the same way. The other one had judged the control of officials too weak. Two of the five were from government contracts. Managements considering the control exercised by delegates to be too weak seemed to attribute this largely to a lack of training and experience on the part of delegates.

TABLE 19

Management Assessments of the Control Exercised
by Union Delegates

	Too Strong	About Right	Too Weak	Other
n = 14	3	5	4	2 ^a

Note: a Consists of one "some too strong, others too weak" and one "varies".

Source: Management questionnaire.

There can be no doubt that on many projects the on-site officials and delegates are the most important union leaders. We have argued that this results from the nature of the industry. The question remains whether on-site representatives are more prone to take action than those off site. Clearly this cannot invariably be the case as some contracts have no stoppages. Even on those that have experienced stoppages, it is difficult to say that the delegates are stoppage prone. If the delegates are the local leaders and if the contract has conflict producing characteristics, it is inevitable that the delegates will appear to be the leaders of conflict situations. This does not mean that the delegates in any way "create" the stoppages, but that they react to situations producing them. Off-site officials may react differently and attempt to avoid conflict, but are removed from the actual situation and from the pressures exerted by the participants. If these officials were permanently located on site, they may react in a similar way to delegates and if they did not, would be unlikely to last there long as the workers would probably replace them. It seems that the same factors making on-site representatives apparent leaders in conflict situations would also make officials leaders in such situations if they were located on site.

One manager argued that if six men, mainly delegates, were deported "this country would be done a great favour". This view was not, however, shared by those on projects where delegates played a major role. One such manager contended

that "it's ——— to argue that the climate of industrial relations would change if five or six delegates were done away with. If the job delegates were shot, nothing would change." He argued that there is at least one advantage in having "strong delegates", namely they are "able to produce a compromise the company would never be able to impose". Another reflected similar sentiments in saying "it wouldn't help to shoot the job committee. They are probably more moderate than the men pushing them. The men are very pushy and make stupid requests. The delegates turn many down." An industrial relations manager claimed that "it's nonsense that stoppages would fall if you got rid of the delegates. Worse ones would come forward. When (the key delegates) are away from the site there is chaos". Clearly managers of high stoppage level contracts on which there were several delegates, do not see the delegates as "creating" conflict but as reacting to its more fundamental causes.

Despite this there is a tendency among some managers and union officials to see conflict as resulting from the work of "agitators" who are often seen to be delegates. One official claimed there are "a few anarchist delegates who feel they are above the book". Several managers contended "there are agitators who want to disrupt the job and ruin the system". These are often seen to be communists. Views on whether communists play any role in the industry differed greatly. One manager argued that "some delegates are communists" while another said he had "never come across an agitator planted by the communists". Several said they did "not adhere to a Red conspiracy theory", and one that "communists are too ideological to survive on a construction site". Certainly the members of a large job committee expressed a common sentiment among delegates in saying that "we are not sympathetic to communism. There are hardly any communists on this site."

A few managers also alleged that agitators, particularly those who are delegates, gain support by "intimidation and violence". While there have been reports of intimidation³⁵

35. See *Report of the Commission of Inquiry into Certain Allegations - "The Davison Commission"* (Auckland, March 1975).

the general opinion on sites visited was that neither violence nor intimidation occurred there. One personnel officer said, however, there was pressure, usually of the form "_____ off if you don't like it". Certainly some of the delegates acknowledged as most powerful, are regarded by those who know them as "men of integrity". On most sites there did not appear any need for violence or intimidation to gain support for delegates.

Some managers also argued that many delegates are "foreign" and are more conflict prone than New Zealand-born workers because of their more "rigid class attitudes". Again, there was a strong body of opinion against this argument. One manager vehemently disagreed with it, stating that "some Kiwi delegates are _____s". Another said some delegates are "foreign but part of the New Zealand workforce so that you can't identify the contribution" of their backgrounds. He added that, in any case "some Kiwi delegates are worse". It is interesting to note that one body of delegates turned this argument on its head in contending that many stoppages had occurred on a site because "a lot of foremen are foreigners who don't understand the local conditions". The same delegates also claimed that "if a delegate asks for entitled conditions he is called a stirrer".

In the questionnaires, managements and unions were asked to assess the importance of the presence of agitators as a cause of strikes on their contracts. As can be seen from Table 20, managements rated this factor more important than did unions. In fact no management considered it of less than average importance. Of those rating it very important, three were from private contracts and two from government ones. Of the private ones, two were highly stoppage prone and had job committees, and of the government ones, one had a medium stoppage level and the other a low one. The union rating the factor of above average importance came from a relatively small private project with a low stoppage level, while two of those considering it of average importance were from government ones. One of those rating it not important was also from a government contract. On the basis of size of mean response, managements

considered this factor the most important of the 19 they assessed but unions rated it only sixteenth. It is not surprising that management and union responses from the same contract were in all cases different, with the management, in all but one, considering it more important than the union. For two contracts, the managements answered "very important" while the union representatives largely answered either "below average importance" or "not important". Responses from delegates from the same project, on the other hand, were in all cases similar or identical.

TABLE 20

The Perceived Importance of the Presence of Agitators
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	5	3	4	0	0	2	1.92	1.57
Union responses (n=13)	0	1	3	3	2	4	3.67	3.73

Source: Management and union questionnaires.

These responses again highlight the importance of the frame of reference which is applied. Many managements consider leaders of workers in conflict situations agitators, while union representatives and workers may hold a very different view. For this reason, and others outlined in Chapter X, the "agitator argument" seems of minimum value in explaining conflict patterns compared with some of the more basic factors discussed.

7. Foremen and Project Managements

The project nature of construction means the management structure differs in many respects from those of other industries. A particular management group may be brought together only for the duration of a contract. The temporary and discontinuous nature of construction work and specialized character of contracts may make it necessary to hire specific management personnel from outside the organisation. Moreover, the group's goal is largely a technical one; to complete a structure in a given time. Not surprisingly, therefore, its key member is the project engineer. The management structure is itself seen by some to result in conflict.

Several managers and union representatives argued that the engineering and technical bias of management has resulted in staff being inadequately prepared to manage workers. As one industrial relations officer claimed, "construction companies are very engineering based and old fashioned in terms of management. Industrial relations techniques are non-existent in them." Another claimed that "the quality of industrial relations management is generally poor". The lack of adequate preparation and training is seen to be most evident in respect of foremen.

As noted previously, a high proportion of foremen are promoted from among manual workers in the industry. It seems in many cases they are given little or no training for the position. As one manager said, "no-one ever tells them what to do and so they make mistakes". One delegate expressed the sentiments of many in contending that "the quality of foremen is shocking. Very few of them know how to handle men." Among some delegates the criticism of foremen was particularly vehement. They, along with many managers, argued that foremen "need training in supervision". One delegate claimed foremen are often chosen for their technical ability, despite the fact that "someone may be a good tradesman but a bad foreman".

Many delegates and industrial relations managers, however,

argued that often foremen even lack technical ability. As one manager said "a lot of foremen don't even know their jobs. This causes a lot of trouble." A group of delegates expressed a similar view in contending that "a lot of foremen are not even tradesmen. They know nothing and that's where the trouble starts." Such sentiments were widely but not universally held. Assessments of the quality of foremen varied both within and among projects.

It seems this situation is a reflection of more basic features of the industry. The foreman's position is simply unattractive. He often has little or no authority but is subject to opposing pressures from higher management and workers. He gets little extra reward even though he is the first involved in conflict situations. In the past he has had the power to hire and fire and to make agreements. This has led to conflict and in some cases to foremen losing these powers. He is now in the unenviable, but possibly inevitable, position of being charged with getting the job done but having no authority with which to do it. Moreover, on some sites he is no longer accepted by the workers. He has become a staff member, a "white hat", whose loyalties now lie elsewhere and so he cannot be trusted. In the circumstances, it is not surprising that managements find it "very hard to get good foremen" or that "many workers won't take foremen's jobs".

In an industry such as this, foremen will be involved in conflict situations, irrespective of their ability or training. Those entering the position are often subjected to intense pressure. While pressures come from several directions, one manager claimed that "if the men can't bargain with the foreman they set him up and attempt to get him dismissed". Certainly, it appears foremen often "get disgruntled". The foreman is as much a result of the situation as are the workers. Variations in the quality of foremen may help explain differences in conflict at work group and project levels, but this is a precipitating factor, being itself a result of more basic causes.

Complaints about management were not confined to foremen.

An alleged lack of managerial expertise in some cases has already been noted. This is often attributed to the traditional technical orientation of management, which in the minds of some, should be changed. As one industrial relations manager said "we need a change in thinking from the top down". Another criticism of managements derives from the nature of the project. It was sometimes contended that real decision-making power lies not on the project but in head office. The result is that workers feel they are "only dealing with office boys". A variation concerns the role of the client in management. On some sites it was argued that the job of project management was made difficult because of interference by the client. One manager claimed "the client looked on from the sideline and when something came up, they wanted a say. The client pulled the strings." Some delegates reacted to this situation by feeling they were not only in conflict with the contractor but also the client. As one said "the men are dealing with hidden faces - the board of (the client)". Another expressed his attitude to the client in saying "we are fighting one of the biggest monopolies in the country".

In the questionnaires, managements and unions were asked to assess the importance of the inaccessibility of top management due to the locality and project nature of the job. It is clear from Table 21 that there was a sharp divergence between management and union responses to this question. Unions generally accorded the factor considerable importance, while most managements accorded it no importance. Most of the unions rating it very important were from fairly small, and in two cases, isolated contracts. Of the six which rated it very important or of above average importance, three were from private and three from government contracts. Two of the six contracts had high stoppage levels, one medium and three low. The one management considering it of average importance was from a government contract. On the basis of size of mean response, unions rated this factor fourth in importance of the 19 assessed and managements only eighteenth. Management and union responses from the same project were invariably different, with the management in all but one case attaching less importance to the factor than did the union.

TABLE 21

The Perceived Importance of the Inaccessibility
of Top Management as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	0	0	1	2	9	2	4.67	3.82
Union responses (n=13)	4	2	0	0	2	5	2.25	2.29

Source: Management and union questionnaires.

It is interesting to compare these responses with those presented in Table 17. We see that managements tended to consider any inaccessibility of union officials a more important cause of strikes than any inaccessibility of top management. Seven managements gave the two factors equal rating, but five considered inaccessibility of union officials more important than that of top management. Of this latter number, two rated union inaccessibility very important or of above average importance but management inaccessibility of no importance. Six unions rated the two factors of equal importance.

While views on the importance of the inaccessibility of top management obviously differ, particular emphasis must be placed on those of union representatives. As far as worker behaviour is concerned, all that is required is that workers consider top management to be remote. Certainly, at least some of the contracts for which unions considered the factor an important cause of strikes had high levels of stoppages and of some individual forms of conflict.

8. Size of Construction Sites

During interviews several ways in which size might influence conflict were mentioned. It was suggested by some managers and union representatives that impersonal relations and attitudes develop as sites increase in size. Moreover, several managers argued that the potential for conflict increases with size, in that the greater the number of work and trade groups employed, the greater the probability that the "traditionally militant" ones will be among them. It was also implied by some managers and delegates that workers' bargaining power is greater on large contracts because of the financial commitment involved and so lesser ability of a contractor to withdraw from the contract. It was argued on one site, for example, that if the contractor were to withdraw it would be difficult to complete the job as no other contractor in the country possessed the necessary experience or technical knowledge. It might be argued that the contractor on a large site therefore has a greater incentive to settle short of a stoppage, but in so far as his ability to do so is not significantly different from contractors on smaller sites, conflict from this cause could be greater on large sites than small ones.

While not all managers mentioned size as a cause of conflict, more managers than union representatives placed emphasis on it. One construction superintendent commented "we have made a deliberate attempt to keep down the number of men on site. We've let out as much as possible to subcontractors. This must be the trend if labour trouble is to be avoided." Managers regarding size as important were associated with contracts ranging from large to small.

Construction contracts are typically large employment units. The average peak labour force for the 14 covered by the questionnaires was 489. The average manufacturing unit labour force, by comparison, was only 30 in 1971-72. Even when the average labour force over the duration of a contract is considered, they are still among the largest employment units in the country. Peak labour force on the contracts surveyed ranged from 64 on the smallest to 1,400 on the largest.

The figures on some projects would be much higher if the labour forces of all contractors and subcontractors operating there were included. Construction contracts or projects are also physically very large, often covering many acres or even square miles. If conflict is directly related to size, projects would have a predisposition toward higher conflict levels than the typically smaller units in most other industries.

If the level of conflict is related to size it might also be expected that larger contracts would experience greater stoppage activity than smaller ones. We tested this hypothesis by calculating the correlation between size of contract labour forces and a measure of contract stoppage activity.

TABLE 22

Correlation Coefficients: Contract Labour Forces
and Levels of Stoppage Activity, 1973

Variables	Correlation coefficient (<i>r</i>)
contract labour force, ^a stoppage frequency	0.499 (significant 0.10)
contract labour force, worker loss ratio	0.031 (insignificant)
contract labour force, man-days lost	0.474 (significant 0.10)

Note: a Contract labour force is the actual or estimated average number of workers (other than "staff") for 1973.

Source: Management questionnaire.

The relationship between size (in terms of labour force) and stoppage frequency is positive but weak, with size explaining only 24.86% of the variation in frequency among contracts.³⁶

36. The relationship is even weaker if unauthorised stopwork meetings are excluded from the frequency figure for Contract 5/1 (Table 5, Chapter XI) with the correlation coefficient now being $r = 0.381$ (insignificant). If man-days lost due to such meetings are excluded from the time lost figure for the contract, the other two correlation coefficients in the above table also fall to $r = -0.002$ (insignificant) and $r = 0.452$ (insignificant) respectively.

But, as can be seen from the second coefficient in the table, size bears virtually no relationship to the number of man-days lost per worker employed on a contract. As in the case of the meat industry, this result could have either a "real" or statistical explanation. It could reflect shorter but more numerous stoppages on larger contracts, or merely a downward bias resulting from the use of a labour force measure in both variables in the regression. If the unsatisfactory alternative of man-days lost is used instead of man-days per worker, the correlation coefficient clearly rises but, as noted in Chapter X, such a result does not clarify the issue and so the relationship between size and man-days lost per worker remains ambiguous.

As also noted in Chapter X, the "size argument" appears applicable to both collective and individual forms of conflict (as well as to employer-initiated forms). This suggests there is a positive relationship between size and the level of individual forms such as labour turnover, absence and accidents. We tested this hypothesis by calculating a series of correlations between the contract labour force on the one hand, and the rates of turnover, absence and accident frequency on the other. Results are reported below.

TABLE 23

Correlation Coefficients: Contract Labour Forces
and Levels of Individual Forms of Conflict, 1973

Variables	Correlation coefficient (<i>r</i>)
contract labour force, turnover rate	-0.217 (insignificant)
contract labour force, absence rate	0.300 (")
contract labour force, accident frequency rate	0.006 (")

Source: Management questionnaire.

It is clear that in no case is the relationship significant and therefore no weight can be placed on the signs of the coefficients. It appears size (in terms of labour force) either has

little effect on turnover, absence or accident frequency or that any effect is counteracted by the influence of other variables. This latter possibility is an interesting one as a high proportion of the largest projects are government ones which typically have relatively low levels of stoppages and sometimes of some of the individual forms. In the case of turnover and absence we are again faced with the possible statistical problem mentioned above. This possibility of downward bias does not, however, apply to the correlation involving the accident frequency rate (which does not incorporate a measure of the labour force), the coefficient of which is also seen to be low and insignificant.

Some managements placed considered emphasis on size as a cause of conflict. Our statistical analysis tested for size within the range of projects. It showed there may be a weak relationship between size of a contract and stoppage frequency, but there seems little or no relationship between size and labour turnover, absence or accident frequency. Nonetheless, conflict relative to other industries may still be related to the size of projects relative to the size of industrial units.

9. The Location of Sites

Location, as an influence on conflict, was mentioned in two contexts other than those already dealt with. It was suggested by some that characteristics of the region within which a project is located can influence its level of conflict, and by others that the level of conflict on past stages or contracts can influence that of subsequent ones on the same site. Concerning the first of these suggestions, an industrial relations officer explained the low stoppage level of a contract in terms of the "conservative" nature of an area that "has not had much to do with unions". A high proportion of the labour force on the contract was recruited from the local area and seen not to possess "militant attitudes". That it had formerly been a depressed region was also seen to militate against stoppages. While this explanation seems plausible, it

does not fit some of the details of the situation. This contract was part of a project involving one other major contract and several minor ones. While both contracts had a high proportion of local workers and were located on the same site, one had numerous stoppages and the other none. It appears the influence of the region was either not strong or modified by that of other factors specific to the contracts concerned.

At a more general level, the region probably has less of an effect on projects than on units in other industries. Projects have only a limited life and are often undertaken by workforces, a high proportion of which comes from other areas.³⁷ These factors, and related ones such as the existence of a camp, tend to reduce the effect of local attitudes and restraints imposed by the state of the regional economy.³⁸

These points are relevant to a claim that labour turnover

37. Estimates of the percentage of peak labour force coming from local districts (within a radius of approximately 30 miles) for the 14 surveyed contracts were as follows:

% peak labour force	0	8	10	33	36	50	60	70	75	85	90
number of contracts (n=14)	1	1	1	1 ^a	1	1	2	1	2	2	1

Note: a This figure was for present labour force, no estimate for peak labour force being given for this contract.

Source: Management questionnaire.

38. As an aside, most managements and some unions placed little or no importance on national disputes as a cause of strikes. In the questionnaires the parties were asked to assess the importance of national disputes as a cause of strikes on their contracts. Responses were as follows:

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=14)	1	0	3	2	6	2	4.00	3.27
Union responses (n=13)	1	2	2	1	2	5	3.12	3.17

Source: Management and union questionnaires.

On the basis of size of mean response, unions rated this factor fourteenth in importance of the 19 assessed and managements fifteenth.

on a particular contract was low partly because of the existence of unemployment in the region. In view of the high proportion of workers from other areas and who "followed" construction projects around the country, this feature of the local economy was likely to have been of little importance. The manager concerned implied as much in suggesting several other influences which were specific to the contract. The state of the local labour market may have a greater effect on turnover on projects located in urban areas where a high proportion of the workers may live locally.

On one project it was suggested that the existence of previous contracts on the same site influenced levels of conflict, and particularly of stoppages, in a number of ways. Union representatives and some management officers noted how certain facilities from earlier contracts were still in use despite their age and condition and how they had become sources of conflict. Managements also placed emphasis on precedents in earnings and conditions set earlier but still regarded as applicable by workers. Moreover, it was contended that high levels of conflict in the past had created a tradition or "lingering atmosphere" which produced a willingness of parties to engage in conflict. As one manager put it, "there is an industrial relations tradition here. It affects people as soon as they come onto the site." Aspects of this argument are plausible and suggest that high levels of conflict on a site in the past (as well as the very existence of past contracts) may help produce subsequent conflict prone contracts there. It may, however, be difficult to generalise from this argument as it is based on the experience of only one project. There are relatively few others which have involved a lengthy development covering several contracts and which were initially stoppage prone. There have been a number of projects which were virtually stoppage free over all stages of their development. We have also noted one other case where one part of a project was stoppage free while a subsequent part, on a slightly different site, experienced several stoppages.

10. Inadequate Communications

As noted in Chapter X, the argument that "inadequate" communications lead to industrial conflict has weaknesses. It fails to explain why poor communications arise and to take account of differences in frames of reference and so in interpretations placed on events. Inadequate communications seems a symptom or precipitating factor rather than a basic cause.

We have already indicated many features having a bearing on communications. Most of these derive from the nature of the project and include the lack of familiarity between and among parties, casual employment, multiplicity of bargaining relationships, remoteness of union officials and of top management and so on. During interviews unions placed more emphasis on inadequate communications than did managements. One group of delegates expressed sentiments shared by others in stating that "liaison (between management and workers) does not exist in the construction industry". Some delegates felt workers were not being involved enough in the running of projects, contending that "companies should bring in all the union people and lay everything on the table. We can point out weaknesses. In certain areas we know more than the companies." At present it is argued that "workers are just a number". A few delegates also claimed that "the men don't get enough information from the union" apparently because "unions don't have time for working men".

In the questionnaires, managements and unions were asked to assess the importance of poor communications as a cause of strikes on their contracts. Despite placing little emphasis on it in interviews, some managements clearly considered this factor important (see Table 24). It is interesting that of the five considering it very important or of above average importance, none came from highly stoppage prone contracts. It is also clear, however, that unions overall rated it more important than did managements. As might be expected, the eight unions rating it very important came from contracts with the full range of stoppage propensities and levels of individual forms. On the basis of response patterns in the table, it is

also not surprising that management and union responses from the same contract were, in all but two cases, different with the management almost invariably rating the factor less important than did the union. Responses from delegates on the same contract, on the other hand, were almost all identical in one case and similar in the other two. On the basis of size of mean response, unions rated this factor first in importance of the 19 assessed and managements third.

TABLE 24

The Perceived Importance of Poor Communications as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=14)	3	2	3	2	2	2	2.83	2.32
Union responses (n=13)	8	0	2	0	1	2	1.73	1.76

Source: Management and union questionnaires.

In responding to a question on ways of "improving" industrial relations on their contracts, 10 union representatives from seven contracts and six managements mentioned the need for better communications or understanding. Four of these union representatives specifically mentioned the need for consultation meetings between management (or, in one case, foremen) and delegates and on-site officials. This view was also expressed by several delegates during interviews although one group, while arguing for greater involvement, regarded consultative committees as "a waste of time because they have no force". Managements were asked in the questionnaire whether their contract operated any formal types of worker participation scheme. Four replied in the affirmative and 10 in the negative. Of these four, two said they operated consultative committees

apparently involving management, delegates and officials.³⁹ Managements were also asked if regular authorised stop work meetings were held on their contract and whether such meetings, from their point of view, were desirable. Eleven said authorised stop work meetings were held on their contracts. The frequency of these meetings varied and included fortnightly (1), monthly (3), quarterly or four a year (6) and two a year (1). The duration of each meeting seemed to range from a half-hour for the fortnightly one to two hours for the quarterly ones. All government contracts had quarterly meetings, while the other frequencies applied to private ones. Eight managements considered such meetings desirable (including one whose contract did not hold stop work meetings), seven of which said they were a useful means of communications. At least two also saw them as improving communications within the union as between delegates or officials and workers.

Unions were asked how often their delegates or site officials met with management. Those from nine contracts replied "frequently", while two replied "infrequently" and one "not at all". Of unions answering "frequently" or "infrequently", six said the meetings were scheduled on a regular basis (either weekly, fortnightly, monthly or bi-monthly) and five said on an irregular basis (usually as the need arose).

Differences in responses of management and union from the same contract are interesting reflections on perceptions and so on communications. We have already noted in the last chapter that management and union from the same contract often held different perceptions of relative stoppage, labour turnover and accident levels. We have also noted that perceptions of the importance of factors as causes of strikes on a contract were more often different than alike. Of contracts for which both parties assessed all 19 factors, the greatest number of identical responses for any one was only nine. At one of these

39. Other schemes in operation, and regarded by respondents as involving worker participation, were profit sharing in the form of a completion bonus (1 contract) and safety committees (2). Unions were also asked an identical question and in most cases responded in the same way as did managements from the same contract.

contracts, management and union gave identical assessments to none of the 19 factors. On the basis of the limited number of contracts for which both parties gave responses for all factors (six), it is however difficult to discern any straightforward relationship between the degree of uniformity of perceptions on strike causes and stoppage levels. It is interesting that responses of delegates from the same contract on a particular factor were also often different, although the divergence was usually not great in at least two of the three cases.

It seems clear that communications between the parties on some contracts are lacking. While communications difficulties can undoubtedly produce collective, individual and employer-initiated forms of conflict, both these difficulties and associated conflict are likely to be the result of more basic determinants of conflict. In any event it is very difficult to empirically test the proposition that variations in the amount and quality of communications within and among contracts help explain differences in amounts of conflict at those levels.

11. Personality Differences

We argued in Chapter X that personality differences are precipitating influences, possibly reflecting more basic causes of conflict. Very few of those interviewed mentioned such differences as a source of conflict. One manager that did, said a "personality clash" had developed between the industrial relations officer and a delegate on a contract and implied this was an added element in a situation already conducive to conflict. The effect of changes in personnel, and so in personalities, was seen to be complex. One management officer implied that a change in managerial personnel, particularly in the early stages of a contract, can lead to a "testing" of a new manager by workers which, if "successful", creates precedents and establishes a "tradition" of direct action. Should such a situation develop, the best way to change it was seen to be another change in personnel but this time with a particularly competent replacement. This view was supported by a

project manager who argued that, "if you have stoppages early on, it takes a long time to get out of them. Normally this is done by changing personalities." It seems that, irrespective of the direction of change in conflict, changes in personalities may help explain sudden variations in conflict levels both within and among projects. It is difficult, however, to empirically test this phenomenon. Certainly there are instances of conflict levels altering with changes in personalities but usually such alteration has been one of degree rather than dramatic reversal. In any event, it is difficult to isolate the effect of a change in personnel from those of other associated changes.

Relatively little emphasis, especially by union representatives, was placed on personality differences. At least one manager implied that such differences partly reflect more basic causes of conflict in the situation. Others suggested that changes in personnel can lead to sudden changes in conflict levels.

12. Private Ownership

The presence of a large public sector in this industry makes the question of the influence of private ownership on conflict a particularly interesting one. We have already mentioned numerous aspects of the "private ownership argument" but other, more specific, ones were raised in interviews and questionnaire responses.

It was argued by a few delegates that the very fact of private ownership can be a source of conflict, given antipathy toward the capitalist system. Public enterprise was seen to be free of this influence. As one delegate put it, "working (for) the MOW removes the ogre of the capitalist system and workers can feel they are creating an asset for their country". A factor more commonly mentioned by union representatives was the effect of private ownership. It was argued that private companies make workers suffer in their "drive for profits". A group of delegates contended that

"construction companies think only of profitability and don't care how they do it". Again the MOW was seen to be relatively free of this conflict source. As one local secretary said in a questionnaire response, "on private contracts nothing must interfere with the profit margin. MOW don't have a profit margin."

Private companies are also considered more susceptible to collective action. That they seek to make a profit on a contract is seen to limit their ability to withstand demands reinforced by stoppage action. They are therefore regarded as "better targets for ... demands" than public organisations. As one management said, "private enterprise is generally more susceptible to financial difficulties ... (and is) unable to sustain strike action ... for so long. Strikes are likely to be more effective against the private sector." The government is considered to have greater financial resources and to be, in any case, more difficult to "buck" than private companies. One management of a government contract even attributed a relatively low level of strikes to a "lack of bargaining power on our work through strike action". Some private sector managers also felt the government was in a stronger position because of the apparently less rigid nature of completion dates on government contracts.

The fact that the public and private sectors are at least potentially in competition was also seen to influence conflict. The Ministry of Works has traditionally undertaken a large part of power development directly. As private companies grow in size and experience they increasingly provide the MOW and New Zealand Electricity Department with the alternative of contracting this work out. The result is that MOW workers (and their union) are "moderate because they want to maintain the right to build power projects as opposed to private enterprise".

Looking at these aspects in more detail, we noted that several union representatives saw the operation and effect of private ownership as inducing conflict. The implied emphasis was on the economic conflict of interest (see Chapter 1).

While this particular conflict may be more marked in private enterprises, it is nonetheless likely to be also present in government ones. Conflict resulting from the differential distribution of authority is also likely to be present in both forms of organisation. The bases of the economic conflict of interest and the distribution of authority, however, may themselves be sources of conflict, so antipathy to the fact of private ownership might produce conflict on private contracts. It is interesting to note though that several of those criticizing the effect of private ownership also said that, even under this system, conflict could be reduced very substantially if changes were made in specific areas such as accommodation, conditions and so on.

It is quite plausible that private organisations are less able to withstand stoppages than government ones. It could be suggested, however, that private organisations therefore have a greater incentive to settle short of stoppage, but this action of course also involves a cost which management may consider higher than that of a stoppage and subsequent settlement. In any event, in the presence of imperfect information management may prefer "to call bluff" on a stoppage threat, assuming it may be nothing more than that.

The degree of emphasis placed on these aspects varied. Also those stressing the importance of the existence and effect of private ownership were largely, but not exclusively, union representatives. Both parties, however, mentioned the apparent greater "effectiveness" of direct action on private contracts. The aspects of this argument seem particularly useful in explaining differences in stoppage levels between government and private contracts, although they may also have a bearing on levels of individual forms.

III. CONCLUSION

The number of possible influences on any conflict pattern is very large. We would argue, however, that the major ones

in respect of this industry have been among those evaluated.⁴⁰ While seeking to show connections between influences, it has been necessary to study them individually rather than as part of a simultaneous system (as, for example, within the context of multiple regression analysis). We must now attempt to bring together these influences into an overview of the determinants of the projects section of the building and construction industry pattern of conflict.

Our evaluation suggests the following factors are important influences on at least one conflict form: the lack of an established employment relationship; the existence, location, size and condition of a camp; the limited life of a contract and the casual, temporary nature of construction employment; the existence of a client with adjacent production facilities; the nature of the work, working conditions and worker; the multiplicity of bargaining relationships; earnings relativities and the bases earnings are calculated on; the nature of production and the formation of work groups; remoteness of top management; private ownership of construction companies. Factors of some importance in particular situations include the unavailability of union officials, quality of foremen and management generally, inadequate communications, personality differences and changes in personnel, and the size of a contract. Others of limited importance include job demarcation and the location of a contract. One of no importance is racial friction.

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40. One factor included in the questionnaires, but clearly considered unimportant was racial frictions. Assessments of this factor were as follows:

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=14)	0	0	0	3	9 ^a	2	4.75	3.89
Union responses (n=13)	0	0	0	1	7	5	4.87	4.95

Note: a Includes one "NA".

Source: Management and union questionnaires.

On the basis of size of mean response, both parties rated it last in importance of the 19 assessed.

In combining these factors into a composite pattern of determinants, the important role of technical and economic conditions is obvious. The technical conditions produce a lack of established employment relationship, a limited life of a contract and casual employment, and predispose the industry toward conflict, although variations in these factors may explain differences in its level in particular situations. Variations in the degree of familiarity among and between parties, for example, may help explain differences in the level of stoppages and of some individual and employer-initiated forms among contracts. Moreover, variations in the "casualness" of employment may influence patterns of conflict (and especially of stoppages and employer-initiated forms) at work group and contract levels. The technical conditions also produce jobs which may be arduous, unpleasant and dangerous. While these features are present in all construction work, their extent varies both within and among contracts and so produces differences in stoppages and some individual forms at those levels. Some of these jobs may also attract or produce "aggressive" workers. Furthermore, these conditions ultimately account for the nature of some project facilities, although decisions of management of course will also influence the standard of these.

The complex nature of construction activity creates the potential for a multiplicity of bargaining relationships. The number of such relationships however can vary, partly as the result of variations in the form of union and employer organisation. Differences in stoppage activity, especially at the contract level, may result from differences in the number of these relationships. Similar conditions give rise to a potential host of earnings relativities, the number, and so influence, of which also varies among contracts (and especially as between private and public ones). The possibilities for establishing, and disturbing, relativities also varies with the method whereby earnings are calculated. The degree of such disturbance may be useful in explaining the stoppage proneness of a particular work group. The nature of the production process and of the work results in the formation of distinct and sometimes powerful work groups, and helps

explain intra-contract (as well as inter-contract) differences in conflict levels.

The nature of the construction project, its technically determined location, may also be the basis for the apparent remoteness of many top managements, the degree of which may be an important influence on conflict patterns at the contract level. Ownership forms derive from economic conditions, although organisational ones also have a bearing. The difference in type of ownership may be an important element in the explanation of differences in the level of stoppages and some other conflict forms between private and government contracts.

Less systematic influences on conflict include the unavailability of union officials and the quality of foremen and management. These may affect amounts of conflict at the work group and contract levels. Other influences which may be relevant on certain contracts are inadequate communications, personality differences and locational characteristics. The size of a contract may have some influence on the number of stoppages relative to other contracts but little or none on relative levels of individual forms (unless its influence is counteracted by that of other factors). Size may still be an important influence on conflict on projects generally insofar as they are larger than units in other industries.

Many of the basic features of construction projects predispose them toward conflict. Variations in amounts of conflict at intra-contract, contract and project levels derive from variations in these features and from the existence of other, less general, influences. Changes in these over time, along with those in more widespread factors, account for intertemporal variations in the amount of conflict.

As with the meat industry, our analysis again has implications for proposals for reducing conflict. Several managers and union representatives argued that the nature of worker accommodation must change if the level of conflict on future contracts is to be lower than at present. A number of managers contended that camps should be non-existent (or

very small), being replaced by company-provided houses. It was argued that houses are a practical alternative and one manager pointed to the MOW experience saying that "if houses are economical for the MOW, they must be so for a construction firm". As a second best possibility it was contended that any future camps should be permanent, "motel-style" structures of the highest standard. Such proposals, while obviously lacking in detail, may be substantial in that they involve alterations in a basic technical condition of the industry.

Another proposal put forward by some managers and several union representatives involves the more direct and explicit involvement of key union representatives, especially delegates, in the running of a contract. While such involvement may have an initial influence on conflict, any lasting effect will depend largely on whether it results in changes in any of the fundamental conditions producing conflict. In fact the evaluation of the possible effect of any proposed change must be in terms of its influence on the basic causes of conflict.⁴¹

Our analysis suggests that alterations in conflict levels are possible but only with changes in some of the basic features of the industry. Such alterations might, for example, require changes in the nature of the employment relationship and worker accommodation, the phasing of major contracts,

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41. As an aside, few proposals for changes in disputes procedures were suggested during interviews. In fact little mention of any sort was made of these procedures. In the questionnaires, parties were asked to assess the importance of inadequate disputes settlement procedures as a cause of strikes on their contracts. Responses were as follows:

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=14)	0	1	4	3	4	2	3.83	3.14
Union responses (n=13)	2	1	3	0	3	4	3.11	3.16

Source: Management and union questionnaires.

On the basis of size of mean response, managements rated this factor tenth equal in importance of the 19 assessed and unions thirteenth.

working conditions and facilities, the nature of some of the work, the multiplicity of bargaining relationships and earnings relativities, payment systems and so on. Some of these changes may have been contemplated but not adopted by managements because their expected costs exceed expected gains. They may not, however, even have been seriously considered, a possibility that at least some managers suggested might be the case.

While the projects section of this industry has a predisposition toward conflict, units in it need not necessarily be highly conflict prone. We saw in the last chapter how some contracts have virtually no stoppages and relatively low levels of labour turnover, absence and accidents. These contracts incorporate many of the features put forward above as possible changes. Their existence points to the possibility that any predisposition toward conflict can to some extent be modified.

Chapter XIII

THE WATERFRONT INDUSTRY PATTERN OF CONFLICT

Our analysis of the conflict pattern of this industry will largely be at the level of its basic unit, the port. As noted in Chapter VII, waterside workers are registered on a port bureau register and are engaged through labour employment bureaus operated by the Waterfront Industry Commission (WIC). They are not permanently employed by any company but may be allocated to gangs working any vessel in port. Consequently, it is difficult to study the conflict pattern at enterprise or company level. Moreover, the composition of gangs changes over time so that it is also difficult to study conflict at this level. Despite these difficulties, mention will be made of some aspects of the intra-port pattern of conflict.

Because of the existence and operation of the WIC, statistics on several conflict forms are published for this industry. These relate to stoppages, penalties, labour turnover, absence and industrial accidents. As regards stoppages, information on each one covering the port, date, man-hours and wages lost and cause is published in the *WIC Annual Report*. This information is therefore at a considerably lower level of aggregation than that published for the waterfront industry by the Department of Statistics (DOS). There are other differences between the two sets of stoppage information. In some years the WIC reports more stoppages for the waterfront than does the DOS. This is despite the fact that the ultimate source of DOS waterfront stoppage statistics is the WIC (which completes the Department of Labour (DOL) strike returns for this industry). These differences are presumably accounted for by changes made by the DOL to WIC source information or by the DOS to information received in DOL strike returns. The stoppage statistics in this chapter will largely be based on those of the WIC.

I. THE PORT LEVEL

1. Stoppages

Stoppage statistics on a port basis for 1967-73 are presented in Table 1. It is clear that most stoppage activity is accounted for by a relatively few ports. The four main ones (Auckland, Mount Maunganui, Wellington and Lyttelton) together accounted for 71.2% of the number of stoppages, 85.4% of man-days lost and 88.8% of workers involved over the period. Other ports contributing significant amounts were Napier and Bluff. The remaining 13 ports together contributed a very small fraction of total stoppage activity. Five of them experienced no stoppages in 1967-73. The largest number of ports experiencing stoppages in any year was 14 in 1971,¹ the smallest was zero in 1968 and the average per year for the period was six. Wellington experienced stoppages in the largest number of years (in 6 of the 7), being followed by Auckland, Mount Maunganui and Napier (each of which had stoppages in 5 of the 7 years).²

As noted in Chapter VII, the size of registered labour force varies considerably among ports. In 1973 it ranged from 1613 (at 30 September) for Auckland, to 25 for Greymouth. The involvement and time lost figures in Table 1 should therefore be related to numbers of workers employed. Results are shown

1. In that year 14 ports engaged in a stoppage over wage rates. In 1972 17 ports took an unauthorised holiday on Waitangi Day; such stoppages are not covered here but in the Appendix.

2. The figures for the ports are:

	No. of years in which stoppages occurred (1967-73)		No. of years in which stoppages occurred (1967-73)
Auckland	5	Nelson	2
Mt. Maunganui	5	Timaru	2
Wellington	6	Bluff	3
Lyttelton	4	Gisborne	0
Dunedin	1	Wanganui	1
Port Chalmers	1	Picton	0
Whangarei	2	Oamaru	0
Napier	5	Westport	0
Onehunga	2	Greymouth	0
Taranaki	3		

TABLE 1
Waterfront Industry Stoppage Statistics on a Port Basis, 1967-73

	1967			1968			1969			1970			1971			1972			1973			Average 1967-73		
	SF	ML	WI	SP	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI
Auckland	0	0	0	0	0	0	2	2850	3009	5	5613	7499	13	15060	18630	6	2076	5096	3	3407	3033	4.14	4143.7	5324
Mt. Maunganui	0	0	0	0	0	0	4	1596	1854	4	2065	1881	5	1722	2238	2	931	1097	3	4984	1749	2.57	1614.0	1260
Wellington	1	14	12	0	0	0	6	3219	4610	7	3436	4750	3	1281	1802	2	4400	2062 ^a	4	437	1084	3.29	1826.7	2046
Lyttelton	0	0	0	0	0	0	1	571	574	3	1706	1036	1	574	567	4	1715	2179 ^a	0	0	0	1.29	652.3	622
Dunedin	0	0	0	0	0	0	0	0	0	0	0	0	1	252	219	0	0	0	0	0	0	0.14	36.0	31
Port Chalmers	0	0	0	0	0	0	0	0	0	0	0	0	1	168	127	0	0	0	0	0	0	0.14	24.0	18
Whangarei	0	0	0	0	0	0	0	0	0	1	33	20	1	129	100	0	0	0	0	0	0	0.29	23.1	17
Napier	0	0	0	0	0	0	1	618	399	1	191	381	1	369	421	2	937	942	2	1578	882	1.00	527.6	432
Onehunga	0	0	0	0	0	0	0	0	0	3	132	268	1	119	86	0	0	0	0	0	0	0.57	35.9	51
Taranaki	0	0	0	0	0	0	1	59	74	2	297	604	1	326	228	0	0	0	0	0	0	0.57	97.4	129
Nelson	0	0	0	0	0	0	0	0	0	0	0	0	1	91	104	2	395	266 ^a	0	0	0	0.43	69.4	53
Timaru	0	0	0	0	0	0	0	0	0	0	0	0	1	136	248	0	0	0	1	344	250	0.29	68.6	71
Bluff	1	985	334	0	0	0	0	0	0	0	0	0	2	1251	804	4	1404	1373 ^b	0	0	0	1.00	520.0	359
Gisborne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wanganui	0	0	0	0	0	0	0	0	0	0	0	0	1	26	39	0	0	0	0	0	0	0.14	3.7	6
Pleaton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oamaru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greymouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL PORTS	2	999	346	0	0	0	15	8913	10520	26	13473	16439	33	21504	25613	22	11858	13015 ^c	13	10750	6998	15.86	9642.4	10419

Notes:

1. a Includes one penalty.
b Includes two penalties.
c Excludes Waitangi Day stoppages.
2. SF = Stoppage frequency; ML = Number of man-days lost; WI = Number of workers involved.
3. The frequency statistics in this chapter treat a stoppage of each individual port as a single stoppage irrespective of whether actions took place in other ports over the same issue.
4. This table includes only "stoppages on waterfront matters and sympathy strikes" (see Appendix).
5. In this table and subsequent ones based on WIC data, 1967-69 are calendar years, 1970 is the 9 months ending 30 September 1970, and 1971-73 are years ending 30 September.

Source: Derived from Waterfront Industry Commission data.

in Table 2. It can be seen that ports accounting for a significant proportion of stoppage activity also had relatively high worker loss and worker involvement ratios. Auckland had the highest average involvement ratio for 1967-73 (320.72%), and Mount Maunganui the highest average loss ratio (2.95). Again, ports other than the four main ones and Napier and Bluff generally had low stoppage levels even in terms of these two measures.³ The stoppage prone ports had lower worker loss and similar worker involvement ratios to stoppage prone meat works or construction projects.

Most managements and port unions view their ports as having low strike propensities relative to other New Zealand ports. In answer to the question: "In relation to other ports in New Zealand, do you consider that strike activity at this port is high, about the same or low?", 12 managements and 10 unions said low, while two and three respectively said about the same, and only one management said high. Both parties tended to underestimate relative strike proneness. Of the seven managements and 10 unions which incorrectly perceived their ports' positions, six and eight respectively underestimated. Management and union from a given port provided the same evaluation in eight of 13 cases. The tendency to underestimate was present when the parties evaluated waterfront strike activity relative to that in other New Zealand industries. Ten managements and eight unions rated it as low, five and six respectively as about the same and only one management as high.⁴ Evaluations by management and union from a particular port were the same in seven of 13 cases.

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3. Employment figures used in Table 2 relate to registered workers only. The result is that in some cases the ratios are slightly overstated in so far as non-registered workers were also involved in stoppages.
 4. Incidentally, nine unions rated lockout activity at their ports relative to other ports as low, while three rated it as about the same. In assessing waterfront lockout activity relative to that in other New Zealand industries, nine unions said it was low and four about the same. It is difficult to evaluate the accuracy of these perceptions because lockouts are seldom reported in either DOS or WIC stoppage statistics. In response to another question, however, no management and only one union reported experience of a lockout in recent years.

TABLE 2
Worker Loss and Worker Involvement Ratios, 1967-73

	1967		1968		1969		1970		1971		1972		1973		Average 1967-73	
	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR	WLR	WIR
Auckland	0	0	0	0	1.75	184.49	3.54	472.82	9.16	1132.52	1.22	299.94	2.07	184.49	2.50	320.72
Mt. Maunganui	0	0	0	0	3.12	362.11	3.84	349.63	2.85	369.92	1.36	159.91	7.18	252.02	2.95	229.93
Wellington	0.01	0.84	0	0	2.84	406.17	3.22	445.17	1.13	159.33	3.59	168.46	0.37	90.71	1.52	170.22
Lyttelton	0	0	0	0	0.89	88.99	2.79	169.56	0.89	88.32	2.49	315.80	0	0	0.96	91.47
Dunedin	0	0	0	0	0	0	0	0	1.06	94.40	0	0	0	0	0.14	12.20
Port Chalmers	0	0	0	0	0	0	0	0	1.27	96.21	0	0	0	0	0.16	12.24
Whangarei	0	0	0	0	0	0	0.42	25.32	1.40	108.70	0	0	0	0	0.26	19.32
Napier	0	0	0	0	1.52	98.28	0.45	90.28	0.85	96.56	1.90	191.08	2.98	166.73	1.21	99.08
Onehunga	0	0	0	0	0	0	1.39	282.11	1.31	94.51	0	0	0	0	0.37	52.58
Taranaki	0	0	0	0	0.20	24.50	1.02	207.56	1.08	75.75	0	0	0	0	0.31	41.48
Nelson	0	0	0	0	0	0	0	0	0.87	100.00	3.43	231.30	0	0	0.64	49.07
Timaru	0	0	0	0	0	0	0	0	0.56	102.89	0	0	1.25	90.58	0.28	29.22
Bluff	2.53	85.64	0	0	0	0	0	0	3.03	194.67	3.10	303.09	0	0	1.29	89.08
Gisborne	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mangamui	0	0	0	0	0	0	0	0	0.68	102.63	0	0	0	0	0.09	14.63
Picton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oamaru	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Westport	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greymouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL PORTS	0.15	5.11	0	0	1.44	169.46	2.23	271.99	3.39	403.80	1.75	192.02	1.60	104.25	1.49	160.94

Notes: 1. WLR = Worker loss ratio (number of man-days lost per worker employed); WIR = Worker involvement ratio (number of workers involved as a percentage of number employed).

2. Employment figures used are averages of registered workers at the beginning and end of year.

Source: Derived from Waterfront Industry Commission data.

2. Labour Turnover

Labour turnover figures for the waterfront industry, in terms of number of men removed from port bureau registers, are possibly more detailed than those published for any other industry. They are classified by reason for removal from the register and so allow the calculation of various types of turnover rates. The number of men leaving the industry of their own accord (as a percentage of an average labour force measure) may be termed the "quit rate". The number removed from the register for disciplinary reasons⁵ as a percentage of average labour force might be called the "dismissal rate", and the total number of removals for all reasons, the "turnover rate". Dismissal and quit rates do not sum to the turnover rate as the latter also includes removals due to death, retirement and transfer. Rates for 1967-73 are presented in Table 3.

The turnover rate for this industry is exceedingly low. The 1973 rate, for example, was only about one-twelfth of that for male workers in all surveyed industries and lower than that for any industry group.⁶ Despite this low general level, there is some variation in turnover rates among ports. Four ports had an average rate for 1967-73 of over 9% (Wellington, Wanganui, Westport and Greymouth), while three had one of less than 3% (Mount Maunganui, Whangarei and Timaru). No port, however, had a high turnover rate. Over the years covered in the table, rates for "all ports" and most individual ones displayed little trend.⁷

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5. Disciplinary reasons include continued unauthorised or unexplained absence, repeated bureau penalties, pillage and theft, misconduct (including drunkenness and assault), inefficiency and general unsuitability, and physical incapacity or medical reasons.
 6. The male labour turnover rate in all surveyed industries for 1973 (on the basis of figures from the April and October 1973 six-monthly surveys) was 46.8%.
 7. The relatively high figure for 1968 (7.8%) was partly due to an abnormally high number of transfers from one port register to another for that year. These largely affected the ports of Lyttelton, Dunedin, Port Chalmers and Wanganui, the 1968 turnover rates of which are also abnormally high. Exclusion of transfers from total removals (but not labour force figures) results in turnover rates for all ports of 8.6% (1967), 6.0% (1968), 4.8% (1969), 3.2% (1970), 5.2% (1971), 3.7% (1972) and 3.5% (1973). With the exception of 1968 these are little different from the transfer inclusive figures in Table 3.

TABLE 3
Labour Turnover on a Port Basis, 1967-73

	1967			1968			1969			1970			1971			1972			1973			Average 1967-73		
	QR	DR	TR	QR	DR	TR	QR	DR	TR	QR	DR	TR	QR	DR	TR	QR	DR	TR	QR	DR	TR	QR	DR	TR
Auckland	2.1	0.7	4.3	1.3	1.4	3.7	1.3	1.0	3.4	1.1	0.4	2.5	1.6	0.9	5.3	0.6	0.2	4.1	0.4	1.0	4.0	1.0	0.8	3.9
Mt. Maunganui	0.8	1.3	2.6	0.2	1.2	2.0	0.4	0.6	3.3	0	0.9	0.9	0.8	0.8	2.5	0.4	1.7	3.8	0.7	1.2	2.7	0.5	1.1	2.5
Wellington	15.3	8.2	25.2	5.1	4.7	11.7	3.5	4.0	8.0	1.2	1.9	4.8	1.9	1.9	6.7	1.4	2.7	5.6	2.3	2.0	5.5	4.4	3.6	9.6
Lyttelton	1.9	0.4	3.8	3.2	0	13.3	3.4	0.5	6.7	1.0	0.3	4.7	0.6	1.6	8.1	0.1	0.4	1.8	0.6	0.1	1.5	1.5	0.5	5.7
Dunedin	3.5	1.6	6.6	4.8	2.8	13.8	2.0	1.9	8.1	0.4	1.6	4.5	1.3	1.7	6.0	0.5	1.8	5.4	0	1.4	3.3	1.8	1.8	6.8
Port Chalmers	6.7	2.6	11.9	6.7	0.6	22.4	3.7	0	9.3	0.8	3.8	6.2	0.8	0.8	3.0	1.5	0.7	2.9	0	3.0	3.7	2.9	1.6	8.5
Whangarei	0	0	0	0	0	0	1.2	0	1.2	0	0	1.3	0	0	2.2	1.0	0	1.9	0	0	1.0	0.3	0	1.1
Napier	2.9	2.3	5.7	0.8	1.3	4.7	3.0	0.2	4.4	0.9	0.7	4.0	0.7	1.4	5.0	0.4	2.4	3.7	2.1	0.4	3.4	1.5	1.2	4.4
Onehunga	0.9	0.9	2.8	1.8	0.9	6.1	8.7	1.9	14.6	0	1.1	2.1	1.1	4.4	7.7	1.1	1.1	2.3	0	1.2	6.0	1.9	1.6	5.9
Taranaki	0.3	2.2	3.1	1.9	1.3	4.8	2.0	1.0	4.0	1.0	1.4	3.4	1.7	2.0	6.6	0.3	2.5	5.5	0.9	2.5	4.9	1.2	1.8	4.6
Nelson	0.9	0	2.7	1.9	1.9	7.5	2.0	1.0	2.9	1.0	1.0	4.0	0	1.0	3.8	0	0	2.6	0	1.7	2.5	0.8	0.9	3.7
Timaru	0.9	0.5	4.5	0.9	0.4	2.2	0.9	0	3.0	0.4	0.4	0.9	0.4	0.8	4.5	0.4	0	2.6	0.4	0.4	1.8	0.6	0.4	2.8
Bluff	1.8	0.5	3.1	4.0	1.1	7.2	2.4	1.1	5.1	1.3	0.8	3.2	1.0	2.4	6.5	0.9	0.7	2.6	1.6	1.4	4.1	1.9	1.1	4.5
Gisborne	2.7	0.9	6.2	1.9	4.7	10.3	2.0	1.0	3.0	1.1	1.1	7.4	0	4.2	6.3	0	2.0	3.1	0	1.0	3.1	1.1	2.1	5.6
Wanganui	1.8	1.8	7.3	0	0	33.3	5.6	2.8	8.3	0	5.6	5.6	0	2.6	2.6	0	2.6	5.3	5.6	0	5.6	1.9	2.2	9.7
Picton	6.2	0	6.2	3.2	0	3.2	3.3	0	3.3	3.4	0	3.4	0	0	3.3	0	0	3.1	3.2	0	3.2	2.8	0	3.7
Oamaru	0	0	0	2.2	0	2.2	0	0	4.4	0	0	2.3	2.3	0	11.4	2.3	0	9.1	0	0	7.5	1.0	0	5.3
Westport	0	0	7.0	0	0	4.9	0	5.3	10.5	0	0	5.7	0	2.9	5.7	0	0	16.2	0	0	17.6	0	1.2	9.7
Greymouth	2.5	0	25.0	0	0	8.1	0	2.9	2.9	2.9	2.9	5.9	0	10.0	20.0	0	3.8	7.7	0	0	0	0.8	2.8	9.9
ALL PORTS	4.9	2.5	8.9	2.6	1.8	7.8	2.3	1.4	5.3	0.9	0.9	3.4	0.9	1.5	5.7	0.7	1.2	4.0	1.0	1.1	3.8	1.9	1.5	5.6

Notes: QR = "quit rate" (No. of workers leaving the industry of own accord as % of average labour force).

DR = "dismissal rate" (No. of workers removed from the register for "disciplinary" reasons as % of average labour force).

TR = "turnover rate" (total number of removals from the register as % of average labour force).

Source: Derived from Waterfront Industry Commission Annual Reports, G. 2 (Government Printer, Wellington).

Of more interest than the total turnover rate from the point of view of industrial conflict are the quit and dismissal rates. The quit rate for the industry is again exceedingly low, even to the point of being negligible. It seems conflict seldom takes the form of workers quitting the industry. There is nonetheless some diversity among ports, with three having average quit rates for 1967-73 of over 2.5% (Wellington, Port Chalmers and Picton) and three with ones of 0.5% or less (Mount Maunganui, Whangarei and Westport). Again, the quit rate in most cases displays little trend.

We noted in Chapter II, that some terminations may be considered employer-initiated expressions of industrial conflict. The dismissal rate may be regarded as a rough proxy measure of such terminations, although this rate includes removals from the register because of physical incapacity or medical reasons. The dismissal rate for the industry is lower than the quit rate, although for most ports the two rates for 1967-73 are similar.⁸ Thus Wellington again had a relatively high average dismissal rate (3.6%) and Whangarei a low one (0). In most cases there is little trend in this rate over the period in question.

Perceptions of the industry's turnover level were fairly accurate, with 12 managements and nine unions correctly stating it was low relative to other New Zealand industries. Only one management and two unions said its turnover rate was about the same (or "medium") as other industries and no respondent said it was high. Management and union from a given port provided the same evaluation in seven of nine cases. The parties were less accurate in evaluating the turnover rate at their ports relative to those at other New Zealand ports. Eight unions and 14 managements said their port's turnover rate was relatively low, four unions said about the same and again none said it was high. Of these respondents, seven unions and nine managements underestimated, while two unions overestimated. Management and union from a given port gave the same evaluation in

8. For particular years in the period, however, the relationship between port quit and dismissal rates is not strong. For example, the correlation coefficient for these two variables is $r = -0.195$ (insignificant) for 1973 and $r = -0.143$ (insignificant) for 1972.

seven of 11 cases.

3. Absence

The WIC publishes a time lost rate for "absent (other causes)". This category excludes absence due to sickness or accidents and is largely composed of time lost due to "unauthorised" or "voluntary" absence. But it also includes time lost due to industrial and non-industrial stoppages (excluding penalties).⁹ To derive a measure of the type of absence most commonly associated with conflict, days lost due to stoppages must therefore be deducted from the total for absent (other causes). Resulting man-days lost and time lost rate figures are presented in Table 4. They are for 1972 and 1973 as these are the only two years of our period for which man-days lost figures were available for absent (other causes). As can be seen, the rate of time lost due to absence varies among ports with the four main ones having much higher rates than the others. Whangarei and Taranaki also had relatively high rates in both years. Absence accounted for the most man-days lost of any cause of time lost, being followed by sickness and accidents (compensation).¹⁰

We argued in Chapter II that illness absence could be an expression of industrial conflict. It is therefore of interest if some ports lose proportionately more time due to sickness than others. As can be seen from Table 5, there is some

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9. Other categories of time lost are penalty, compensation and sickness. Time spent "working" includes, in addition to the actual days of work, days when men were available for work when no work was offering, and days absent on statutory and annual holidays.
10. The proportion of man-days available lost due to various causes for 1972 and 1973 was as follows:

	1972	1973
	%	%
Absence ^a	2.92	3.08
Stoppages ^b	0.65	0.52
Penalty	0.35	0.23
Compensation	2.27	2.07
Sickness	2.19	2.31
Total	8.38	8.22

a As defined in Table 4, p. 480.

b Industrial and non-industrial.

TABLE 4

Time Lost Due to Absence

	1972		1973	
	Man-days lost	% of total man-days available	Man-days lost	% of total man-days available
Auckland	27,905	5.25	28,035	5.58
Mt. Maunganui	6,350	2.92	5,396	2.53
Wellington	16,039	4.16	15,604	4.30
Lyttelton	5,751	2.62	7,051	3.31
Dunedin	659	0.96	758	1.15
Port Chalmers	189	0.44	251	0.60
Whangarei	479	1.46	379	1.19
Napier	1,390	0.85	2,456	1.51
Onehunga	239	0.87	340	1.35
Taranaki	1,553	1.51	1,350	1.36
Nelson	322	0.88	223	0.61
Timaru	298	0.34	378	0.44
Bluff	913	0.64	905	0.67
Gisborne	85	0.28	87	0.29
Wanganui	54	0.46	9	0.08
Picton	119	1.18	110	1.14
Oamaru	40	0.30	65	0.53
Westport	97	0.89	12	0.12
Greymouth	1	0.01	1	0.01
ALL PORTS	62,483	2.92	63,410	3.08

Source: Derived from Waterfront Industry Commission data.

variation among ports although not as much as for the proportion of time lost due to absence. This variation suggests the possibility that conflict may at some ports take the form of sickness absence, although other factors would also clearly be involved.

TABLE 5

The Percentage of Total Man-Days Available Lost Due to Sickness

	1972	1973
	%	%
Auckland	3.45	3.62
Mt. Maunganui	2.10	3.04
Wellington	2.25	2.25
Lyttelton	1.98	2.00
Dunedin	1.66	1.32
Port Chalmers	1.49	1.17
Whangarei	2.49	0.66
Napier	1.18	1.67
Onehunga	0.69	1.33
Taranaki	1.79	1.45
Nelson	0.39	0.70
Timaru	1.21	1.07
Bluff	1.87	1.94
Gisborne	0.62	0.59
Wanganui	1.23	0.17
Picton	0.65	0.03
Oamaru	0.43	1.24
Westport	0.82	0.43
Greymouth	1.38	1.38
ALL PORTS	2.19	2.31

Source: *Waterfront Industry Commission Annual Reports.*

Several ports with a high absence rate (such as the main ones) also have a high sickness rate. It is therefore not surprising that a close relationship exists between these two rates. Correlating port absence rates (percentage of man-days available lost due to absence) with port sickness rates (percentage of man-days available lost due to sickness), gives a correlation coefficient of $r = 0.795$ (significant 0.001) for 1973, and $r = 0.765$ (significant 0.001) for 1972. Ports with high absence rates tend also to have high sickness rates.

In the questionnaires, the parties were asked to evaluate the level of absence at their port relative to those of other New Zealand ports. Eight unions and 11 managements said their port's absence rate was relatively low, while three each said about the same and only one management said high.¹¹ Both parties tended to underestimate. Specifically, six unions and nine managements underestimated, while only two unions overestimated. Management and union from a given port provided the same evaluation in six of 11 cases.

4. Industrial Accidents

A measure of industrial accidents which can be compared among ports is the number of man-days lost due to accidents qualifying for compensation as a percentage of the total number of man-days available. As can be seen from Table 6, this measure displays considerable variation among ports, the 1967-73 average ranging from 0.24% (Oamaru) to 5.65% (Wellington). Two ports had an average accident lost time rate of greater than 4% (Westport and Wellington) and three had one of less than 0.5% (Wanganui, Picton and Oamaru). Wellington has an unusually high rate by comparison with the other main ports, at least two of which handle similar types of cargo in similar conditions. Conflict, in the form of time lost due to accidents, could possibly be higher at Wellington than at other ports. With the exception of Westport, Greymouth, Mount Maunganui and Wellington, the accident time lost rate has been fairly stable over the years covered in the table.

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11. Evaluations of the absence level of the waterfront industry relative to those of other New Zealand industries were as follows:

	<u>Low</u>	<u>Medium</u>	<u>High</u>
Management responses (n=13)	8	2	3
Union responses (n=11)	6	5	0

Source: Management and union questionnaires.

It is not possible to assess the accuracy of these perceptions because absence data for other industries do not exist.

TABLE 6

The Percentage of Total Man-Days Available Lost Due to
Accidents, 1967-73

	1967	1968	1969	1970	1971	1972	1973	Average 1967-73
	(percentages)							
Auckland	1.37	1.49	1.69	1.76	1.38	1.58	1.81	1.58
Mt. Maunganui	2.85	3.24	3.53	2.44	1.91	1.20	0.92	2.30
Wellington	3.53	3.99	5.40	7.14	7.24	6.63	5.59	5.65
Lyttelton	2.20	2.38	2.48	1.96	1.41	1.56	1.23	1.89
Dunedin	1.06	1.16	0.87	1.16	0.87	1.30	1.39	1.12
Port Chalmers	0.63	0.51	1.40	0.95	1.27	1.04	1.12	0.99
Whangarei	0.41	1.47	1.22	1.23	1.51	1.56	0.81	1.17
Napier	0.67	0.71	1.04	1.31	1.12	0.71	0.61	0.88
Onehunga	0.69	0.92	0.42	1.60	1.72	0.41	0.28	0.86
Taranaki	0.91	0.99	1.64	2.08	1.31	1.28	1.46	1.38
Nelson	1.66	2.50	0.97	1.00	0.71	0.98	0.21	1.15
Timaru	0.58	0.58	0.83	1.17	1.05	0.82	1.00	0.86
Bluff	1.93	2.14	2.55	2.63	1.78	1.26	1.57	1.98
Gisborne	3.22	1.82	1.66	1.76	1.72	1.85	1.54	1.94
Wanganui	0.75	0.07	0.34	0.95	0.39	0.12	0	0.37
Picton	0.18	0.12	0	0.35	1.11	0.04	0	0.26
Oamaru	0.08	0.72	0.09	0.05	0.24	0.25	0.25	0.24
Westport	6.03	7.34	1.47	0.39	2.14	4.32	7.17	4.12
Greymouth	0.11	0.66	1.09	4.08	0.06	3.69	3.69	1.91
ALL PORTS	1.90	2.10	2.46	2.72	2.47	2.27	2.07	2.28

Source: Derived from *Waterfront Industry Commission Annual Reports*.

An alternative measure, the accident frequency rate, is available on a port basis only for the major ports. As can be seen from Table 7, the diversity in port frequency rates for 1967-73 is less than that in port accident lost time rates. The difference between the extreme frequency rates in this sample (those of Napier and Bluff), however, is quite considerable. A ranking of major ports in terms of frequency rates

bears only a weak relationship to one in terms of lost time rates.¹² Wellington, for example, has the highest accident time lost rate but only the fourth highest frequency rate among major ports. Its high time lost rate must therefore reflect a relatively long absence per accident rather than a relatively high number of accidents.

TABLE 7
Accident Frequency Rates: Major Ports, 1967-73

	1967	1968	1969	1970	1971	1972	1973	Average 1967-73
Auckland	11.5	11.4	10.3	10.3	9.8	12.3	10.4	10.9
Mt. Maunganui	13.7	11.7	11.9	11.1	10.5	9.8	11.4	11.4
Wellington	13.5	13.0	14.0	12.8	11.4	10.2	10.9	12.3
Lyttelton	15.4	12.9	13.9	13.3	11.4	12.6	10.0	12.8
Otago	8.9	10.0	9.4	13.0	13.1	12.1	13.3	11.4
Napier	10.0	10.1	7.7	5.0	6.2	7.5	7.1	7.7
Taranaki	10.9	11.5	14.0	14.9	12.3	13.1	10.1	12.4
Bluff	15.8	19.1	16.2	13.4	17.0	13.4	6.0	14.4
ALL PORTS	12.4	12.1	11.8	11.3	11.2	11.1	9.7	11.4

Notes: 1. Otago consists of the ports of Dunedin and Port Chalmers.

2. Figures are for calendar years.

Source: Derived from New Zealand Port Employers' Association data.

As regards perceptions of accident levels, only eight unions correctly said the waterfront industry has a high accident level relative to other New Zealand industries. Six managements and three unions said its level was about the same as those of other industries while seven and two respectively said its level was relatively low. Management and union from the same port gave different evaluations in all 10 cases. In comparing the accident level of the local port with those of other New Zealand ports, nine managements and three unions

12. As a test of the similarity of these two rankings Spearman's coefficient of rank correlation was calculated and found to be $r_s = 0.482$ (insignificant).

rated it low, five and six respectively about the same and three unions high. Eight managements and three unions underestimated in their evaluations, while one and four respectively overestimated. Management and union from a given port provided the same evaluation in five of 11 cases.

5. Penalties and Other Employer-Initiated Forms of Conflict

As noted in Chapter VII, bureau rules provide for penalties whereby a worker (or workers) is liable to not qualify for work for a specified period in the event of the infraction of some rule of work. The penalty is an unusual conflict form presenting some classification difficulties. It, along with the other bureau rules, is made and enforced by the port conciliation committee (PCC), which consists of equal numbers of employers' and workers' representatives and an independent chairman. While workers may be represented on the PCC, the penalty is clearly a conflict form when its imposition is initiated by the employer. Such is obviously the case when employers impose a penalty in retaliation against a stoppage by workers. As indicated in Table 8, there were several such "collective" penalties in 1972.

TABLE 8

"Collective" Penalty Statistics on a Port Basis, 1967-73
(year ended 30 September 1972^a)

	No. of Penalties	Man-days lost	Workers Involved
Wellington	1	2,059	1,019
Lyttelton	1	906	588
Nelson	1	263	133
Bluff	2	927	760
Totals	5	4,155	2,500

Note: a 1972 was the only year in which separately classified penalties occurred during this period. In some other years, however, disputes involving both a stoppage and penalty occurred (see p. 486).

Source: Derived from Waterfront Industry Commission data.

While relatively few disputes were separately classified as collective penalties over 1967-73, several others involved both worker and employer actions. In November 1971 there was a dispute between an employer and the union at Mount Maunganui over the rate for handling salt. Following two stop work meetings the workers withdrew from the ships of the employer concerned. These workers were placed on penalty and those finishing other ships transferred to these "preference" ships¹³ and placed on penalty when they refused to work them. At the same port in February 1973 there was a dispute over the handling of cargo from an off-wharf shed. When cargo from the shed was presented, waterside workers refused to load it. The employers gave the ship concerned preference for labour and placed workers refusing this work on penalty. The union then ceased all work. At Timaru in the same month in 1973, a gang of workers stopped work over a difference in interpretation of the meaning of the term "hatch or job". These workers were placed on penalty, as were others who subsequently participated in the stoppage.¹⁴ Moreover, stoppages can sometimes follow the use of the penalty by employers. For example, in April 1969 a stoppage occurred in Port Taranaki as a protest against the action of employers placing five men on penalty for being absent without permission when work resumed after rain.

Penalties can also be imposed on individuals and small groups. Such "individual" penalties accounted for most or all of total time lost due to penalties in each year of our period except 1972. A measure which can be compared among ports is the number of man-days lost due to (collective and individual) penalties as a percentage of the total number of man-days

13. Employers may designate a vessel as a "preference" ship or "priority work". As workers become available they are assigned the priority work and, should they refuse it, may be placed on penalty.

14. Statistical details of these actions are as follows:

<u>Date</u>	<u>Port</u>	<u>Man-days lost</u>	<u>Workers involved</u>
5- 8/11/71	Mt. Maunganui	467	535
7-15/ 2/73	"	2,934	584
9-12/ 2/73	Timaru	344	250

available.¹⁵ As can be seen from Table 9, there is some variation in this measure with certain ports losing a relatively high proportion of days (e.g. Mount Maunganui and Dunedin) and others a low proportion or none at all. Man-days lost figures for 1972 and 1973, the only two years of our period for which they were available, are also included in the table and not surprisingly display greater variation. The presence of the collective penalties in Wellington, Lyttelton, Nelson and Bluff in 1972 is obvious from these ports' figures for that year.

TABLE 9

The Percentage of Total Man-Days Available Lost Due to Penalties (1967-73) and Man-Days Lost Due to Penalties (1972 and 73)

						1972		1973		Average 1967-73
	1967	1968	1969	1970	1971	man- days lost	%	man- days lost	%	
	%	%	%	%	%					%
Auckland	0.12	0.09	0.09	0.06	0.06	318	0.06	135	0.03	0.07
Mt. Maunganui	0.41	0.34	0.49	0.32	0.37	1136	0.52	3419	1.60	0.58
Wellington	0.15	0.07	0.07	0.11	0.12	2319	0.60	296	0.08	0.17
Lyttelton	0.17	0.12	0.14	0.18	0.09	1341	0.61	145	0.07	0.20
Dunedin	0.17	0.17	0.26	0.17	0.68	45	0.06	47	0.07	0.23
Port Chalmers	0.09	0.02	0.08	0.11	0.11	34	0.08	16	0.04	0.08
Whangarei	0	0.01	0	0	0	0	0	0	0	0
Napier	0.04	0.05	0.04	0.02	0.03	738	0.45	65	0.04	0.10
Onehunga	0.01	0	0	0	0	0	0	0	0	0
Taranaki	0.24	0.26	0.07	0.09	0.03	60	0.06	52	0.05	0.11
Nelson	0	0	0.03	0.04	0.03	210	0.58	0	0	0.10
Timaru	0.04	0.04	0.05	0.05	0.10	9	0.01	414	0.49	0.11
Bluff	0.05	0.03	0.05	0.06	0.04	1291	0.91	95	0.07	0.17
Gisborne	0.04	0.03	0.01	0	0	0	0	0	0	0.01
Wanganui	0.04	0.04	0	0	0	0	0	0	0	0.01
Picton	0	0	0	0	0	0	0	0	0	0
Oamaru	0	0	0	0	0	0	0	0	0	0
Westport	0	0	0	0	0	0	0	0	0	0
Greymouth	0.02	0.02	0	0	0	20	0.25	20	0.25	0.08
ALL PORTS	0.13	0.10	0.12	0.10	0.12	7521	0.35	4704	0.23	0.16

Source: Derived from Waterfront Industry Commission data.

15. Some penalties are imposed on the instruction of the employer and others are applied automatically. An example of the former is when a worker is not present for a roll call at a ship (e.g. in the early afternoon) a penalty will be imposed if the employer so instructs. An example of the latter is when a man fails to lift his disc from the engagement board (failing to report to the engagement bureau when instructed to do so by the WIC bureau officer or representative) a penalty is imposed by the WIC.

6. The Association Between Forms of Conflict

Collective and Individual Forms

We noted earlier that the four main ports not only have the highest stoppage levels but also the highest absence rates. This suggests levels of stoppages and absence may be closely related. The correlation results in Table 10 to an extent confirm this possibility. In 1972 and 1973 the relationship was particularly strong between stoppage frequency and absence, so that ports with high frequency also tended to have high absence rates. A positive relationship also existed between the worker loss ratio and the absence rate but was significant only in 1972.

TABLE 10
Correlation Coefficients: Port Stoppage Levels
and Absence Rates

Variables		Correlation Coefficient (r)
<u>1973</u>	Stoppage frequency, absence rate ^a	0.759 (significant 0.001)
	WLR, ^b absence rate	0.350 (insignificant)
<u>1972</u>	Stoppage frequency, absence rate	0.703 (significant 0.001)
	Stoppage frequency (excluding "collective" penalties), absence rate	0.759 (" 0.001)
	WLR, absence rate	0.446 (" 0.10)
	WLR (excluding "collective" penalties), absence rate	0.621 (" 0.005)

Notes: a For definition see Table 4, p. 480

b WLR = worker loss ratio.

Source: Derived from Waterfront Industry Commission data.

High accident rate ports include several minor as well as major ones. It is therefore not surprising that the relationship between stoppage levels and accident rates is not statistically significant. A comparison of Tables 1 and 2 with Table 3 also suggests that any relationship between stoppage

levels and quit rates is weak. As can be seen from the following one, this was indeed the case for 1972 and 1973.

TABLE 11
Correlation Coefficients: Port Stoppage Levels,
Accident and Quit Rates

	Variables	Correlation Coefficient (r)
<u>1973</u>	Stoppage frequency, accident rate ^a	0.267 (insignificant)
	WLR, accident rate	-0.113 (")
	Stoppage frequency, quit rate	0.143 (")
	WLR, quit rate	0.010 (")
<u>1972</u>	Stoppage frequency, accident rate	0.083 (")
	Stoppage frequency (excluding "collective" penalties), accident rate	0.016 (")
	WLR, accident rate	0.316 (")
	WLR (excluding "collective" penalties), accident rate	0.290 (")
	Stoppage frequency, quit rate	-0.030 (")
	Stoppage frequency (excluding "collective" penalties), quit rate	-0.058 (")
	WLR, quit rate	0.019 (")
	WLR (excluding "collective" penalties), quit rate	-0.021 (")

Note: a For definition see Table 6, p. 483.

Source: Derived from Waterfront Industry Commission data.

Collective and Employer-Initiated Forms

As collective penalties sometimes follow stoppages, it might be expected that a positive relationship will exist between rates of time lost due to (collective and individual) penalties and to stoppage activity. Such was the case for 1972

and 1973. As can be seen from the following table, the relationship between the "penalty rate" and worker loss ratio was particularly strong, so that ports with a high loss of time from penalties also tended to have a high loss per worker from stoppages. The relationship between stoppage levels and the dismissal rate, on the other hand, is weak.

TABLE 12
Correlation Coefficients: Port Stoppage Levels,
Penalty Rates and Dismissal Rates

Variables		Correlation Coefficient (r)
<u>1973</u>	Stoppage frequency, penalty rate ^a	0.448 (significant 0.10)
	WLR, penalty rate	0.870 (" 0.001)
	Stoppage frequency, dismissal rate	0.183 (insignificant)
	WLR, dismissal rate	0.017 (")
<u>1972</u>	Stoppage frequency (excluding "collective" penalties), penalty rate	0.414 (significant 0.10)
	WLR (excluding "collective" penalties), penalty rate	0.784 (" 0.001)
	Stoppage frequency, dismissal rate	-0.178 (insignificant)
	Stoppage frequency (excluding "collective" penalties), dismissal rate	-0.163 (")
	WLR, dismissal rate	0.012 (")
	WLR (excluding "collective" penalties), dismissal rate	0.119 (")

Note: a For definition see Table 9, p. 487.

Source: Derived from Waterfront Industry Commission data.

Individual Forms

A comparison of accident rates in Table 6 with absence

rates in Table 4 suggests any relationship between these two forms is weak. Correlating these two variables yields insignificant coefficients for 1972 and 1973. Insignificant relationships were found between all pairs of individual forms.

TABLE 13
Correlation Coefficients: Absence, Accident and Quit Rates

	Variables	Correlation Coefficient (<i>r</i>)
<u>1973</u>	Absence rate, accident rate	0.135 (insignificant)
	Absence rate, quit rate	0.013 (")
	Accident rate, quit rate	-0.164 (")
<u>1972</u>	Absence rate, accident rate	0.364 (")
	Absence rate, quit rate	0.076 (")
	Accident rate, quit rate	0.013 (")

Source: Derived from Waterfront Industry Commission data.

Individual and Employer-Initiated Forms

The relationship between a particular individual form, on the one hand, and an employer-initiated form, on the other, was also found to be insignificant in all instances for 1972 and 1973.¹⁶ This may seem surprising in the case of absence and dismissal rates. Insofar as workers are dismissed for absence from work, it might have been expected that these two rates would be positively related. But dismissals due to continued unauthorised or unexplained absence constitute a low proportion of total dismissals.

16. An insignificant relationship also existed between two employer-initiated forms (the dismissal rate and the penalty rate), with the correlation coefficient being $r = 0.120$ for 1972 and $r = 0.037$ for 1973.

TABLE 14

Correlation Coefficients: Dismissal and Penalty Rates
and Absence, Accident and Quit Rates

Variables		Correlation Coefficient (r)
<u>1973</u>	Dismissal rate, absence rate	0.184 (insignificant)
	Dismissal rate, accident rate	0.011 (")
	Dismissal rate, quit rate	-0.195 (")
	Penalty rate, absence rate	0.135 (")
	Penalty rate, accident rate	-0.054 (")
	Penalty rate, quit rate	-0.083 (")
<u>1972</u>	Dismissal rate, absence rate	-0.053 (")
	Dismissal rate, accident rate	0.335 (")
	Dismissal rate, quit rate	-0.143 (")
	Penalty rate, absence rate	0.252 (")
	Penalty rate, accident rate	0.247 (")
	Penalty rate, quit rate	-0.026 (")

Source: Derived from Waterfront Industry Commission data.

II. THE REGIONAL LEVEL

In view of the possible influence of the region on conflict levels, it is interesting to compare the regional distribution of stoppage activity in the waterfront industry with that in industry generally. Comparative figures for 1967-72 are shown in Table 15. There are obvious differences in regional distributions of stoppage frequency (Cols. 1) as between the waterfront industry and industry in general. Differences also exist when the proportion of stoppages occurring in a region is related to the proportion of the relevant labour force employed there (Cols. 3). Wellington and Marlborough-Nelson contributed relatively more stoppages to the waterfront industry total than they did to industry generally, while the reverse was true for Taranaki, Westland and Otago-Southland. Only in the Northern district and Canterbury was the relative number of stoppages in waterfront similar to that in industry as a whole.

TABLE 15
Waterfront and All Industry Stoppage Statistics on an Industrial Districts Basis, 1967-72

INDUSTRIAL DISTRICT	WATERFRONT				ALL INDUSTRY				ALL INDUSTRY MINUS WATERFRONT		
	(1) % of stoppages	(2) % of No. of workers involved	(3) % of industry labour force	(4) (2)÷(3)	(1) % of No. of workers involved	(2) % of No. of workers involved	(3) % of surveyed employment	(4) (2)÷(3)	(1*) % of No. of workers involved	(2*) % of surveyed employment	(3*) (1*)÷(2*)
Northern	48.5	64.1	38.4	1.7	59.4	56.8	43.5	1.3	55.3	43.5	1.3
Taranaki	4.0	1.3	5.0	0.3	3.2	2.3	2.6	0.9	2.5	2.6	1.0
Wellington	25.3	22.9	25.9	0.9	15.0	17.9	26.1	0.7	16.8	26.1	0.6
Marlborough-Nelson	3.0	0.5	2.1	0.2	1.4	1.0	2.5	0.4	1.1	2.5	0.4
Westland	0	0	1.1	0	-0.9	0.6	1.2	0.5	0.7	1.2	0.6
Canterbury	10.1	6.8	14.2	0.5	10.1	8.5	14.2	0.6	8.9	14.2	0.6
Otago-Southland	9.1	4.2	13.2	0.3	10.0	10.7	9.9	1.1	12.2	9.9	1.2
National	0	0	NA ^a	NA	0.1	2.0	NA	NA	2.5	NA	NA
N.Z. TOTALS	100.0	100.0	100.0	1.0	100.0	100.0	100.0	1.0	100.0	100.0	1.0

Notes: a NA = not applicable.

1. The Northern Industrial District (ID) includes the ports of Auckland, Mount Maunganui, Whangarei, Onehunga and Gisborne; the Taranaki ID includes Port Taranaki; the Wellington ID includes Wellington, Napier and Wanganui; the Marlborough-Nelson ID includes Nelson and Picton; the Westland ID includes Westport and Greymouth; the Canterbury ID includes Lyttelton and Timaru; the Otago-Southland ID includes Dunedin, Port Chalmers, Bluff and Oamaru.

2. Years in this table are calendar years.

Source: Derived from *Statistics of Prices, Wages and Labour*, 1972 (Department of Statistics, Wellington) and *Waterfront Industry Commission data (stoppage statistics)*, and supplementary tables to the *Labour and Employment Gazette* (Department of Labour, Wellington) and *Waterfront Industry Commission data (employment statistics)*.

A comparison of worker involvement distributions (again viewed in conjunction with employment distributions, i.e. Cols. 2 and 3) also reveals differences between waterfront and industry generally. The contribution of the Northern district to involvement was relatively greater in waterfront than in all industry, while the reverse was true for Taranaki, Marlborough-Nelson, Westland and Otago-Southland. Similar differences apply when the waterfront regional involvement distribution (relative to employment distribution) is compared with that for industries other than waterfront.

The possibilities for regional action by a number of units are limited in this industry if only because several regions each have but a single port. It is, however, not uncommon for several ports in various parts of the country to engage in stoppages over the same issue. In 1969 Mount Maunganui, Lyttelton and Wellington had stoppages against proposals for new conditions of work issued by the Waterfront Conference. In the same year Auckland and Wellington, on two occasions, stopped in protest over workers other than waterside workers packing or unpacking containers. In the following year there was a series of stoppages, spread over a number of months and involving several ports, in order to consider proposals for a new general principal order issued by the Waterfront Conference. In 1971 14 ports stopped for two or three days over a dispute involving wage rates.

III. THE INTRA-PORT LEVEL

As already noted, waterside workers are not permanently employed by a particular employer and do not belong to permanent gangs. The composition of the gang, and so work group, usually changes with each vessel. The most permanent organisational unit of workers is the local port union to which all waterside workers at the port belong. The focal employment unit tends therefore to be the port labour force rather than any section of it.

It is not surprising that waterfront stoppages usually

involve the whole labour force. While, on the basis of WIC information, it is difficult to distinguish sectional or partial stoppages from total ones, it appears that only about 18 stoppages in 1967-73 involved just part of the labour force. Of that number, three seemed to be confined to a single gang on a ship, 12 to all gangs on a ship and three to a container terminal. In all but three cases, these stoppages occurred at one of the four main ports where the diversity of work and the size of labour force increases the potential for sectional stoppages. A few other stoppages started by involving only part of the labour force but subsequently involved the whole of it.

This picture was broadly confirmed by management responses to a question asking approximately what percentage of port stoppages are sectional (confined to one part of the registered workforce) or total (involving all the registered workforce). It can be seen from Table 16 that 90% or more of stoppages were total in the case of seven of the 10 ports that considered the question relevant. The two managements which said 50% came from moderate sized but low stoppage level ports. The one which said 60% was from a large and stoppage prone port.

TABLE 16
The Percentage of Port Stoppages Which Involve All the Registered Workforce ("total" stoppages)

	Percentages				
	50	60	90	94	100
Number of ports (n=10)	2	1	2	1	4

Note: Managements from six other ports answered "NA" in that no recent stoppages had occurred there.

Source: Management questionnaire.

If most stoppages are total, it is not surprising that they generally involve several employers. Of all stoppages over 1967-73 only the above-mentioned 18 sectional ones, and a few others, involved a single employer. The largest stoppages

involved up to 16 employers. In the questionnaire, managements were asked if some firms at their ports experience relatively more direct action than others. Not unexpectedly, respondents from 11 ports said "NO" to this question, while those from only four said "YES" (it was not applicable to one other small port where a single general cargo agent operated). Two of the four answering in the affirmative were those which said that only 50% of local port stoppages involved the whole labour force.

In stoppages reported by the WIC over 1967-73, the unions involved were those of waterside workers. In several cases, however, non-registered workers (who are not union members) were also directly involved along with registered workers.

IV. FORMS OF INDUSTRIAL CONFLICT: COLLECTIVE AND EMPLOYER-INITIATED FORMS

From Table 17 it appears the strike is a relatively less important collective form of conflict in this industry than in the other two so far studied. In fact the figures for the strike are over-stated because many waterfront strikes are preceded by stop work meetings and some also involve the imposition of a penalty. The stop work meeting, on the other hand, is relatively more important than in the other industries.¹⁷ Such meetings accounted for a majority of workers involved in collective forms over 1967-73 and, in some years, for a majority of man-days lost (1970 and 1971). Several actions classified as unauthorised stop work meetings in the table were actually unauthorised extensions of regular sanctioned meetings. Thirty-two of the 35 unauthorised meetings in 1967-73 occurred at the four main ports, with about half of them being at Auckland.

17. The large number of stop work meetings may partly reflect the fact that, unlike other industries, stoppage data for this one are collected by a single organisation directly involved in it (WIC). Almost all actions involving a stoppage of work on the waterfront are likely to come to the notice of the WIC and, but for the very smallest, be reported to the Department of Labour for eventual inclusion in the official statistics.

TABLE 17
Waterfront Industry Conflict Forms, 1967-73

Form	Number	No. of man-days lost	No. of workers involved
Strike	71 ^a (64.0%)	39,575 (58.6%)	32,896 (45.1%)
"Unauthorised" Stop Work Meeting	35 (31.5)	23,767 (35.2)	37,535 (51.5)
"Collective" Penalty	5 (4.5)	4,155 (6.2)	2,500 (3.4)
TOTALS	111	67,497	72,931

Note: a Includes three involving penalties (see fn. 14, p. 486) and 14 which occurred over the same issue.

Source: Derived from Waterfront Industry Commission data.

The demarcation strike or stop work meeting is relatively common on the waterfront. Over our period, 10 such actions (8 strikes and two meetings), involving a total of 8,830 workers and a loss of 10,579 man-days, occurred. Several of these involved disputes over workers other than watersiders packing or unpacking containers or the right to the work in off-wharf sheds and depots generally. There were also one or two sympathy strikes (for example, a stoppage in 1972 in support of tally clerks).

Several conflict forms are often used in combination. A good example is the one previously cited where two stop work meetings were followed by a withdrawal of labour from the ships of the employer concerned. The employers then designated these as "preference" ships and placed transferring workers on penalty when they refused to work them. There are other cases of the strike and penalty merging into one. Many strikes are also preceded by stop work meetings.

WIC stoppage statistics, and so the above table, do not

include restrictions on output such as the go slow and the ban. The WIC statistics concentrate on the relatively easily-quantified loss of time, although the commission is conscious of the possible importance of restrictions on output and the largest of these may be mentioned in the text of its *Annual Report*. From discussions with WIC officers it appears that, at least until very recently, go slows have been uncommon on the waterfront. The ban may be more common. In February 1971 a ban on handling freight-forwarders' containers was imposed in Wellington which subsequently spread in a partial form to Lyttelton and Auckland before being lifted on 2 April. The introduction of new types of vessels has also seen the use of the ban. The second cellular container ship to come to New Zealand, "Act III", arrived on 19 August 1971 but was not worked until 24 August because of the lack of a final agreement for such work. Moreover, in 1973 the first LASH vessel to visit this country was not worked for two days while an agreement was being reached on conditions to apply. Bans have also been employed in other contexts. For example, they were imposed on French shipping in 1972 and 1973 in protest against French nuclear testing and on the working of vessels whose crews allegedly received wages not complying with international minimum standards (such as the one on the "Tauloto" at Bluff from 18 May to 1 June 1973).

The following table gives an indication of the number of ports experiencing particular conflict forms in recent years. It is based on questionnaire responses. In view of the above pattern, it is not surprising that the most commonly experienced forms reported by both parties were the strike, stop work meeting and ban. Ports experiencing other forms tended to be the larger ones. Management and union responses from a given port were generally the same except with respect to the ban, where they were identical in only seven of 12 cases. It is noteworthy that neither party reported recent experience of an unofficial strike and that only one union reported a lock-out.

TABLE 18
Port Experience With Conflict Forms

Form	No. of ports experiencing particular conflict forms in recent years	
	Management Responses	Union Responses
	(n=16)	(n=12)
Overtime ban	3	2
Go slow or work to rule	4	0
Unauthorised stop work meeting	7	5
Official strike	11	7
Unofficial strike	0	0
"Black" ban	8	3
Penalty for withdrawing or withholding labour	4	2
Lockout	0	1

Source: Management and union questionnaires.

IV. CONCLUSION

Our analysis has shown that the level of stoppage activity varies among ports, with a few accounting for a majority of such activity over 1967-73. Levels of individual forms (the quit, absence and accident rates) also varied among ports but to a lesser extent than stoppages. Collective penalties were confined to a few ports and years, although the use of individual penalties was more widespread. In some cases levels of conflict forms were related (e.g. stoppages and absence), but in several others the relationship was insignificant.

The regional distribution of stoppage activity for the industry differed in some respects from that for industry generally, with some regions accounting for a greater proportion of the waterfront total than for that of industry as a whole and vice versa. At the intra-port level it was found

that most stoppages involve the whole port labour force and several employers.

The strike is a relatively less, and the stop work meeting a relatively more, important form of conflict in this industry than in the other two so far studied. While such forms as the go slow or work to rule appear uncommon, others, such as the ban, are relatively common.

V. APPENDIX: WATERFRONT INDUSTRY STOPPAGE STATISTICS

In this chapter we have analyzed only stoppages which appear to meet the criteria of the Department of Statistics for inclusion in the official statistics (i.e., those involving "waterfront matters and sympathy strikes"). Stoppages over other matters, such as social or generally "non-industrial" questions, while not being reported by the Department of Statistics are separately classified and published in annual reports of the WIC. To gain an impression of total stoppage activity in the waterfront industry, this latter type of stoppage must be added to the former. Table 19 presents statistics on "non-industrial" stoppages and on all (industrial and non-industrial) stoppages.

TABLE 19
Statistics on "Non-Industrial" Stoppages and All Stoppages 1967-73

	1967			1968			1969			1970			1971			1972			1973		
	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI	SF	ML	WI
Auckland	2 720	3135		1 1469	1544		0	0	0	0	0	0	2 1287	3166		2 2119	3326		0	0	0
	(2 720)	(3135)		(1 1469)	(1544)		(2 2850)	(3009)		(5 5613)	(7499)		(15 16347)	(21796)		(8 4195)	(8422)		(3 3407)	(3033)	
Mt. Maunganui	0	0	0	0	0	0	1	61	404	0	0	0	1 492	582		2 699	1167		0	0	0
	0	0	0	0	0	0	(5 1657)	(2258)		(4 2065)	(1881)		(6 2214)	(2820)		(4 1630)	(2264)		(3 4984)	(1749)	
Wellington	1 289	946		1 481	1104		0	0	0	1 293	959		1 998	998		2 1284	1856		2 169	1613	
	(2 303)	(958)		(1 481)	(1104)		(6 3219)	(4610)		(8 3729)	(5709)		(4 2279)	(2800)		(4 5684)	(3918)		(6 606)	(2697)	
Lyttelton	2 369	956		0	0	0	0	0	0	0	0	0	1 968	510		1 523	565		0	0	0
	(2 369)	(956)		0	0	0	(1 571)	(574)		(3 1706)	(1035)		(2 1542)	(1077)		(5 2238)	(2744)		0	0	0
Dunedin	1 35	158		0	0	0	0	0	0	0	0	0	0	0		1 48	54		0	0	0
	(1 35)	(158)		0	0	0	0	0	0	0	0	0	(1 252)	(219)		(1 48)	(54)		0	0	0
Port Chalmers	1 34	153		0	0	0	0	0	0	0	0	0	0	0		1 255	257		0	0	0
	(1 34)	(153)		0	0	0	0	0	0	0	0	0	(1 168)	(127)		(1 255)	(257)		0	0	0
Whangarei	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0		0	0	0
	0	0	0	0	0	0	0	0	0	(1 33)	(20)		(1 129)	(100)		0	0		0	0	0
Napier	0	0	0	0	0	0	0	0	0	0	0	0	1 410	405		1 497	507		0	0	0
	0	0	0	0	0	0	(1 618)	(399)		(1 191)	(381)		(2 779)	(826)		(3 1434)	(1449)		(2 1578)	(882)	
Onehunga	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 77	78		0	0	0
	0	0	0	0	0	0	0	0	0	(3 132)	(268)		(1 119)	(86)		(1 77)	(78)		0	0	0
Taranaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 303	306		0	0	0
	0	0	0	0	0	0	0	0	0	(2 297)	(604)		(1 326)	(228)		(1 303)	(306)		0	0	0
Nelson	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 92	98		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	(1 91)	(104)		(3 487)	(364)		0	0	0
Timaru	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 253	256		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	(1 136)	(248)		(1 253)	(256)		(1 344)	(250)	
Bluff	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 221	258		0	0	0
	(1 985)	(334)		0	0	0	0	0	0	0	0	0	(2 1251)	(804)		(5 1625)	(1631)		0	0	0
Gisborne	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 157	90		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0		(1 157)	(90)		0	0	0
Wanganui	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	(1 26)	(39)		0	0		0	0	0
Picton	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 74	77		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0		(1 74)	(77)		0	0	0
Oamaru	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 39	44		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0		(1 39)	(44)		0	0	0
Westport	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0		0	0	0
Greymouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1 60	21		0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0		(1 60)	(21)		0	0	0
ALL PORTS	7 1447	5348		2 1950	2648		1 61	604		1 293	959		6 4155	5661		19 6701	8960 ^a		2 169	1613	
	(9 2446)	(5694)		(2 1950)	(2648)		(16 8974)	(10924)		(27 13766)	(17398)		(39 25659)	(31274)		(41 18559)	(21975)		(15 10919)	(8611)	

Notes: a Includes 16 stoppages over the same issue.

b Includes 5 penalties.

1. The figures in brackets relate to all stoppages while the unbracketed ones relate to "non-industrial" stoppages.

Source: Derived from Waterfront Industry Commission data.

Chapter XIV

FACTORS SHAPING THE WATERFRONT INDUSTRY
PATTERN OF CONFLICT

I. NATURE OF THE INQUIRY

We are now in a position to study factors which have shaped this industry's pattern of conflict. As with the previous two industries, reliance will be placed on the literature and on information received from participants. Again, interviews and visits played an important part in becoming familiar with the industry. The geographic dispersion of the country's 20 ports made visits to all difficult but, over a period from December 1973 to January 1975, a total of eight were visited, including the four main ones.¹ During port visits, discussions were held with the local secretary of the New Zealand Port Employers' Association (NZPEA) who was usually a full-time official, but in one case was a manager of a shipping company branch office. At some larger ports interviews also involved other representatives of the NZPEA. Discussions were also held with the secretary and/or president of the local port union. In some cases other union officials, members of the executive committee, port conciliation committee representatives and workers generally were also involved. Where possible port operations and facilities were observed. Interviews were further held with officials at the head office of the NZPEA and at the New Zealand Waterside Workers' Federation (NZWWF).

In addition, the Waterfront Training Organisation was visited and discussions held with its staff. Several officers of the Waterfront Industry Commission (WIC) were also interviewed, and provided information on various matters during the course of the study. A total of over 30 people were interviewed and discussions were invariably friendly and informative.

1. That is Auckland, Mount Maunganui, Wellington and Lyttelton. Others visited were New Plymouth, Port Chalmers, Dunedin and Bluff.

No request for an interview was declined.

Visits and interviews were again supplemented by questionnaires, one for managements and one for unions. Relevant preliminary drafts were referred to the NZPEA and to the NZWWF for comment, as a result of which improvements were incorporated in the final versions. Both organisations informed their branches or affiliated unions of the forthcoming questionnaire and commended it to them.² In September 1974 copies of the management questionnaire were distributed to branch secretaries of the NZPEA. Copies of the union questionnaire were sent to secretaries of port unions.

Of the 20 management questionnaires distributed, 16 were completed and returned giving a very high response rate of 80%. Indeed as one NZPEA branch secretary, representing two ports, completed only one questionnaire on the grounds that the other port was virtually defunct and most answers relating to it would be repetitious, the effective response rate is even higher than 80%. Twenty union questionnaires were also distributed, of which 14 were completed and returned. Again, the response rate, 70%, was high.

II. AN EVALUATION OF POSSIBLE INFLUENCES ON THE WATERFRONT INDUSTRY PATTERN OF CONFLICT

1. The Casual Nature of Employment

It is frequently argued that conflict on the waterfront results from the casual nature of waterfront employment. The volume of cargo requiring handling fluctuates according to the flow of vessels in and out of port. A particular stevedoring company may at one time handle several ships and at another, none at all. Similarly, the port as a whole may at times be busy and at others idle. The result is a fluctuating demand

2. A number of copies of the questionnaires were completed, where appropriate, from a national perspective. Responses from these copies are not included in the tables or in any statistical analysis.

for labour. The fluctuation is very substantial for the individual company but also significant for the port generally. Workers may be in the employment of a particular employer for a brief period and only perform work on an intermittent basis.

Several of the connections between casual employment and conflict previously noted are also seen to apply to the waterfront industry. It is again argued, for example, that casual employment promotes a casual attitude to the employment relationship,³ which means the worker has no feeling of attachment or loyalty to a particular employer, and the employer has little feeling of responsibility for the worker.⁴ Moreover, where the watersider works under the orders of several different employers in succession, he may in fact be confused as to who his employer is.⁵ The intermittent nature of the work and incidence of idle periods is seen to be not conducive "to the development of stability in work attitudes, or to any sense of real partnership in an enterprise".⁶ Casual employment may further promote feelings of insecurity on the part of the worker whereby employer actions are treated with suspicion.⁷ Memories of past conditions are also likely to influence attitudes and perceptions.⁸ Workers may react to this employment system by attempting to gain control of the work situation.⁹ Fluctuations in earnings resulting from the intermittency of the work may also be a source of conflict.¹⁰

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3. See Michael Mellish, *The Docks After Devlin: A Study of the Effects of the Recommendations of the Devlin Committee on Industrial Relations in the London Docks* (Heinemann, London, 1972) pp. 1-4; and B.W. Fernandez, "Trade Union Policy and Practice in the New Zealand Waterfront Industry", M.Com. Thesis, University of Otago, 1969, p. 155.
 4. See A.A. Evans, *Technical and Social Changes in the World's Ports* (ILO, Geneva, 1972) p. 146.
 5. See *ibid.*, p. 147.
 6. N.S. Woods, *Report on Industrial Relations Legislation* (Department of Labour, Wellington, 1968) p. 20.
 7. See Mellish, *op.cit.*, p. 1.
 8. See Evans, *op.cit.*, pp. 206-207.
 9. See Paul T. Hartman, *Collective Bargaining and Productivity: The Longshore Mechanization Agreement* (University of California Press, Berkeley and Los Angeles, 1969) Ch. II.
 10. See V.P. Blakeley, "Industrial Relations on the New Zealand Waterfront", mimeographed paper, New Zealand Port Employers' Association, Wellington, 1966, p. 12; and Evans, *op.cit.*, p. 207.

The "casual employment argument" relates primarily to the inclination to engage in conflict, although it has implications for the ability to do so in that workers have common employment experiences and are not differentiated along company lines. It appears relevant not only to collective and employer-initiated forms but also to individual forms of conflict. The influence of casual employment may be general, but vary in degree as among ports to the extent that intermittency of work and regularity of particular employment relationships also varies.

This argument is a plausible one and several managers¹¹ interviewed considered the present system of casual employment a major source of conflict. One expressed fairly widespread sentiments in saying "waterside workers have no employer to give allegiance to. They don't know where their money comes from. They think it comes from the commission (WIC). Many don't know that the commission is paid by the shipping companies." The absence of an employer was seen to produce not only a lack of loyalty but also a "lack of good discipline". Many managers considered the permanent employment of waterside workers by particular employers to be desirable.¹² As one said "permanent employment builds loyalty to the company". Several also saw a permanent system as more efficient than the present "wasteful" pool or rotational system. Moreover, several managers complained of "hangovers from the casual or 'auction block' days" such as the right of the worker to sign off until further notice. The intermittency of work and incidence of idle days was also considered by some to produce conflict. As one manager said, "the stop/start work system causes trouble. When the workers start again they don't like working". An officer involved in the administration of the industry contended that "you get unrest where large numbers of men find

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11. In line with previous terminology, we shall call both company managers and employers' representatives "managers" or "managements".
 12. There are numerous types of "permanent" employment. Workers employed by a single employer may be grouped into regular or permanent gangs which stay intact for most jobs or into irregular gangs, the composition of which changes with each job. Alternatively, workers may be formed into permanent gangs which are employed not by a single employer but are available for hire by any employer.

themselves with a good deal of idle time". Furthermore, the heritage of past systems was regarded by some managers as an important influence on worker attitudes. It was argued that watersiders have customary attitudes which often involve suspicion of the employer. Such attitudes and resultant practices are considered "very hard to break".

Union officials interviewed seldom saw casual employment as producing conflict. Most were opposed to permanent employment either in the form of permanent gangs rotating among employers or of workers being employed by a single employer. But among the grounds for opposition to permanency were that "it is a threat to what little militancy we have got", "it is hard to be a good delegate when you are permanent", and that it can result in workers being "pressurised". One executive member went as far as to say "I detest permanency of any form". The main argument against permanent employment was that it would reintroduce aspects of favouritism and discrimination. Some workers might not get employment, incomes could differ among workers and preferred "pacemakers" might develop. The present system was seen to be equitable giving the same treatment to all and several union representatives also liked "the independence side" of a system which allows men to sign off until further notice and so on. The unusual flexibility of this system may be an important reason why the industry's quit rate is so low. Nevertheless, some officials at smaller ports regarded fluctuations in incomes and in availability of work as potential sources of conflict.

In the questionnaires, managements and unions were asked to assess the importance of the casual nature of waterfront work and of fluctuations in the amount of work available and in earnings as causes of strikes at their ports. Parties from a number of ports did not assess these or other factors, on the grounds that no strikes or other stoppages had occurred at their ports for many years.¹³ Of those that did make assessments, managements tended to consider the casual nature of employment less important than did unions, with all but one

13. Some of these respondents obviously did not regard the Waitangi Day stoppages of 1972 as relevant.

management rating it not important (see Table 1). This response pattern is puzzling in view of the sentiments expressed during interviews. It may partly derive from confusion over the word "casual". Since General Principal Order No. 305 of August 1970, the larger ports have been under "permanent conditions" and the smaller ones under "casual conditions".¹⁴ In this context the words have meanings different from their usual ones. "Permanent conditions" here simply means a weekly wage covering 40 hours at ordinary time is paid even if work is not available, while "casual conditions" means workers are paid two hours daily minimum for attendance at the bureau, with their remuneration being made up to a weekly guaranteed payment if necessary. All but one of the managements assessing this factor were from "permanent" ports. The possibility of confusion is suggested by responses to another question on permanent employment in which a lack of loyalty and of a direct employer-worker relationship were commonly mentioned. Any confusion was apparently not present in union responses. Four of the seven unions rating the factor of at least average importance were from fairly small ports where work may be intermittent. On the basis of size of mean response, unions rated this factor fifteenth in importance of the 29 assessed and managements only twenty-seventh equal or last. It is not surprising that union and management assessments from the same port were different in seven of eight cases. In six of these seven cases, the union rated the factor more important than did the management.

Management assessments of the importance of fluctuations in earnings and in availability of work were the same as those for casual employment, except that two managements rating the latter not important, considered fluctuations in earnings and work of average importance and that the one considering casual employment of average importance rated such fluctuations of above average importance. Most unions were also fairly

14. Ports under "permanent conditions" are Auckland, Mount Maunganui, Wellington, Lyttelton, Port Chalmers, Dunedin, Whangarei, Onehunga, Napier, Taranaki, Nelson, Timaru and Bluff. Those under "casual conditions" are Opua, Gisborne, Wanganui, Picton, Westport, Greymouth and Oamaru.

TABLE 1

The Perceived Importance of Casual Employment and
Fluctuations in Earnings and Availability of Work as Causes
of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very	Above	Average	Below	Not	No	Mean	
	import-	import-	import-	import-	import-	Answer	response	SMR ^c
	ant	ance	ance	ance	ant			
1. <u>Casual Employment</u> ^a								
Management responses (n=16)	0	0	1	0	9	6	4.80	3.93
Union responses (n=14)	2	0	5	1	2	4	3.10	3.01
2. <u>Fluctuations in earnings</u> ^b								
Management responses	0	1	2	0	7	6	4.30	3.52
Union responses	1	1	3	2	2	5	3.33	3.23

Notes: a The casual nature of waterfront work.

b Fluctuations in the amount of work available and in earnings.

c SMR = Standardised mean response.

Source: Management and union questionnaires.

consistent in their assessments of these two factors, although one which rated casual employment of below average importance considered such fluctuations very important. On the basis of size of mean response, unions rated this factor eighteenth equal in importance of those assessed and managements twenty-second. Management and union assessments from the same port were different in all eight cases.

The parties were also asked whether or not they considered it desirable that waterside workers should be permanently in the employment of particular employers. Seven managements said

it was desirable, two that it was desirable in particular types of work and seven that it was not desirable. Of the seven considering permanency desirable, five argued in explanation that it leads to "greater loyalty", "better understanding" and more "direct relations between employer and employee". Four also contended that it increases efficiency. One management considered permanency desirable within the context of a single stevedoring company undertaking all work at a port. Two managements regarded permanent employment as desirable in roll on/roll off and container terminals but argued a non-permanent force would still be required for other work. Of the nine seeing it as wholly or partially desirable, six considered permanent employment to be practicable at their ports. All six came from larger ports. In response to another question on ways of "improving" industrial relations, three managements specified permanent employment. Of the seven regarding it as not desirable, six said no one employer at their port had sufficient continuous work to warrant it and five that it also would increase costs. One management even argued that "the present 'pool of labour system' provides the best utilisation of labour (and) this applies to all ports".

As in the interviews, unions were firmly against permanent employment by a particular employer, with 13 of 14 considering it undesirable. Of these 13, eight argued in explanation that it leads to "favouritism", "jealousies", "demarcation problems", "segments in the union" and so on, and three that it was not practicable or would result in less work. One also argued it makes workers "company conscious". Widespread sentiments were expressed by another in stating "the basis of the water-side workers' approach to his job and union is equality. Permanent work as a small pocket within a port area could be an added advantage to a section of workers and discriminate against others. It could cause factionalism and breed disunity." The one union which favoured permanent employment was from a small, declining port and expressed the hope that it would give "more security".

It is obvious that employment on New Zealand waterfronts is casual. In allocating labour to ships, an attempt is made

to ensure an equalisation of hours for each worker. He may be allocated to many employers over the course of a year and work for a particular one only a relatively few times.¹⁵ In ports where one or two employers predominate, however, he may be more regularly in the employment of a given employer. It is also clear that in many cases work is available only intermittently. Two measures of the availability of work for 1973 are contained in Table 2. The workers' average number of paid hours not worked per week due to lack of work gives some idea of its availability and of the extent of idle time. Only in the case of Auckland was the number of paid hours not worked negligible. In all "casual" ports but Westport, the number of paid but idle hours exceeded the number of hours worked. The broad pattern of hours for 1973 is similar to that for other recent years.

The hours figures in the table are averages and so smooth fluctuations. A measure of the variability of demand for labour is the number of man-day surpluses and shortages. Over a period there may be some days when there is a shortage of men and others a surplus. From the table it can be seen that the only port with a net shortage (surpluses minus shortages) in 1973 was Auckland. That port, Lyttelton and, to a lesser extent, Mount Maunganui and Taranaki all experienced numerous days of shortage as well as of surplus. Most ports experienced few days of shortage relative to those of surplus.

For reasons outlined earlier we might expect the above variables, insofar as they measure the availability and intermittency of work, to be positively related to stoppage activity. That is, the higher the average number of paid hours not worked because of lack of work or the net man-day surpluses (surpluses minus shortages) per worker for the port, on the one hand, the higher the expected level of stoppage activity of that port on the other. As a test of these propositions, a number of correlations were estimated, results of which are presented in Table 3.

15. In 1972, the number of employers paying wages at a particular port ranged from two at Oamaru to 40 at Bluff, with the average number per port being 16.7.

TABLE 2

Registered Workers' Average Weekly Paid Hours and
Man-Day Surpluses and Shortages on a Port Basis,
Year Ended 30 September 1973

	Paid hours not worked due to lack of work	Total worked hours	Total paid hours	Man-day surpluses	Man-day shortages
<u>Permanent</u> <u>Conditions</u>					
Auckland	2.86	36.11	44.32	28,721	33,220
Mt. Maunganui	7.17	31.91	43.62	30,603	8,197
Wellington	8.57	29.48	43.01	70,884	4,749
Lyttelton	7.64	32.17	44.43	38,035	11,797
Dunedin	14.07	27.22	46.19	20,808	3,277
Port Chalmers	17.53	22.55	44.97	17,891	331
Whangarei	12.90	32.60	50.60	9,929	186
Napier	10.96	30.05	45.46	40,771	2,962
Onehunga	11.03	30.17	46.09	7,233	0
Taranaki	13.78	25.12	43.65	33,640	7,491
Nelson	15.11	25.29	44.81	14,611	1,981
Timaru	13.17	27.17	44.67	27,752	1,815
Bluff	13.56	26.43	44.55	44,325	892
Average of above	8.52	30.96	44.33		
Subtotal				385,203	76,898
<u>Casual</u> <u>Conditions</u>					
Opua	17.89	8.79	27.65	16,772	208
Gisborne	22.64	11.43	38.43	20,661	228
Raglan	17.43	1.35	18.92	NA ^a	NA
Wanganui	25.61	6.57	36.78	8,562	1
Picton	22.99	9.71	37.11	6,916	57
Oamaru	22.70	10.48	40.86	8,600	0
Westport	15.93	19.87	41.12	5,479	269
Greymouth	24.63	7.09	36.14	5,708	25
Average of above	21.18	9.72	34.74		
Subtotal				72,698	788
ALL PORTS	9.17	29.80	43.81	457,901	77,686

Notes: a NA = not available.

Cols. 1 and 2 do not sum to Col. 3 largely because of paid hours allocated to holidays.

Source: Derived from *Waterfront Industry Commission Annual Report*, G. 2 (Government Printer, Wellington) 1973.

TABLE 3

Correlation Coefficients: "The Availability and Intermittency
of Work Hypothesis" - Collective Forms

Variables		Correlation Coefficient (r)	
1973	no. of stoppages, no. paid hours not worked ^a	-0.637	(significant 0.005)
	worker loss ratio, no. paid hours not worked	-0.481	(" 0.05)
	no. of stoppages, net man-day surpluses per worker ^b	-0.576	(" 0.01)
	worker loss ratio, net man-day surpluses per worker	-0.450	(" 0.05)

Notes: a Average weekly number of paid hours not worked due to lack of work.

b I.e. man-day surpluses minus man-day shortages all divided by average labour force.

Source: Derived from Waterfront Industry Commission data.

The relationship between the number of stoppages and average weekly number of paid hours not worked due to lack of work is a significant, but negative one. Even in a high stoppage year like 1971 a similar relationship prevailed with the correlation coefficient being $r = -0.596$ (significant 0.005). It seems ports with a relatively high average number of paid but idle hours, tend to have a relatively low number of stoppages and vice versa. A negative, but less significant, relationship also holds when the alternative stoppage measure of the worker loss ratio (man-days lost due to stoppages per worker) is used. Results are little different when net man-day surpluses is used as the availability and intermittency of work measure. Both stoppage variables are related to this measure in a negative and statistically significant way.

As suggested earlier, casual employment appears to influence not only collective but also individual and employer-initiated forms of conflict. It might be expected therefore that the greater the intermittency of the work the higher will

be the levels of individual and employer-initiated forms. In testing this, the average weekly number of paid but idle hours and net man-day surpluses per worker were again used as the measures of the availability and intermittency of work. As can be seen from the correlation results in Table 4, these variables are significantly related only to the absence rate, and even then in a negative way. It seems ports with a relatively high average number of paid but idle hours and a high number of net man-day surpluses per worker, tend to have low absence rates and vice versa. In a way, this result was to be expected in that workers at ports with idle time do not need to be absent without pay in order to avoid being at work. At busy ports, however, workers have less opportunity to be absent from work while still receiving at least a minimum rate of pay. Most of the other coefficients in the table also have negative signs but no weight can be attached to this because none of them is significant.

TABLE 4

Correlation Coefficients: "The Availability and Intermittency of Work Hypothesis" - Individual and Employer-Initiated Forms

Variables		Correlation Coefficient (r)
1973	absence rate, no. paid hours not worked	-0.785 (significant 0.001)
	accident rate, no. paid hours not worked	-0.111 (insignificant)
	quit rate, no. paid hours not worked	0.263 (")
	dismissal rate, no. paid hours not worked	-0.291 (")
	penalty rate, no. paid hours not worked	-0.289 (")
	absence rate, net man-day surpluses per worker	-0.734 (significant 0.001)
	accident rate, net man-day surpluses per worker	-0.045 (insignificant)
	quit rate, net man-day surpluses per worker	0.276 (")
	dismissal rate, net man-day surpluses per worker	-0.390 (")
	penalty rate, net man-day surpluses per worker	-0.290 (")

Source: Derived from Waterfront Industry Commission data.

These results cannot be taken to mean the influence of casual employment on conflict is either negligible or of a direction opposite to that normally suggested in the literature. The two "independent" variables used in the regressions are clearly inadequate proxy measures of the intermittency of work and say nothing of the possibly more important effect, namely, the rotation of workers among employers. The results may even be expected insofar as the two aspects of the casual employment argument (intermittency of work and rotation among employers) have counteracting effects on conflict. Ports with intermittent work are typically small and have only a few employers so that, when work is available, workers are employed by a regular and familiar employer. Ports with a steady flow of work, on the other hand, are typically large with many employers. Workers there may have steady employment but work for any given employer only infrequently. Moreover, the effects of casual employment may be counteracted by other influences. Ports with a low average number of paid but idle hours and few net man-day surpluses per worker are obviously relatively busy ones in which workers possess considerable bargaining power. At ports where such hours and surpluses are numerous, workers may possess little ability to engage in conflict action, especially that of a collective nature. In addition, busy ports are typically large ones and slack ports small ones so that the above correlations may also be incorporating the effect of size.

Data on the number of different employers for whom the average watersider worked during a year are not available. Statistics were, however, published prior to 1973 on the number of employers at a port paying wages to waterside workers. On the basis of our earlier discussion, it would be expected that the higher the number of employers at a port, the greater will be the level of stoppages there. Results in Table 5 reveal that for 1972 such a positive relationship existed irrespective of whether the number of stoppages or worker loss ratio is used as the stoppage measure. The number of employers explained two-fifths of the variation in number of stoppages (including collective penalties) among ports, and a quarter of the variation in worker loss ratio. It can further be seen from the table that both the absence rate and penalty rate were

significantly and positively related to the number of employers.

TABLE 5

Correlation Coefficients: "The Multiplicity of
Employers Hypothesis"

Variables		Correlation Coefficient (r)
1972	no. of stoppages (incl. pens.) ^a , no. of employers ^b	0.633 (significant 0.005)
	no. of stoppages (excl. pens.) ^c , no. of employers	0.548 (" 0.02)
	worker loss ratio (incl. pens.), no. of employers	0.516 (" 0.025)
	worker loss ratio (excl. pens.), no. of employers	0.493 (" 0.05)
	absence rate, no. of employers	0.421 (" 0.10)
	accident rate, no. of employers	0.011 (insignificant)
	quit rate, no. of employers	0.005 (")
	dismissal rate, no. of employers	-0.166 (")
	penalty rate, no. of employers	0.507 (significant 0.05)

Notes: a Number of stoppages (including collective penalties).

b Number of employers paying wages at a port.

c Excluding penalties.

Source: Derived from Waterfront Industry Commission data.

These results must again be treated with some caution. The variable used as a proxy for casual employment (the number of employers) is undoubtedly related to other factors which may themselves influence the results. For example, insofar as the number of employers is positively related to the size of a port, the above correlations may also incorporate the effect of size.¹⁶

16. The correlation between the number of employers and a measure of size (average bureau register strength) for 1972 was $r = 0.591$ (significant 0.01).

Demand for labour, and so income of the waterside worker, is subject to seasonal variation. New Zealand's main export trades (fruit, meat, dairy products and wool) all reach a peak during the October to May period. It would therefore be interesting to see if stoppage activity also has a seasonal pattern. The nature of this pattern (if one exists), however, is obscure. It might be argued that stoppage activity will be highest in the summer months when the worker possesses his maximum bargaining power and is also rotating among possibly numerous employers. At that time though the flow of work is at its most regular and it could be suggested that stoppage activity will be at its greatest when the intermittency of work begins to increase (i.e. in the early winter months). Reference to Table 6 shows that a seasonal pattern does exist for stoppage frequency.¹⁷ For 1967-73, stoppage frequency was highest in the summer months (December to April) and in two winter months (June and July). It peaked in January and troughed in September.

TABLE 6

Seasonal Index for Stoppage Frequency, 1967-73

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
162.20	125.16	134.39	114.13	82.24	140.91	121.36	32.30	23.22	90.39	52.35	121.35

Source: Derived from Waterfront Industry Commission data.

This seasonal pattern differs from that for meat freezing and building and construction stoppage frequency. In particular, relatively more stoppages occur in the months of June, July and December in the waterfront industry than in meat freezing. Compared with building and construction, waterfront stoppage frequency is high in April, June and December but low in July and August.

Casual employment appears a significant influence on conflict. Numerous managers described it as such during interviews,

17. A seasonal index was derived for stoppage frequency only as employment figures, needed to derive the worker loss ratio, are not available on a monthly basis.

although management responses to the questionnaire failed to support this view. Some union officials placed little weight on casual employment during interviews, but questionnaire responses indicated that unions often consider it of some importance. It is difficult to empirically test the casual employment argument, partly because of the lack of adequate proxy measures. Our correlation results throw little light on the nature and strength of the relationship between the intermittency of work and levels of conflict. But they do possibly indicate that the more employers waterside workers at a port have over a period, the greater will be the level of stoppages, absence and penalties there. Thus while casual employment may be pervasive, its effect may vary insofar as aspects such as the degree of rotation among different employers also vary among ports. Casual employment is important not only because of its direct effect on conflict but also because it has shaped attitudes in numerous ways and resulted in an organisational structure which itself has implications for conflict.

While the system of employment is still casual it is nonetheless highly regulated. Aspects of statutory regulation were outlined in Chapter VII. Workers also maintain their own forms of regulation. Most have their origins in, and are reactions to, by-gone variants of the casual system and are largely concerned with employment opportunities. One of them is "spelling" which involves workers not performing work when scheduled to do so. It can take several forms. For example, at any given time part of a hold gang may be "upsies" (that is, having a break on deck); or a worker may actually leave the job and wharf area altogether (sometimes called "gliding"), a variant of which involves a worker going home early (an "early nighter") at, say, 3.30 p.m. The effect of spelling is to lower the rate of output and so increase employment opportunities.

Managers at five of the eight ports visited considered spelling at their ports to be of significant proportions. There was widespread feeling that spelling was "possible because there are too many men in a gang". One even suggested

"gang strengths are too big for most cargoes and some men would be in the way if they were all there". Some implied that it was associated with poor supervision. The degree of antipathy to spelling ranged from sentiments such as "it is the worst restrictive practice on the waterfront" to others like "it is a problem...but on certain jobs, for example freezers, some laxity is necessary".¹⁸

Several union officials acknowledged the existence of spelling in interviews but said the union did not officially recognise it. As one said, "we don't recognise its existence. If we did, we would recognise lower gang manning". Most said they did not condone it, largely because it "creates a case for reducing manning scales" and some unions impose fines on members caught "gliding". Nonetheless, in a number of cases spelling was seen as "something the men allow". One official even alleged that a particular employer at his port encouraged it because he achieved a "better turn-around through no supervision". Most argued that the extent of spelling is less than is commonly suggested.

Another form of regulation concerning employment opportunities is job demarcation. Waterside workers zealously guard work they consider theirs and resist any action which may result in a loss of job opportunities to other workers. Employment

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18. In the questionnaire, managements were asked to indicate the level of spelling in the waterfront industry relative to that in other New Zealand industries and at their port relative to that at other ports. Responses were as follows:

	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Other^a</u>
Perceived levels of spelling in:				
- Waterfront relative to other N.Z. industries (n=13)	4	2	7	0
- Particular port relative to other N.Z. ports (n=14)	2	2	8	2

Note: a "not applicable".

Source: Management questionnaire.

Five of the managements which said their ports had relatively low levels of spelling also said the industry had a relatively low level.

opportunities may also be ensured by the practice of not working in the rain. At some ports watersiders will apparently not work in the rain even if they are requested to do so and wet weather gear is provided. Some employers argue that, despite the reasons given by workers, this action is designed to spread jobs out and so ensure work opportunities.

2. The Waterfront Industry Commission and the Organisation of the Industry

An argument related to the casual employment one concerns the organisation of the industry. It is suggested that the Waterfront Industry Commission, as a buffer or barrier between workers and employers, tends by its very existence to keep the two sides apart.¹⁹ It is also contended that the normal functions of the employer in relation to the workers he employs have been transferred to the commission, Waterfront Industry Tribunal and port conciliation committees.²⁰

It is difficult to say on a *priori* grounds what influence the WIC has on conflict. It can be argued that an independent organisation responsible for allocation of employment, payment of wages and other administrative matters constitutes a barrier between employer and worker. In an industry where the employment relationship is transitory, such an organisation, by performing many employer functions, makes it even less likely that a "normal" relationship between worker and employer will develop. It may play such a prominent role that the worker is confused as to the identity of his actual employer. Equally, however, it can be argued that such an organisation acts as a buffer between employer and worker and by so doing reduces conflict. In a casual industry such as this, the possibilities for conflict are so great that only an independent organisation could carry out many employment functions in a

19. See Blakeley, *op.cit.*, p. 4.

20. See Producer Boards' Shipping Utilisation Committee and New Zealand Trade Streamlining Committee, *New Zealand Overseas Trade: Report on Shipping, Ports, Transport and other Services* ("Report of the Streamlining Committee", 1964) pp. 107-109.

way which avoids conflict between the parties. The barrier/buffer dichotomy came through strongly in both interviews and questionnaire responses.

The majority of managers interviewed saw the WIC as a barrier between employer and worker and so a source of conflict. One expressed fairly widespread sentiments in saying "at the moment it is impossible to get worker loyalty to the employer. The commission is a barrier which separates the two groups. The employers must become an identity. They should run what they are paying for." The actual division of functions between the employer and WIC is also seen to produce conflict. The allocation of work and payment of remuneration lies with the WIC while the supervision of the work and administration of discipline lies with the employer. The result, it is suggested, is that "the men give credit for the good parts to the commission and blame the bad parts on the employer". To establish a more direct employment relationship and an "employer identity" it is argued that the form of the WIC must be changed. A suggested change was that all WIC functions be undertaken by an expanded New Zealand Port Employers' Association, possibly with the proviso that it be administered by a board representing both employer and worker interests. A few also saw change to be desirable because of the alleged inefficiency of the commission. A minority of managers did not see the WIC as a source of conflict and considered the present system satisfactory. As one said, "we've never been used to anything else. The commission is working quite well."

All union officials interviewed saw the WIC as a buffer between the parties and so as a device which minimises conflict. The general view was that "the commission has done away with many of the arguments and has led to harmony". The independence and impartiality of the WIC was stressed. As one secretary said, "the commission is an independent body. You couldn't get a fairer one." Even the few who said the WIC was "not perfect", acknowledged it was "honest" and were against its removal or major modification. Most officials would agree with the statements that "the commission is the only way to run the waterfront industry" and that "I could not visualize

any other system". It was considered that any removal of the WIC's independence in favour of employer control would result in substantial conflict. As one official put it, "if we went back to free enterprise, it would be _____ murder".

In the questionnaires, the parties were asked whether the Waterfront Industry Commission form of waterfront employment is desirable or undesirable. The difference in views between managers and union officials was again evidenced in the responses. Ten managements said the WIC form of organisation was undesirable while five said it was desirable. Thirteen unions, on the other hand, said it was desirable and only one that it was undesirable. All managements which saw the WIC form as undesirable commented in explanation along the lines that a "third party prevents a direct employer-employee relationship" and so "does not encourage improved relations". One even suggested that "the commission often contributes to disharmony between the union and employer". Of managements considering it desirable, all agreed, at least in part, with the view that, "it is probably the best available having regard to the nature of the industry. Any similar organisation controlled by the Employers' Association would be regarded with suspicion by (the) watersiders' union, and as there must be some body to control waterfront employment and administration, a separate body not directly controlled by either party is the only answer." Eleven of the 13 unions regarding the WIC form as desirable indicated that the WIC is a "buffer" and would agree with the statement that "it is imperative for industrial harmony to have a completely independent body acting as a buffer between the worker and the employer". The single union considering it undesirable argued that the WIC "represents government domination of the industry and prevents direct bargaining".

The parties were also asked whether or not the present nature of the WIC is in need of change. The 10 managements considering the WIC form undesirable also said the nature of the commission was in need of change. Of this number, five wanted a new organisation that would be directly responsible to waterfront employers, one wanted a single stevedoring

company and union for each port, one wanted increased participation of both employers and workers in fields covered by WIC activities and two wanted its complete abolition. (A further management did not outline the desired change.) One management argued that the "WIC should either be done away with and its role taken over by the Port Employers' Association, or this Association and individual employers (be) done away with and replaced by one employer who would have direct contact with the workers". Four of the five managements seeing the WIC form as desirable saw no need for a change. The other such management saw a change desirable at the national level but not at its particular port. The suggested national change was "a governing body of employers, government, Harbours Association and waterside workers instead of the present Commission".

Eight unions saw no need for change in the nature of the WIC. Two others, however, envisaged an expanded role for the WIC in which it would "become involved in the total administration of waterfront affairs" and "cover all workers connected with cargo handling". A further union took the opposite view in suggesting that the WIC "revert to its original role instead of becoming a second employer". Of the two other unions which saw need for change, one asked "for greater co-operation with the port unions and (New Zealand Waterside Workers') Federation", while the other considered "the format outdated". One union response suggested that the "functions and policy of the Commission (be) decided by a Board representative of (the) industry", a change which is apparently provided for in the proposed amendments to the Waterfront Industry Act.²¹

There are obviously different views on the role of the WIC in industrial conflict. Unions are firmly of the impression that conflict is lower under the present system than it would be under one involving greater employer involvement. It seems many of the functions of the WIC, such as the allocation of work, are not regarded as sources of conflict. In any event

21. At the time of writing, amendments to the Waterfront Industry Act, 1953 were being considered by Parliament.

worker opinion on this matter is crucial, in that if workers are hostile to any system other than the present one, any major change will inevitably result in conflict. On that basis, it may be argued that the level of conflict prevailing under the present system is likely to be lower than that which would occur under a significantly different form of waterfront organisation.

An organisational body with conciliation as well as administrative functions is the port conciliation committee (PCC). It might be argued that conflict will at least be exacerbated if there are inadequacies in the nature of this body or in the way in which it discharges its functions. Most managers interviewed considered the PCC, and the conciliation system generally, to be effective in settling disputes and saw little need for major change to it. One even contended that the conciliation machinery is "the best in New Zealand - from bottom to top. Many latent stoppages are settled at ship's side." Several stressed the flexibility and ready availability of the PCC. Some noted, however, that the work of the chairman is vital to the effectiveness of the committee.

There was more diversity of opinion among union officials, although most agreed with the PCC in principle. Several considered it "most necessary in an industry like this" and argued that the conciliation system "works". One even suggested the PCC system is the "only way whereby serious disputes can be diminished". Some, however, said they could "operate without it" and a number, while not necessarily being opposed to the system, felt it can have "detrimental" effects on industrial relations. In particular, it was alleged that the conciliation system can "mean decisions get passed on" and that it "gives the employer a way out and he won't negotiate". Several officials expressed a reluctance to take disputes to the PCC, some preferring to "deal directly with the employer". One official said "only things we expect to win are taken to the PCC". Several emphasised the importance of the chairman, and there was dissatisfaction at certain ports with the choice of chairman and of some employers' representatives. There appeared to be some dissatisfaction with the Waterfront Industry

Tribunal, although few officials reported any contact with it.

In the questionnaires, managements and unions were asked how frequently disputes are referred to the local PCC and how they would rate the effectiveness of the PCC at their port. As regards frequency of referral, three managements said "often", two said "sometimes" and 11 "very infrequently" or "never". No union said "often", 11 said "sometimes" and three "very infrequently" or "never". Ten managements rated the PCC as effective, three of which made the proviso that it is seldom required. One management considered it effective on matters of dirt rates but not on other disputes, while three rated it as generally ineffective. Two of these last mentioned noted a reluctance on the part of the union to refer disputes to the PCC or to attend its meetings. A management from a small port said the PCC was not applicable there, and another that it was seldom called upon. A majority of unions (eight) also rated the PCC effective, one making the proviso that it is seldom required and another that it depends on the attributes of the chairman. Two saw it as only partially effective, one noting it is "O.K. on minor ship side disputes" but not "on interpretations of agreements etc.", and the other that "many matters (are) not being referred to PCC because of the binding nature and tendency to refer matters of unimportance to (the) Tribunal". Three unions rated it ineffective, two of which mentioned problems with the local chairman. The respondent from a further union noted that "I don't think one (PCC) is in existence (at this port)".²²

22. A matter which may be appealed to the PCC is alleged wrongful dismissal. The parties were asked to assess the importance of this factor as a cause of strikes at their ports. Responses were as follows:

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=16)	0	1	0	2	7	6	4.50	3.69
Union responses (n=14)	3	0	2	1	3	5	3.11	3.02

Source: Management and union questionnaires.

(Footnote 22 is continued on the next page.)

Managements and unions were also asked to assess the importance of inadequate disputes settlement procedures as a cause of strikes at their ports. Responses to this question revealed a similar pattern of views to that expressed in interviews and in the answers just dealt with. It is clear from Table 7 that most managements considered this factor of no importance. The only one rating it of any importance also noted a reluctance of the union to attend PCC meetings. There was a greater diversity of views among unions but again a significant number saw it as of little or no importance. Of the two unions considering the factor very important, one rated the PCC as ineffective, complaining particularly about the local chairman, and the other said it was "effective but rarely used". On the basis of size of mean response, unions rated this factor twentieth equal in importance of the 29 assessed and managements twenty-fifth equal. Management and union from the same port gave identical assessments in only two of eight cases. In two others, the management rated the factor not important (i.e. 5) and the union very important (1).

TABLE 7
The Perceived Importance of Inadequate Disputes Settlement Procedures as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	1	0	0	9	6	4.70	3.85
Union responses (n=14)	2	0	2	1	4	5	3.56	3.46

Source: Management and union questionnaires.

(Footnote 22 continued):

While displaying some diversity, unions clearly generally considered it more important than did managements. Union and management from a given port gave the same assessment in three of eight cases. On the basis of size of mean response, unions rated alleged wrongful dismissals sixteenth in importance of the 29 factors assessed and managements only twenty-third.

Most managements and unions consider the PCC not only necessary but also effective. It is therefore not surprising that the majority of respondents from both parties saw inadequate disputes settlement procedures to be of little importance as a cause of strikes.

As noted in Chapter VII, the waterfront industry's unusual form of organisation has associated with it a unique system of penalties. Penalties, especially when imposed on the initiation of the employer, may be regarded as a form of conflict but may conceivably also be a source of conflict. Most managers interviewed saw penalties as necessary for the employer to have some control over the worker and regarded the system as being accepted by the workers. One said he would "hate to see penalties done away with. The industry is so loose it needs them. Supervision must be backed up by a penalty system." While few saw penalties as creating conflict, one manager noted that a two day port penalty imposed in retaliation against a stoppage "led to some bitterness". Views on the effectiveness of penalties varied. Some considered penalties, and especially those involving groups of workers, ineffective, with one manager arguing "at times cargoes have been declared preference, but employers are not very keen on it as it is work lost. Widespread penalties are probably a bigger imposition on the employer than on the union."

Most union officials interviewed also regarded the penalty system as a necessary feature of waterfront work. One even viewed the system favourably arguing it is "a needed condition to man the industry harmoniously". Several said unions were party to it in that they were involved in the formulation of the bureau rules. "Individual" penalties were considered necessary to ensure workers present themselves for employment and undertake their share of unpleasant work. One official argued that "the penalty system is necessary otherwise there would be chaos". Moreover, several unions apparently apply their own system of penalties through fines on members guilty of breaking union rules. At least one official, however, agreed with penalties in principle but not in practice, arguing "the application of penalties is subject to arbitrariness". Several

officials agreed with "individual" penalties but not with "collective" ones, contending the latter are "fundamentally different" and "harmful". One said "the employers have never tried to give a penalty as the result of a stoppage. If they did we would give them one back." But another whose union had been placed on penalty for stopping work said the penalty "was expected and accepted. It had the effect of extending the stoppage. The employer claims that quick turn-around is vital for the economy. The penalty strikes out their own argument." One official was strongly opposed to penalties on the grounds that they apply to the worker but not to the employer.

In the questionnaires, managements and unions were asked what effect the penalty system has had on waterfront industrial relations. Managements again generally expressed the view that penalties are necessary and accepted. Thirteen indicated that penalties have little or no effect on industrial relations, although one of these noted that "the union feel they are too severe". One also noted that "individual penalties are administered by the union (here) although the employers can penalise the union as a whole". A further management stated penalties have had a "good" effect in that the "men know where they stand for infringements", and one other that the system "does not improve industrial relations but at least shows that the employers who are still paying the wages should be able to expect some loyalty". (One management said penalties did not apply to its port.)²³ Ten unions also said penalties have little or no effect on industrial relations, with two noting that any penalties are administered by the union executive, and one that the system does not apply locally. One stated that penalties, where "wrongly imposed", have created "a reaction" on the part of workers. Two other unions said they have a "detrimental" effect on industrial relations, one arguing "discipline is necessary for all parties" and the other that

23. In answer to another question, two managements, however, explained why some firms at their ports experience relatively more direct action than others in the following terms: "Workers react in the way of direct action against companies which tend to exercise discipline" and "some companies are prepared to take a strong stand on any matter of dispute and have built up a degree of antagonism from the union as a consequence".

the system is "outdated".

The parties were also asked to assess the importance of disputes over the application of penalties as a cause of strikes at their ports. Responses were in line with impressions gained from interviews and other parts of the questionnaires. All managements but one considered the factor of little or no importance (see Table 8). The one exception made the statement quoted above about the union feeling penalties are too severe. Unions were divided equally between those rating it of average importance and those rating it of below average or no importance. On the basis of size of mean response, managements rated the factor nineteenth equal in importance of the 29 assessed and unions twenty-fourth. Management and union responses from a particular port were identical or similar in four of six cases.

TABLE 8

The Perceived Importance of Disputes over the Application of Penalties as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	1	0	0	4	5	6	4.20	3.44
Union responses (n=14)	0	0	4	2	2	6	3.75	3.64

Source: Management and union questionnaires.

The existence and use of penalties seems to epitomize the view that industrial relations is essentially a matter of providing rules. Penalties are a unique type of rule and that they should largely be accepted by both parties in an industry such as this is possibly surprising. They may have usually been applied in a way that bolsters the system of equalisation

of hours and of bureau labour engagement generally. Penalties have infrequently been used in the wider context of retaliation against the union or labour force. Certainly it appears neither party considers the application of penalties a very important cause of strikes.

3. The Remoteness of the Employer and Nature of Ownership

Another argument related to the one on casual employment concerns the remoteness of the employer.²⁴ As mentioned, the worker under a pool employment system such as that in New Zealand, has no single employer. The stevedoring company may in any case be regarded by the worker only as an agent for the ultimate employer, the overseas shipowners.²⁵ Conflict may result from the existence of overseas owners because they "don't belong" in the local system of industrial relations and are seen to be "profiteering" monopolists.²⁶ The employer may also appear remote because of the many parties involved in waterfront employment (such as stevedoring and shipping companies, harbour boards, Waterfront Industry Commission etc.) and consequent "complexity of the employer unit".²⁷ This argument relates largely to the inclination to engage in conflict and appears consistent with most forms of conflict. The degree of apparent remoteness may vary among and within ports and so help explain differences in amounts of conflict at intra- and inter-port levels.

We have already discussed the remoteness of the employer within the contexts of casual employment and the organisation of the industry. This argument also suggests the employer is remote because shipping companies are typically overseas-owned and are seen to be monopolies. As noted in Chapter VII, most

24. See Woods, *op.cit.*, p. 20.

25. See Australian Waterside Workers' Federation, *The Case for the Waterside Worker, Towards a Better Understanding*, p. 3.

26. See Australian Waterside Workers' Federation, *op.cit.*, p. 3; and T. Ryan, "The Watersider and His Image", *Port News*, Auckland Waterside Workers' Union, May 1974, p. 11.

27. R.J. May, "Determinants of the Industrial Relations Pattern in the Australian Stevedoring Industry", *Journal of Industrial Relations*, Vol. 3, Oct. 1961, p. 159.

shipping companies trading at New Zealand ports are either wholly or predominantly overseas-owned and most major stevedoring companies are either subsidiaries of, or associated with, shipping firms. Even "independent" New Zealand-owned stevedoring firms are likely to be strongly influenced by the overseas-owned companies. The shipping companies are also associated through a small number of conferences which are primarily concerned with fixing freight rates, obtaining and sharing cargoes etc. and certainly give the appearance of acting as "monopolies".

Most managers interviewed saw neither overseas ownership nor the organisation of shipping companies as important influences on conflict, although one said "union officials think ship-owners are hard employers". It was also stated in one case that "local firms have a fair amount of autonomy but they refer things to their principals".

Several union officials, however, regarded overseas ownership as being important in a number of respects. They claimed negotiations are often hampered because of the lack of decision making ability on the part of some employers' representatives. As one said, "the employers will seek an adjournment while they contact head office overseas". The "real" employers are considered to be removed from the situation. One official said "often in negotiations the employers are five times removed" and another that "we have to deal with the lines' New Zealand managers. We never see the top men." Furthermore, shipping companies were seen to be powerful international organisations, one official arguing "we have to protect the men against international consortia".

In the questionnaires, the parties were asked whether workers and managements in the waterfront industry are basically "on the same 'side'" or "on different 'sides'". Eleven managements said the parties were on the same side, with six commenting in explanation along the lines that "both obtain their living by the waterfront industry". Five managements said the parties were on different sides, one of them noting that "this is caused through the historical distrust between

union and employer. History shows that this distrust was justified to a degree; however, times have now changed." Ten unions said the parties were on different sides. Of these, two mentioned aspects of employer remoteness, namely, "management is often noticeably under orders from higher levels, i.e. faceless people" and (workers and managements are on different sides) "particularly where (companies are) overseas owned or oriented". Four unions said the parties were on the same side, although one commented that it "varies greatly with how many overseas bosses you deal with compared to Kiwis". Management and union responses from a given port were the same in six of 14 cases. Parties were also asked whether they thought the other party at their port would answer in the same way as they did. Thirteen of 16 managements felt that waterside workers at their ports would generally have answered the same as they did, and five of these were incorrect. Eleven of 14 unions felt that local port employers would give the same answer as they did and six were incorrect.

The parties were also asked to assess the importance of overseas ownership of shipping and stevedoring companies as a cause of strikes at their ports. Responses followed similar patterns to those noted above. As can be seen from Table 9, all managements considered this factor of little or no importance. A majority of unions, however, regarded it as very important or of above average importance. Of the four rating it very important, one was from a large port, one from a port of medium size and two from relatively small ones. On the basis of size of mean response, unions rated this factor seventh in importance of those assessed and managements only twenty-fifth equal. In no case did the management and union from a given port provide identical assessments, with the union, in seven of eight cases, rating it more important than did the management.

Managements and unions obviously differ in their assessments of the importance of overseas ownership as a source of conflict. But this is a factor about which worker opinion is decisive in that if workers consider overseas ownership produces conflict then such is indeed likely to be the case. As most

TABLE 9

The Perceived Importance of Overseas Ownership of Shipping
and Stevedoring Companies as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	0	0	3	7	6	4.70	3.85
Union responses (n=14)	4	2	0	2	1	5	2.33	2.26

Source: Management and union questionnaires.

shipping firms and many stevedoring companies are overseas owned its influence is likely to be fairly pervasive, although may vary among ports according to the proportion of companies which are overseas-owned.

On the more general matter of private ownership of shipping and stevedoring companies, we have already noted that a few unions would like to see the WIC involved in the total administration of waterfront affairs. In interviews neither managers nor union officials placed great emphasis on private ownership as a source of conflict in itself. Nonetheless, in questionnaire responses four unions, in explaining why they thought conflict is inherent in industry, mentioned such factors as: "both sides want the best deal"; "as long as the present system is operated there will always be disputes"; the parties have "different interests and outlooks"; and "while the industry has a profit motivation conflict is inevitable". One of these unions did make the qualification that "many events and actions can reduce the incidence and minimize the effect of industrial conflict".

An interesting recent development involving a joint venture between a waterside workers' union and shipping agent is New Zealand Marshalling Limited. This company, the share-

holding of which is divided equally between the Mount Maunganui Waterside Workers' Union and the New Zealand Lumber Co. Ltd., has a contract for marshalling Tasman Pulp and Paper Co. Ltd. export produce through the port of Mount Maunganui. Operating work is performed by waterside workers, while administration is in the hands of a board of directors consisting of two watersiders' representatives, two N.Z. Lumber Co. representatives and an independent chairman. This form of direct participation in stevedoring and wharfing operations has been enthusiastically welcomed by local watersiders and the agreement covering it described as "the greatest...ever reached industrial wise". It has, however, not existed long enough for any evaluation to be made of its influence on conflict levels.

4. Technological Change

Another possible influence on conflict, incorporating elements of the "casual employment" and "remoteness of employer" arguments, is technological change.²⁸ In a casual labour market, workers may resist changes which could influence employment opportunities. This is especially likely if the worker is not informed of their nature and likely effects. In a market where regular employment relationships are lacking the worker's anxiety may be mingled with distrust of the employer. Technological change may also induce conflict insofar as it opens up possibilities for demarcation disputes. This argument relates to the inclination to engage in conflict and appears particularly relevant to collective forms and some employer-initiated forms of conflict. To the extent that the rate and impact of technological change varies among ports, it may help explain inter-port differences in conflict levels. Also, insofar as the rate and impact fluctuate over time, it may explain inter-temporal differences in such levels.

Rapid technological change, by implication, involves changes in work methods and patterns, employment and income

28. See Evans, *op.cit.*, pp. 142, 154 and 206-207.

opportunities and in many other features of the work situation. It is reasonable that such changes will produce conflict. Technological change has been rapid on New Zealand waterfronts in recent years. Among changes introduced in the last fifteen years or so are pallets and other forms of unitised cargo, new methods of bulk cargo handling, new types of equipment such as bulldozers and fork hoists, mechanical loaders, roll on/roll off shipping and container shipping.

A high degree of awareness of the presence and impact of technological change was evident among those interviewed. Several managements noted the severe effect of the introduction of containerisation at the main ports on local levels of throughput. This fall in trade has apparently led to workers "becoming disturbed as they are uncertain of the future" and created "a fear of what is going to happen". It seems workers in most cases have not resorted to stoppage action as a result but, on the contrary, have sought in every way to attract trade to their ports. At ports where considerable new technology has been introduced, however, conflict has often resulted. New methods and equipment raise the question of work coverage and open up possibilities for demarcation disputes. Significant changes result in the need for "new arrangements and agreements" on hours of work, manning, remuneration and so on. Conflict can accompany the negotiation and implementation of these agreements.

Union officials at secondary ports also often expressed concern at the reduction in trade as the result of containerisation, roll on/roll off shipping and other changes. Several said they "want to do the best we can to bring trade to the port". At ports undergoing major change, on the other hand, there was a feeling that "having to change the old ways creates conflict". As one official said "a lot of changes are taking place and they have led to an escalation of disputes". Officials at several ports noted the presence of a "demarcation problem" which, it was felt, would be alleviated by amalgamation of unions at each port.

The questionnaires contained several questions relevant to

this matter. The parties were asked whether or not they considered their port a growing one. Five managements did not regard their ports as growing, each, at least in part, attributing this to technological change such as roll on/roll off, containers, unitisation and the consequent centralisation of cargoes. Of the 10 managements regarding their ports as growing ones, four mentioned in explanation the introduction of new technology such as container and roll on/roll off facilities and bulk cargo installations. A further management considered its port "stable". Four managements could see a redundancy situation arising at their ports, including one which also regarded its port as a growing one. There was a widespread belief, even where tonnage was expected to increase, that it would not be necessary to increase the port labour force. When asked to estimate how many men will be on the local bureau register in five years' time, seven managements said approximately the same number as at present on the register, four said less than at present (one of which said "none"), and only one said more. The general view seemed to be that "modern ...methods provide faster, less intensively manned cargo handling".

Five unions also regarded their ports as not being growing ones, with four attributing this to containerisation. Of the eight unions regarding their ports as growing ones, two mentioned container facilities, and one roll on/roll off, in explanation. Union and management from the same port gave identical assessments of growth prospects in nine of 13 cases. Six unions could see a redundancy situation arising at their ports, including two which considered theirs growth ones. One of these last mentioned unions saw redundancy resulting from "new methods of loading and discharging cargoes and new ships", and the other from "new forms of transport and cargo handling and phasing out of conventional work". Two unions expected the local bureau register strength in five years' time to be similar to that at present, five expected it to be lower and three higher. Assessments of employment prospects by union and management from the same port were the same in three of seven cases.

The parties were also asked what influence the introduction of containerisation and roll on/roll off has had on industrial relations at their ports. Respondents were of course from ports either with or without container handling or packing facilities. Four of six responding managements from ports without such facilities indicated that containerisation had caused "apprehension" on the part of workers as to the future. One management, however, said "industrial relations have been good because the union is vying for (the) port to become a South Island container port and fear adverse publicity toward them will be harmful". Two other managements from non-container ports said containerisation has had no effect, although one noted the indirect influence of national union policy "on matters arising at other ports". Three of four managements from ports with container facilities noted an "adverse" influence on industrial relations. Among results mentioned were demarcation disputes (in two cases) and endeavours by watersiders to "increase manning on conventional jobs" and "broaden...work coverage in every possible direction". One management indicated intra-union conflict has resulted in saying "higher earnings in the container terminal have been the source of some jealousy within the union ranks".

Among responding unions from non-container ports, two indicated that containerisation has resulted in a "fear of redundancy", one mentioning it has "shown to employers (local) and workers that they have a common bond - all jobs are on the block". The three other such unions said it has had little or no effect on industrial relations although one made the proviso that "we have a grave concern of all our cargoes being lost to containers". All four unions from ports with either packing or handling facilities (or both) indicated that containerisation has "adversely" affected industrial relations. Two, in particular, noted initial difficulties, although these are apparently being overcome. Another mentioned "demarcation problems to a marked degree" and one intra-union conflict in saying it has "caused some difficulties between men qualified to work in the terminal and those who do not". At a national level, the effect was considered "very bad" in that it was "introduced in an emotional atmosphere" and has resulted in

"traditional areas of waterfront work (being) transferred to consolidators", "job security (being) threatened", "mistrust of employer by worker" and a "reduction of work".

As regards roll on/roll off, the six responding managements from ports not possessing such facilities all noted that their introduction elsewhere has had little or no effect on local industrial relations. But one of these said roll on/roll off has "killed the coastal trade". Of the four managements from ports with roll on/roll off facilities, two said their introduction has had no effect, one that it initially led to conflict but was "now...an accepted part of work operations", and one that it has "improved" industrial relations because of "conditions and high remuneration at the terminals". A proviso, that the introduction of roll on/roll off increased demarcation disputes, was added to this last opinion.

Three of four responding unions from ports without roll on/roll off facilities noted little or no effect on industrial relations but the other said it "has increased fears of redundancy". There was again a diversity in responses from roll on/roll off ports. One union stated the effect of these facilities was "bad at first but (we have) learned to live with it", and another that they have reduced demand for labour and created demarcation issues. But one union said they have had "no adverse effect" and another that they have "improved" industrial relations.

In view of the possibilities for demarcation disputes, it is interesting to note union responses to the question: "Would you describe the relations between your union and other unions at this port as good, fair or bad?". Nine said these relations were "good", although one qualified its answer by saying they were "poor to bad" with a particular union.²⁹ Five

29. In the questionnaires, the parties were asked to assess "strikes in sympathy with other unions" as a cause of strikes in their ports. Responses were as follows:

unions said they were "fair", two of which mentioned the existence of demarcation disputes. Amalgamation of any of the unions at the local port was considered likely in the foreseeable future by 12 of 14 unions, and two mentioned some amalgamation had occurred or was in process. All responding unions considered amalgamation desirable, three seeing it as overcoming "demarcation problems". Ten of 16 managements also considered amalgamation likely, four mentioning it was actually taking place (usually involving tally clerks and shipwrights amalgamating with waterside workers). Thirteen managements saw amalgamation as desirable, five arguing it would reduce or eliminate demarcation disputes, which one considered "the most serious single problem at present".

The heavy emphasis placed on technological change and job demarcation as sources of conflict was evident in responses to a question asking the parties to assess the importance of the impact of new technology on waterfront work and of demarcation frictions between unions as causes of strikes at their ports. It is clear from Table 10 that most unions attached considerable importance to the impact of new technology. Not surprisingly, the five rating it very important were all from ports experiencing major change in recent years. Managements also generally regarded it as important, with the only one rating it not important coming from a very small port. On the basis of size of mean response, unions rated the impact of new technology third equal of factors assessed and managements fifth. Management and union from the same port gave identical assessments in two of nine cases.

(Footnote 29 continued):

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=16)	1	0	3	3	3	6	3.70	3.03
Union responses (n=14)	1	1	3	2	2	5	3.33	3.23

Source: Management and union questionnaires.

On the basis of size of mean response, managements rated this factor fifteenth in importance of the 29 assessed and unions eighteenth equal. In only one of eight cases did management and union from a given port provide the same assessment.

The assessment patterns for demarcation disputes are similar to those for the impact of technology. Six of 11 responding unions rated such disputes very important, and six of 11 managements considered them very important or of above average importance. It is not surprising that a particular respondent tended to give the same or similar assessments to demarcation disputes and to the impact of technology. Three managements gave the same assessment to both factors and the seven others gave assessments differing by a margin of only one (e.g. 3 and 2 etc.). Five unions gave the same assessment to both and four of six others gave assessments differing by a margin of one. On the basis of size of mean response, unions rated demarcation frictions fifth in importance of the 29 factors assessed and managements fourth. Management and union from the same port gave identical responses in three cases, although in five of seven others responses differed by a margin of only one.

TABLE 10

The Perceived Importance of the Impact of New Technology on Waterfront Work and of Demarcation Frictions between Unions as Causes of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very import- ant	Above Average import- ance	Average import- ance	Below Average import- ance	Not import- ant	No Answer	Mean response	SMR
<u>New technology</u>								
Management responses (n=16)	1	3	5	0	1	6	2.70	2.21
Union responses (n=14)	5	3	2	1	0	3	1.91	1.86
<u>Demarcation frictions</u>								
Management responses	2	4	2	2	1	5	2.64	2.16
Union responses	6	0	4	1	0	3	2.00	1.94

Source: Management and union questionnaires.

Both parties clearly place considerable importance on new technology and job demarcation as sources of conflict. This view is supported by stoppage data. The manager of the Statistics and Research Division of the WIC (Mr. B.H. Wood)³⁰ has calculated that, over the period 1 January 1967 to 30 September 1974, 10 stoppages, involving a loss of 53,077 man-hours, occurred over new or changed methods of work and a further 13, involving a loss of 114,379 man-hours, over demarcation.³¹ Stoppages over new or changed work methods accounted for 7.5% of the total number of waterfront stoppages (including penalties) for the period and for 5.7% of the resulting time lost, while those over demarcation accounted for 11.3% of total frequency and 12.4% of time lost. Most of these demarcation stoppages resulted, at least indirectly, from technological change and, as noted in the last chapter, several were specifically over the question of packing and unpacking containers. In addition to these two types of stoppage, numerous actions not involving a loss of time, have occurred as a result of the introduction of new technology. An example cited in the last chapter was the bans placed on early container and LASH vessels.

Actions directly or indirectly resulting from the introduction of new technology have, not surprisingly, been largely confined to those major ports where most change has been occurring. At ports not experiencing significant change, its effect, if anything, has been to reduce conflict as the parties strive to retain trade. At ports undergoing change, the reverse has been the case. The differential impact of technological change would therefore appear a fruitful explanation not only of differences in levels of collective and some employer-initiated forms among ports but also of changes in them at a particular port over time.

30. Now Assistant General Manager.

31. The potential for demarcation stoppages is high even if only because of the number of unions involved in the industry. In or adjacent to the wharf area, aside from watersiders, there may be harbour board employees, shipwrights, tally clerks, drivers, railway workers, toll clerks and storemen and packers among others.

5. The Nature of the Work and the Worker

The nature of waterfront work may itself be a source of conflict. Handling cargo can be hazardous and dangerous work.³² It may also be unpleasant and obnoxious.³³ Much of it is performed outdoors and involves exposure to the weather.³⁴ This results in the need for, and emphasis on, adequate amenities.³⁵ Such work might be expected to attract or produce forceful and combative workers.³⁶ These features produce a situation where conflict easily emerges. The "nature of the work and of the worker argument" concerns the inclination and ability to engage in conflict and may be relevant to both collective and individual forms of conflict. The influence of these factors may be fairly pervasive but vary among types of cargo and ports. The argument may therefore have explanatory value at intra- and inter-port levels.

The existence of danger in waterfront work was emphasized by numerous officials and several managers during interviews. As one official said, "work on the waterfront will always be dangerous". Danger appears one issue over which watersiders at most ports are prepared to stop work. In most cases it is the only issue over which the delegate on a job can authorize a stoppage of work without prior consultation with union officials. The extent to which danger has led to stoppages, however, varied among ports. At one an executive member said "the main issue over which stoppages occur here is safety". An official at that port, which receives a wide variety of shipping, noted that "many ships come here with substandard gear. Some are just rust buckets. We say we will examine the

32. See Woods, *op.cit.*, p. 2; and Betty V.H. Schneider and Abraham Siegel, *Industrial Relations in the Pacific Coast Longshore Industry* (University of California, Berkeley, 1956), pp. 36-7.

33. See Blakeley, *op.cit.*, p. 11; and Woods, *op.cit.*, p. 20.

34. See Fernandez, *op.cit.*, p. 162.

35. See Kenneth F. Walker, *Australian Industrial Relations Systems* (Harvard University Press, Cambridge, Mass., 1970) p. 377.

36. See Schneider and Siegel, *op.cit.*, p. 37.

gear and only work with shore installations." An official elsewhere noted that "we only use the ban in the case of dangerous cargo". At several ports it appears both parties are "very safety conscious" and "work together on safety". Despite this, one manager argued that "safety is often used as a front for other issues".

The questions of wet weather work and safety are related. At numerous ports it was reported by both managers and officials that work is performed in the rain unless the cargo cannot be exposed to the wet or danger is involved. In some cases there is "the odd argument over what is too wet", which may lead to stoppages. One official described the situation as follows: "We work in the wet as required except where safety is involved. If the foreman disagrees, the men take a vote and the vote is final." But at one port it was stated "we do not work in the rain". Several managers expressed sentiments such as "working in the wet is not popular with watersiders" and "its hard to overcome the habit of not working in the rain".

At some ports it was noted that unpleasant work has led to stoppages. As one manager said, "the nature of the work causes some problems and, in particular, dirty cargoes". While a number of interviewees said the work is still physically demanding, there was general agreement that it was not as hard as in "the old days". The nature of the waterside worker is also seen to be changing, some arguing that, while still being forceful and prepared to take direct action, he is "losing his militancy".

The questionnaires contained a number of items relevant to this argument. In particular, the parties were asked to assess the importance of the following factors as causes of strikes at their ports: dangerous work, disagreements over safety matters, wet weather, disputes over amenities, dirty and unpleasant work, and the forceful, combative character of waterside workers. It is clear from Table 11 that unions generally place considerable importance on dangerous work as a cause of strikes. Only one union, and that from a small port, considered it of less than average importance. Most managements, on the

TABLE 11

The Perceived Importance of Factors Relating to the Nature of the Work as Causes of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very	Above	Average	Below	Not	No	Mean	
	import-	import-	import-	import-	import-	Answer	response	SMR
	ant	ance	ance	ance	ant			
<u>Dangerous Work</u>								
Management responses (n=16)	1	1	6	1	1	6	3.00	2.46
Union responses (n=14)	5	3	2	1	0	3	1.91	1.86
<u>Safety Disagreements^a</u>								
Management responses	1	2	5	1	1	6	2.90	2.38
Union responses	6	3	1	1	0	3	1.73	1.68
<u>Wet Weather</u>								
Management responses	1	0	2	2	4	7	3.89	3.19
Union responses	1	1	3	0	4	5	3.56	3.46
<u>Amenities Disputes</u>								
Management responses	0	1	1	3	5	6	4.20	3.44
Union responses	1	0	4	2	3	4	3.60	3.50
<u>Dirty Work^b</u>								
Management responses	3	2	1	2	2	6	2.80	2.29
Union responses	3	3	4	1	0	3	2.27	2.20
<u>Forceful Workers^c</u>								
Management responses	1	2	2	1	4	6	3.50	2.87
Union responses	1	1	4	1	1	6	3.00	2.91

Notes: a Disagreements over safety matters.

b Dirty and unpleasant work.

c The forceful, combative character of waterside workers.

Source: Management and union questionnaires.

other hand, considered it of average importance, with two rating it of more than, and another two of less than, average importance. On the basis of size of mean response, unions rated dangerous work third equal in importance of the factors assessed and managements eighth. In only one of nine cases did management and union from the same port assess this factor in the same way. In the other cases, the management placed less importance on it than did the union.

In view of the relationship of disagreements over safety matters to dangerous work, it is not surprising that the response patterns for these two factors should be similar. Seven of 10 managements and seven of 11 unions assessed the two identically and all other respondents varied their assessments by a margin of only one (e.g. 1 and 2). Unions again placed heavy importance on this factor, while managements largely considered it of about average importance. On the basis of size of mean response, unions rated disagreements over safety matters second in importance of the factors assessed and managements seventh. In two cases the management and union from a given port gave this factor the same assessment, while in seven others the management placed less importance on it than did the union.³⁷

It is interesting to note that eight³⁸ of 14 unions and 12 of 16 managements said the work of the National Port Safety Council and the port safety advisory committees has influenced the quality of port-level industrial relations. Two unions in particular said these organisations had influenced industrial

37. While stated causes of stoppages are not necessarily actual ones and may say little of factors shaping the situation, the manager of the Statistics and Research Division of the WIC has calculated that, over the period 1967-74, five stoppages involving a loss of 25,942 man-hours occurred over safety. These figures constitute 3.76% of the total number of stoppages and 2.81% of the man-hours lost over that period. He has also calculated that three (2.26%), involving a loss of 19,722 man-hours (2.13%) occurred over amenities (including two over car parking facilities).

38. One other union said these safety organisations have influenced the quality of industrial relations "at meetings" but not "on the job".

relations by "safety recognition" or making "members.... more safety conscious". Five managements commented along the lines that "it has been the means of getting the parties together to discuss and frequently solve problems arising in this area. A good safety valve."

Most managements considered wet weather of little or no importance as a cause of strikes. Union responses displayed greater diversity, with both "average importance" and "not important" being popular assessments. It appears that at a number of ports "the parties in the main co-operate over wet weather" or "we are seldom asked to work in heavy weather". On the basis of size of mean response, unions rated this factor twentieth equal in importance of those assessed and managements sixteenth. Despite the apparent similarity of response patterns, management and union from a given port gave the same assessment in only two of eight cases. In one other the management answered "below average importance" and the union "very important" and in yet another the management said "very important" and the union "not important".

Disputes over amenities were generally regarded by both parties to be of little or no importance. Most appear to agree with the official who said "today conditions are much improved". In terms of size of mean response, unions rated this factor twenty-second in importance of the 29 assessed and managements nineteenth equal. Again, in only two of eight cases did management and union from a given port provide the same assessment.

It can be seen that dirty and unpleasant work was considered a much more important factor than the two just discussed. While there was some diversity of response, three managements, all from large ports, considered it very important. Three of the four rating it of below average or no importance were from fairly small ports. The only union rating it of below average importance was also from a small port. On the basis of size of mean response, both parties rated dirty and unpleasant work sixth in importance of factors assessed. In no case did the two parties from a given port provide identical assessments.

Despite a variety of responses, 50% of unions considered the forceful, combative character of waterside workers of average importance. Also a significant number of managements saw it of at least average importance, although four considered it of no importance. In terms of size of mean response, unions rated this factor thirteenth equal in importance of the 29 assessed and managements thirteenth. In only one of seven cases did both parties from a given port provide the same assessment.

The nature of the work appears an important influence on conflict. In particular, work which is dangerous or unpleasant seems to create a predisposition toward conflict. While the nature of the work is, in the main technologically determined, it varies considerably with the type of cargo. Jobs which are relatively unpleasant or dangerous may be stoppage prone, so that variations in the nature of the work may be an important explanation of stoppages arising at a particular hold or ship. Moreover, to the extent that some ports have relatively more work with these characteristics than others, the nature of the work might help explain differences in levels of conflict, and especially of collective and some employer-initiated forms, as among ports.

6. Cohesion, Mobility and the Kerr-Siegel Hypothesis

The rotation of workers among employers ensures that waterfront labour forces are unusually homogeneous. There are certain specialist positions, for example, hatchmen, winchmen and various types of drivers, but these are available to any watersider with the necessary qualifications. At some ports up to 70% of the men have "top hands" (i.e. hatchmen and winchmen) qualifications. Also a given worker is only employed in a special area, such as a container or roll on/roll off terminal, for a strictly limited period before being rotated back to other types of work. These features, along with equalisation of hours, mean there is relatively little differentiation among waterside workers in terms of either occupation or income.

It is not surprising therefore that watersiders are generally cohesive in the event of conflict with the employer. Managements and unions were asked in the questionnaires: "What degree of unity exists among waterside workers in the event of a stoppage on an individual job at this port". Responses were as follows:

TABLE 12
The Percieved Degree of Unity in the Event of a Stoppage

	High	Generally High	Other	Not Applicable or "not tested"
Management responses (n=16)	9	3	1 ^a	3
Union responses (n=14)	11	1	1 ^b	1

Notes: a "Generally confined to job concerned".

b "Job action for any length of time never taken without support of rank and file majority".

Source: Management and union questionnaires.

Most managements and unions said waterside workers have a high degree of unity and, interestingly, none said the degree of unity is low. Six of the nine managements and 10 of the 11 unions which said it is high went further to indicate it is "complete", "total", "solid" or the like. One management commented in explanation that "waterside workers traditionally have always supported their colleagues and will not replace workers on strike". Such cohesion indicates a high degree of worker interest and involvement in the port union. During interviews most officials said their members were highly "union conscious", although a few said some were apathetic. The parties were asked in the questionnaires how they would describe the degree of involvement of local waterside workers in the affairs of their union. It can be seen from Table 13 that there was a greater range of opinion among managements than unions. The four managements which saw the degree of involvement as high were, with one exception, from small ports,

while the five seeing it as low were either from large or moderate size ports. A much higher proportion of unions saw the degree of involvement as high. One union which answered "moderate", commented it is "moderate in our eyes but high compared with other unions". Management and union responses from a given port were the same in six of 14 cases.

TABLE 13

The Perceived Degree of Involvement of Workers in their Union

	High	Moderate	Low
Management responses (n=16)	4	7	5
Union responses (n=14)	9	5	0

Source: Management and union questionnaires.

Four of the five managements which considered the degree of involvement to be low also felt that the control exercised by the local union officials over their members was too strong. Eleven other managements, however, described the control exercised by officials as "about right", while only one said it was too weak.

Union responses to a question on the percentage of members generally attending the regular monthly stop work meeting indicated a high degree of participation. All but one responding union noted an attendance of 60% or more.³⁹ As one stated "attendance at stop work meetings and general involvement in union activities has traditionally been high; centralization of employment and a tradition of trade union principle and practice being important factors". In this industry the union is a highly visible and readily available organisation. The very location of union offices often serves to emphasize the integral part played by the union in waterfront employment. In

39. Detailed responses were as follows:

	percentages										
	20-25	50-80	60	67	70	75	80	90	95	98	100
(n=13)	1	1	2	1	1	1	1	1	1	1	2

most cases the union offices are part of or adjacent to the amenities building which is itself joined to the engagement bureau. This complex of buildings is usually the only place where watersiders are together at any one time.

When asked whether waterside workers' unions and the New Zealand Waterside Workers' Federation are, in relation to other New Zealand unions, well, adequately or poorly organised, 15 managements said "well organised", one "adequately organised", and none "poorly organised". One even claimed that "waterside workers' union has better communication between the national office and port unions and between individual port unions than do the Employers' Association". In response to a similar question about the New Zealand Port Employers' Association, five unions said that association is "well organised", seven "adequately organised" and two "poorly organised".

In the last chapter we noted that relatively few waterfront stoppages involve only part of the port labour force. No responding management or union said the decision to take strike action is usually made at ship's side. Of 16 managements, eight said this decision is usually taken at port level and another eight at national level. Unions placed relatively more emphasis on the port level, with nine stating the decision is taken there and two each that it occurs at national level or port and national levels. In only five of 13 cases did management and union from a given port answer this question in the same way. In most of the others, the management said the decision usually occurs at national level but the union that it occurs at port level. Despite these differences of perception both parties generally considered national disputes important causes of strikes. They were asked to assess the importance of national disputes over waterfront issues and those over other than waterfront issues as causes of strikes at their ports. As can be seen from Table 14, a majority of both managements and unions rated national disputes over waterfront issues as very important. On the basis of size of mean response, both parties rated this factor first in importance of the 29 assessed. Management and union from the same port gave an identical assessment in an unusually high proportion

of cases, namely, in five of 10. There was a greater diversity of opinion among each party as to the importance of national disputes over other than waterfront issues. Several managements and unions, however, again accorded this factor considerable importance. In terms of size of mean response, managements rated it third in importance of those assessed and unions ninth. Identical assessments were given by parties from the same port in two of seven cases.

TABLE 14
The Perceived Importance of National Disputes
as Causes of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very	Above	Average	Below	Not	No	Mean	
	import-	import-	import-	import-	import-	Answer	response	SMR
	ant	ance	ance	ance	ant			
<hr/>								
<u>Those over waterfront issues</u>								
Management responses (n=16)	8	3	1	0	1	3	1.69	1.38
Union responses (n=14)	8	0	2	0	0	4	1.40	1.36
<hr/>								
<u>Those over other than waterfront issues</u>								
Management responses	3	3	1	1	2	6	2.60	2.13
Union responses	2	2	2	1	1	6	2.62	2.54

Source: Management and union questionnaires.

There is a fairly widely held view, especially among unions, that conflict is inherent in industry. As can be seen from Table 15, a slight majority of managements also considered this to be the case. Among comments made in explanation by these were: "a feeling of distrust between employer and unions which has existed since the 'bad old days'. (It) still exists and is fostered by many workers' magazines...and...by certain employing interests who perhaps regret the passing of the 'big

boss' image"; "(the parties) are on different sides and (have) different views"; "(the union's) rigid policy of not giving an inch but grabbing all they can, can only lead to conflict ...(as can) their refusal to even see an employer's difficulty let alone assist him with it". Most unions also considered conflict to be inherent, four indicating in explanation that interests and outlooks are basically different. Responses given by management and union from a particular port were the same in seven of 12 cases.

TABLE 15
Responses to the Question: "Is Conflict
Inherent In Industry?"

	YES	NO
Management responses (n=14)	8	6
Union responses (n=13)	10	3

Source: Management and union questionnaires.

As regards occupational mobility, for reasons alluded to earlier, there is no clearly defined "occupational ladder" which waterside workers may follow. In the general principal order there is provision for the appointment of leading hands, but it is not always made use of and, in any case, the appointment lasts only as long as the job concerned (although a particular worker could possibly be regularly appointed leading hand).⁴⁰ It is possible that a watersider might become a foreman stevedore in charge of a gang. In so doing, however, he would become a permanent employee of a stevedoring company and cease to belong to a waterside workers' union. At some ports the proportion of foremen stevedores appointed from among waterside workers is fairly low, while at others it is quite high.

40. Leading hands are most frequently appointed on the loading of overseas vessels (two leading hands per gang). The leading hand is mainly concerned with the technical aspects of loading and not the supervision of labour.

TABLE 16
The Percentage of Foremen Stevedores at a Port
Appointed from Among Waterside Workers

	No local foremen	"A low percentage"	percentages									
			0	10	15	30	50	57	67	75	80-90	90
Management responses (n=16)	3	1	2 ^a	0	1	0	5	1	1	1	0	1
Union responses (n=13)	1	0	3 ^b	1	0	1	2	0	0	2	1	2

Notes: a Both small ports, one with only one foreman and the other with two.

b Two are small ports with only one foreman each.

Source: Management and union questionnaires.

While it was generally acknowledged that waterside workers are cohesive, they were not considered socially isolated. It was often contended by interviewees that the reverse is the case. As one union official claimed, "waterside workers are fully integrated into the community". It was pointed out on several occasions that watersiders are members of the local municipal council and other community organisations. One official commented that "the waterside worker considers himself part of the community". It was also frequently noted, however, that this had not always been the case. As one secretary put it "the policy has changed from living within themselves. Once watersiders would not mix but this has gradually changed." Many managers and union representatives expressed sentiments similar to those of the official who stated "waterside workers regarded themselves as a race apart. They had the feeling of being picked on. This is not the case now. They are widely involved in the community." One manager, however, felt that "the stigma associated with 'wharfies'" still remains and is a cause of conflict.

The general lack of emphasis attached to social isolation was reflected in responses to a question asking the parties to assess the importance of any tendency for waterside workers to be socially separate communities as a cause of strikes at their

ports. It is clear from Table 17 that neither managements nor unions placed great importance on this factor. On the basis of size of mean response, managements rated it seventeenth in importance of those assessed and unions only twenty-sixth. Management and union from a given port provide identical assessments in only one of seven cases.

TABLE 17

The Perceived Importance of Any Tendency for Waterside Workers to be Socially Separate Communities as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	2	1	3	4	6	3.90	3.19
Union responses (n=14)	0	1	0	1	6	6	4.50	4.37

Source: Management and union questionnaires.

In terms of the Kerr-Siegel hypothesis, several but not all factors necessary for the development of an isolated mass are present in the waterfront industry. As regards the nature of the work and worker aspect of the hypothesis, we have already commented on the importance of such factors as casuality, dangerous or unpleasant work, forceful workers and so on. While some of these, along with some making for an isolated mass, are undoubtedly major influences on conflict we have placed them within contexts other than the Kerr-Siegel hypothesis. By so doing it is hoped that more basic causes of conflict are studied rather than the essentially secondary ones which constitute this hypothesis.

7. Variations in Cargoes and Conditions

Another possible influence concerns the diversity of cargo and conditions under which it must be handled. This diversity results in complex methods of remuneration and codes of pay rates and of conditions.⁴¹ While such complexity may result in conflict, the diversity also makes it virtually impossible to provide for every case in agreements or in wage schedules. The possibilities for argument and "continuing negotiation" are therefore great. The influence of this factor may vary among ports insofar as the degree of diversity also varies. The argument concerns the inclination to engage in conflict and appears relevant to most conflict forms.

This is a plausible argument and there can be no doubt that the diversity of cargoes, and of conditions under which they must be handled, is partly responsible for the fairly complex series of agreements governing waterfront employment. At the national level, covering all ports, is the general principal order (GPO). This document is nearly 100 pages long and consists of over 40 clauses and five appendices. The schedule of special rates alone covers 12 pages and individually specifies dozens of different cargoes. Each port also has a supplementary principal order covering local conditions of work. There may further be several agreements relating to parts of a port, such as container or roll on/roll off terminals, dry docks and so on. In addition to agreements, there are also numerous general harbour and Ministry of Transport regulations which are largely concerned with safety.

The very complexity of these agreements, regulations and codes may produce conflict. As will be seen later, this is the judgement of several of those within the industry. One union official highlighted the complexity of these documents in saying while the harbour regulations are "an absolute necessity, the instruments generally are far too technical for the average working man to understand. In this port we have

41. See Woods, *op.cit.*, p. 20; and Evans, *op.cit.*, pp. 153 and pp. 163-172.

14 to 15 agreements in total. The port itself has to prepare 10 different agreements, one of which is for only four men".

The GPO sets out special cargo rates, payable in addition to other rates, for the handling of a wide range of cargoes. These special rates are "to cover all inconveniences due to dust, dirt, discomfort, or other incidentals in connection with the loading or unloading of these cargoes".⁴² While being very numerous, they do not cover every conceivable cargo or combination of cargoes and are in any case only minimum rates. There is consequently the potential for continuing negotiation and so conflict. Such negotiation is usually conducted at ship's side between the delegate and foreman stevedore, although may involve other parties if not concluded there.⁴³

During interviews the impression was often gained that special rates are a source of conflict. As one official said, "the men are quick to take action on rates for cargo on a job. This is a vital issue for the men and the employer should recognise this." Another argued that a particular company is a "bad employer. It's mean over rates and has caused stoppage after stoppage." One manager claimed that disputes over rates, and especially dirt rates, have increased in recent times because such rates are "a means of getting around the stabilisation regulations".

As seen in Chapter VII, another key part of the worker's remuneration is the bonus payment under the incentive contract system. It was noted at some ports that the operation of this system has led to conflict. In particular, it appears numerous disputes have occurred over whether or not particular cargoes qualify for unitised contract rates which are lower than those on conventional cargoes. Moreover, because the bonus per hour falls as the gross time worked increases, there is an incentive for workers to attempt to have certain delays deducted from

42. GPO No. 357, Appendix 1(a).

43. When asked in the questionnaires what types of dispute are settled at the delegate-foreman stevedore level, 11 of 16 managements and 12 of 13 unions mentioned, often among others, those over special rates.

gross time in calculating the bonus. This has also apparently led to conflict. As one manager argued, "at some ports the workers strive after time off the system".

Several managers and some union officials indicated that special rates and the incentive contract system are major areas of change in earnings relativities. Some managers saw the multiplicity of employers as a "disadvantage" in that "unions play one employer off against another". One, in a questionnaire response, said "it stands to reason" this will be the case because there is a "multiplicity of employers - all in competition - but using (the) same labour on a pooled basis". Another claimed that "if a company principal says 'pay' (to a claim for special rates), it makes it difficult as it creates a precedent". Apparently employers ignore such precedents only at the risk of conflict. The multiplicity and complexity of agreements and regulations is seen to be to the workers advantage in this respect. One official claimed "we are able to fragment the employers through the various agreements. We make an advance in one area and get flow-on effects. The special clauses then go into the national order."

Different types of cargo are associated with different manning scales. The resulting manning schedules can themselves be fairly complex. Because of the variation in nature of cargoes there is a provision in the GPO for negotiation over larger or smaller gangs than those specified in the schedule. Also, negotiations over manning may occur with respect to types of cargo being handled for the first time at a port. Manning is clearly another potential source of conflict. As one official said "disputes occur here mainly over rates on ships, manning and work coverage".⁴⁴

At a general level, one manager saw the relatively high level of stoppages at the local port as due to the fact that

44. As an aside, four managements and one union said local disputes over manning are usually settled at the delegate-foreman level, while five managements and seven unions said they are usually settled at the union official-company manager level.

"the job varies greatly as do conditions of work". This view was supported in responses of two managements to a question asking why workers at some ports apparently engage in strike action more often than do those at others. Both attributed this in part to the degree of variation in the type and condition of cargoes handled.

Several other questions have a bearing on this matter. The parties were asked to assess the importance of the following factors as causes of strikes at their ports: The complexity of the general principal order and supplementary order (SO);⁴⁵ complex general harbour regulations and Ministry of Transport regulations; disagreements over claims for special rates; the operation of the incentive contract system; and the bases on which wages are calculated. It is clear from Table 18 that relatively more unions than managements considered the complexity of the GPO to be very important. Nonetheless, several managements attached importance to this factor. On the basis of size of mean response, unions rated it eleventh in importance of those assessed and managements ninth equal. Parties from the same port assessed this factor in the same way in two of eight cases. Managements generally attached slightly less importance to complexity of the supplementary order than they did to that of the GPO. This is to be expected in view of the briefer and more straightforward nature of the supplementary order.

The parties attached less importance to complex general harbour and Ministry of Transport regulations. In terms of the size of mean response, managements rated this factor fourteenth in importance of those assessed and unions twenty-third. The one management, and one of the two unions, which rated it of above average importance were both from a particular large port. Indeed, perceptions of parties from the same port on this factor were identical in four of eight cases.

45. The union questionnaire specified complex conditions of employment based on the general principal order, and the management questionnaire requested separate assessment of the complexity of the general principal order and of the supplementary order.

TABLE 18

The Perceived Importance of Factors Relating to the
Variation in Cargoes and Conditions as Causes of Strikes

	Scale of importance							
	1	2	3	4	5			
	Very	Above	Average	Below	Not	No	Mean	
	import-	import-	import-	import-	import-	Answer	response	SMR
	ant	ance	ance	ance	ant			
<u>Complex orders</u>								
Management responses (n=16)								
- GPO	1	3	2	1	3	6	3.20	2.62
- SO	0	3	1	2	4	6	3.70	
Union responses (n=14)	3	2	3	1	1	4	2.70	2.62
<u>Complex harbour regs.^a</u>								
Management responses	0	1	5	1	3	6	3.60	2.95
Union responses	0	2	2	2	3	5	3.67	3.56
<u>Special rates^b</u>								
Management responses	2	4	3	0	1	6	2.40	1.97
Union responses	3	1	3	2	1	4	2.45	2.38
<u>Incentive system^c</u>								
Management responses	1	1	4	2	2	6	3.30	2.70
Union responses	2	1	3	1	2	5	3.00	2.91
<u>Bases of wages^d</u>								
Management responses	0	0	1	0	9	6	4.80	3.93
Union responses	1	3	3	1	1	5	2.78	2.70

Notes: a Complex general harbour regulations and Ministry of Transport regulations.

b Disagreements over claims for special rates.

c The operation of the incentive contract system.

d The bases on which wages are calculated.

Source: Management and union questionnaires.

Responses on disagreements over claims for special rates confirmed impressions gained during interviews. A high proportion of both parties attached considerable importance to this factor. The only management rating it of less than average importance was from a small, low stoppage level port, as was the only union considering it not important. All respondents rating it very important, on the other hand, were from large or medium size ports. In terms of size of mean response, managements accorded disagreements over claims for special rates second in importance of factors assessed and unions eighth. Responses of the two parties from a given port were different in all nine cases.⁴⁶

Despite a diversity of views among the parties, several managements and unions attached at least average importance to disputes over the operation of the incentive contract system. The diversity does, however, indicate that the importance of this factor varies among ports. On the basis of size of mean response, unions rated it thirteenth equal in importance and managements eleventh equal. Responses of the two parties from a given port were different in all eight cases.

In view of the response patterns on special rates and the incentive contract system, it is surprising that all managements but one considered the bases on which wages are calculated not important as a cause of strikes. This is especially so as most unions considered this factor of at least average importance. For all eight ports for which both management and union responded, the management rated it lower than did the union. This divergence in views is reflected in the fact that, on the basis of size of mean response, unions rated this factor twelfth in importance of the 29 assessed but managements only twenty-seventh equal (or last).

46. While the stated cause or object of a stoppage may not be the actual one nor reflect factors shaping the situation, the manager of the Statistics and Research Division of the WIC has calculated that three stoppages involving a loss of 649 man-hours occurred over special payments and another two involving a loss of 56 man-hours over additional manning during 1967-74.

The variation in types of cargo and consequent variation in rates, manning and conditions appears an important basic cause of conflict. This is particularly so in view of the multiplicity of the consequential factors. Many stoppages and other actions originating at a particular ship may have their origins in this feature of the industry. Moreover, the greater the variation, the greater the potential for conflict so that this feature may be a fruitful explanation of differences in the level of stoppages and of some employer-initiated forms as among ports.

8. Bargaining Power

A further argument relates to the bargaining power of workers. Cargo handling and time in port constitutes a high proportion of the total cost of shipping.⁴⁷ Ship owners therefore seek a quick turn-around of vessels. The movement of cargo across the wharves is also an important feature of international trade and so is of interest to the wider community. The waterside worker is, as a result, seen to be in a powerful position, being able and willing to bring work to a standstill.⁴⁸ The stevedoring company or shipowner, for their part, are seen to "give in" to worker demands when they are backed by direct action.⁴⁹ This argument concerns the ability and inclination to engage in collective forms of conflict. The influence of this factor may be a general one, making it useful in explaining any widespread tendency to engage in stoppages. Should bargaining power vary among ports, however, it may also be relevant to inter-port differences in levels of collective and some employer-initiated forms.

This argument requires further development. It implies that the high cost of stoppage to the employer will result in the stevedoring or shipping company acceding to worker demands. If the employer does so, he incurs a cost of settlement which

47. See Evans, *op.cit.*, pp. 33-5.

48. See Blakeley, *op.cit.*, p. 12.

49. Industrial Reporter, "On the Wharves: Avoiding Confrontation No. 4", *New Zealand Economist*, May 1974, p. 37.

is expected to be lower than the cost of the stoppage itself and subsequent settlement. Nonetheless, this cost of acceding will lower profits unless it can be shifted forward in price increases. Much of the literature on New Zealand shipping suggests that shipping companies have this ability to influence price.⁵⁰ If the cost of stoppage to the employer is high it might be argued he always has an incentive to settle short of a stoppage. This may be especially so if he can influence prices. (Although this ability could conceivably cause the employer to be intransigent in the knowledge he can pass on the cost of stoppage.) To the extent that information is imperfect, however, the relatively high cost of cargo handling and resultant bargaining power of workers may still lead to stoppages in that the employer may wrongly interpret a threat of stoppage as being nothing more than that.

It is highly doubtful that the bargaining power of water-side workers is universally as strong as this argument suggests. It concentrates on one aspect of bargaining power to the neglect of others. Even if the cost of stoppage to the worker is low in the short run, it may be high in the long run if future trade is diverted from that port because of the stoppage. At a declining port the bargaining power of workers may be low, in that a stoppage may hasten the port's decline while imposing a short run cost which is a higher ratio of total income than at a busy port.

The impression gained from interviews was that there are at least two types of ports. On the one hand are those large and busy ones where the workers' bargaining power is high and, on the other, those with a declining or spasmodic trade where the workers' bargaining power is low. At a port in the first category, a manager argued that "it's expensive to have a ship stopped. This is a problem with the industry and has led to concessions". Another noted in a questionnaire response that "with the high capital cost of vessels it is, super-ficially, cheaper to 'pay up' rather than have a vessel

50. See, for example, Laurie Wallace, "Planning - Not Spending - Should Cure Waterfront Congestion", *New Zealand Economist*, May 1974, p. 42.

delayed". The implication is that stoppages are often avoided because the employer concedes to demands. Thus a union official at a large port said "the threat of stoppage is just as effective as stopping work". It seems, however, that the threat at times has to be accompanied by some form of direct action. The same official stated "we don't have many strikes, even though we have the power, but we make use of other tactics". This claim was echoed by an official from another large port who said "if we can exert pressure in other areas without a stoppage we will do so". In particular he cited the use of the ban in "nipping off employers without members losing a cent". Nonetheless, one manager claimed that "the greater utilisation, the readier the workers are to take strike action". At these ports it appears that workers are aware of their bargaining power and will employ conflict tactics, although not necessarily the strike, in exercising it. It is interesting that a manager, in explaining the stoppage proneness of particular firms within a port, made a distinction between independent stevedoring companies and those owned by shipping companies. He implied that independent companies may have more stoppages because they are under less pressure from shipping companies to make concessions.

Despite the general acknowledgement of worker bargaining power at busy ports, it is clear that this power is limited. There is still the possibility that trade might be diverted from such ports and future incomes and employment opportunities suffer as a result. Certainly this possibility is at times raised during bargaining. As one manager said "we don't have many confrontations involving threats of stoppage and of diverting trade but they do happen". He went on to comment that "the men realise they are fairly well off so why spoil it by frightening ships off". One official noted a short term bargaining advantage for workers in that the "cargo (on or for a struck vessel) has still got to be handled here" but also that "future trade may be lost", although he took heart in the fact that "watersiders do it elsewhere".

The bargaining situation at declining or irregularly used ports was very different from that at busy ones. At declining

ports the emphasis is on attracting trade. As one manager said "the union is encouraging all the trade they can get. They are willing to work to get the trade". Workers at such ports are in a weak bargaining position and have a strong incentive to refrain from conflict action. An executive member claimed that workers at a particular port "stretch the order to the limit because they're scared of losing trade". A secretary at a declining port said "we might put up with things that another port would not". Interviewees at several such ports noted the pressure to refrain from stoppages. As one union official remarked, "with stoppages you have got to watch trade going to other ports which are rivals". Another official clearly stated the difference between the busy and slack port in saying: "A big port feels fairly strong. They have large numbers and a lot of trade. The union there is in a different position with the employer than here. When men are out of work they are not in a strong position. They're more reluctant to exert pressure. Today we avert stoppages as we're worried about the future of trade. We refrain from doing anything that may adversely affect the future of the port." This official saw employers taking advantage of this weak position in that "stoppages are used by shipping companies as an excuse to go elsewhere. Its difficult to avoid stopping without giving an issue away." He even claimed that "lately employers have been engineering stoppages which take a lot of manoeuvring to dodge". This experience was not commonly mentioned at other declining ports where parties often claimed to be "working together" to attract trade.

On the question of shipping company influence on price, it was noted in Chapter VII that most trades are organised into conferences. These conferences set freight rates, sometimes in negotiation with user organisations such as producer boards.⁵¹ Even where rates are negotiated, it is likely, in view of the near monopoly position of a conference in a

51. See David Levinson, "Industrial Relations on the New Zealand Waterfront", mimeographed paper, Victoria University of Wellington, 1968, Ch. 1. For a treatment of the Australian situation see John Wesley Spiers, "The Australian Stevedoring Industry 1947 to 1970", M.Com. Thesis, University of Melbourne, 1970, especially Ch. IV.

particular trade and lack of alternative transport modes, that the user organisation is in an inferior bargaining position. In any event, the conferences have the power to unilaterally impose a "congestion surcharge" on all tonnage entering a port in order to recoup costs of slow turn-around of ships.⁵² The situation is thus a classic one of "cost plus" pricing. Stevedoring companies, which themselves operate on an essentially cost plus pricing basis and largely belong to shipping firms, pass increased costs on to the shipping companies which in turn pass them on to the user and ultimate consumer.

It seems the economics of shipping confers a bargaining advantage on workers but only at ports enjoying a high volume of trade. At other ports the bargaining power of workers is relatively low and of employers relatively high. This variation in bargaining power appears a most useful explanation of differences in stoppage levels as among ports. Its influence on the distribution of collective penalties, however, is unclear. While the employer has a greater ability to impose such a penalty at a declining or slack port, he may have less inclination or motivation to do so there than at a busy one.

9. The Size of the Port

The importance of size as an influence on conflict has been noted already within several contexts. The size of a port is related to the number of employers there which is in turn related to the level of stoppages, penalties and absence. Moreover, larger ports tend to be undergoing the most technological change which, we have argued, also tends to produce conflict. Larger ports also have greater variation in types of cargo and so greater conflict deriving from this source. These ports further have high volumes of trade which confers a bargaining advantage on their labour forces. Size may also be related to other factors discussed. For example, to the extent that large ports have a higher proportion of dangerous

52. Such surcharges were widely used in 1974 and 1975.

or unpleasant work, conflict from this source will be higher there than elsewhere. Finally, a large port may cover a wide area which makes for communications difficulties and impersonal relationships.

In view of the many effects of size, it is not surprising that this factor was frequently mentioned in interviews. It was the general opinion that larger ports have relatively more conflict than smaller ones. A suggested reason is that workers at small ports are well known to one another and to the employer with the result that "over time a good relationship has evolved between labour and management". At larger ports it is maintained that "you have large groups of men with not the same degree of loyalty to or understanding of the employer". Also some argued that workers at small ports are more strongly influenced by the local community than those at large ones. As a manager noted, "in smaller ports watersiders are well known in the community and stand out when they are on strike. There is a strong community pressure on them." This view was only partially shared by a manager at a small port who contended that while "waterside workers are well integrated, they are not strongly influenced by the community in deciding on strike action". Certainly at smaller ports union officials emphasised the high degree of involvement of their members in the community. As one said, "there is a good relationship between the port and town". The importance of maintaining the volume of trade at small ports was also frequently mentioned. Another official related size to the nature of the region in noting that large ports service large industrial areas, "the industrial unrest (of which)...tends to feed into the port".

Many of these views were echoed in questionnaire responses. In explaining why workers at some ports engage in strike action more than those at others, nine of 15 managements mentioned size. Several expressed sentiments such as "nearly all strike action originates at the larger ports". Numerous unions also mentioned size in one context or another. One from a small port, in explaining the low stoppage level there, said "water-front activity tends to be centred at the main ports. Issues are therefore decided at the main ports". Some officials

indicated a lower need for stoppages at small ports, in that benefits gained at large ones often flow on to them, sometimes through incorporation in the general principal order.

In view of this heavy emphasis it is surprising that most managements and several unions placed little emphasis on size in answering a question which asked the parties to assess the importance of the size of the port as a cause of strikes at their ports. As can be seen from the following table, most managements considered size of no importance as a cause of strikes. This opinion was shared by several unions, although four considered it very important. On the basis of size of mean response, unions rated this factor seventeenth in importance of those assessed and managements only twenty-fourth. Management and union from the same port gave an identical assessment in four of eight cases.

TABLE 19
The Perceived Importance of the Size of the Port
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	0	2	0	8	6	4.60	3.77
Union responses (n=14)	4	0	1	0	5	4	3.20	3.11

Source: Management and union questionnaires.

It is understandable that respondents from smaller ports should consider size not important in that smallness may be associated with a lack of strikes. But only three of the eight managements, and one of the five unions, rating it not important were from small ports. Not too much weight should be placed on responses to this question in light of opinions expressed in other answers and in interviews. For example, four of the nine managements which used size to explain inter-port

differences in strike levels also rated the size of the port to be not important as a cause of strikes.

Despite the confusing nature of some of these responses, it seems clear that there is widespread support within the industry for the proposition that size influences conflict. Certainly, ports are generally large employment units. The average port labour force in 1973 was 353, with the smallest being 25 and the largest 1644. This compares with an average manufacturing unit labour force of only 30 in 1971-72. If conflict is related to size, the waterfront industry has a predisposition toward a relatively high level of conflict. It might also be expected that larger ports will have higher stoppage levels than smaller ones. This was tested by correlating the bureau register strength with measures of stoppage activity, with the following results:

TABLE 20
Correlation Coefficients: Port Labour Forces and
Levels of Stoppage Activity

Variables		Correlation Coefficient (r)
1973	no. of stoppages, bur. reg. strength ^a	0.834 (significant 0.001)
	worker loss ratio, bur. reg. strength	0.418 (" 0.10)
1971	no. of stoppages, bur. reg. strength	0.872 (" 0.001)
	worker loss ratio, bur. reg. strength	0.804 (" 0.001)

Note: a Bureau register strength (average of the strength at beginning and end of year).

Source: Derived from Waterfront Industry Commission data.

There is a strong and positive relationship between size of labour force and stoppage frequency, the implication being that the larger the port the greater the number of stoppages. In 1973, port employment levels explained 69.74% of the variation in frequency among ports. The association was even

stronger in 1971 which was a high stoppage year. The relationship between size of labour force and man-days lost per worker (worker loss ratio) is also positive but, at least in 1973, less strong than that involving frequency. In 1971 it appears to be fairly strong but this result is largely due to a single extreme observation, in the language of regression analysis an "outlier", and therefore must be discounted. The relationship between size of labour force and worker loss ratio seems fairly weak.

As suggested elsewhere, size appears to influence not only collective forms but also individual and employer-initiated forms of conflict. It might be expected that the larger a port, the greater will be its levels of individual and employer-initiated forms. In testing this the bureau register strength was again used as the measure of size. It can be seen from Table 21, that in 1973 size of labour force was strongly related to the absence rate,⁵³ with employment levels explaining 88.94% of the variation in absence rates among ports. Size is apparently unrelated to the accident lost time rate. The correlation coefficient for accidents, however, appears to vary in size between years, partly because the rates for two small ports (Greymouth and Westport) fluctuate significantly over time. The results in the table relate to 1973, a year in which these two ports experienced high accident rates. Obviously, when small ports have relatively high rates, the correlation coefficient will tend toward zero. In 1969, a year in which these two ports had much lower accident rates, the correlation coefficient was significant and positive ($r = 0.608$, significant 0.01). It is clear, however, that in 1973 and other recent years there is either no relationship between size and the quit, dismissal or penalty rate, or that any relationship is modified by the influence of counteracting factors.⁵⁴

53. This result may possibly be influenced by the fact that large ports tend to be relatively busy, so that workers at these ports have less opportunity to be absent from work while receiving at least a minimum rate of pay than those at smaller ones.

54. In 1969, for example, similar correlation results hold:

	(r)
quit rate, bur. reg. strength	-0.042 (insignificant)
dismissal rate, bur. reg. strength	0.058 (")
penalty rate, bur. reg. strength	0.294 (")

TABLE 21
Correlation Coefficients: Port Labour Forces and
 Levels of Individual and Employer-Initiated Forms

Variables		Correlation Coefficient (r)
1973	absence rate, bur. reg. strength	0.943 (significant 0.001)
	accident rate, bur. reg. strength	0.210 (insignificant)
	quit rate, bur. reg. strength	0.046 (")
	dismissal rate, bur. reg. strength	0.229 (")
	penalty rate, bur. reg. strength	0.187 (")

Source: Derived from Waterfront Industry Commission data.

The view that the level of stoppages is positively related to the size of a port is widely held in the industry and the results of our statistical analyses add support to it. Larger ports appear to have relatively higher stoppage frequencies and possibly worker loss ratios than smaller ones. Our results also indicate that larger ports tend to have higher absence, and possibly accident, rates. Size therefore seems a useful explanatory variable of variations in aspects of stoppage activity and in absence and accident rates among ports. Size may also be an important consideration in the level of conflict at ports as opposed to that at the typically smaller units in other industries.

10. Foremen and the Supervisory Structure

An argument incorporating elements of several already outlined concerns the role of foremen. In a casual system the foreman stevedore occupies a particularly key position and may be the only point of contact between employer and worker. The diversity of cargoes and conditions means he is frequently involved in informal negotiations on the job. Moreover, at

times he is under pressure from the stevedoring company to turn the ship around on schedule, with inconsistent supervision being the result.⁵⁵ If in such a situation the quality of foremen stevedores is poor, as some suggest,⁵⁶ conflict is likely to result. The foreman may also be at the centre of conflict because of his historical image as the "dispenser of injustice" under the "auction block" system.⁵⁷ This argument seems consistent with most forms of conflict. The influence of this factor may vary among employers and ports depending on the quality of foremen concerned.

Any description of the supervisory structure of a stevedoring company is made complex by differences in nomenclature. For example, a foreman stevedore is in some places called a supervisor and in others simply a stevedore. A description of the supervisory structure using fairly standard names begins with the stevedoring company superintendent who is in charge of several supervisors. The supervisor, in turn, is in charge of a ship and has under his authority foremen stevedores. A foreman stevedore supervises the work of a gang of waterside workers. While this structure is fairly common, it is not universal. On a small ship or at a small port, for example, the most senior management representative may be a foreman stevedore.

In a pooled employment system where workers rotate among employers, it is obvious that the foreman stevedore (and the supervisor) plays a key role. He is often the only direct contact between employer and worker.⁵⁸ We have already indicated that at many ports, disputes over special rates, manning and wet weather work are handled at the foreman stevedore-

55. See Joel A. Fadem, "The Case of the Australian Waterfront: Organizational Design", *Journal of Industrial Relations*, Vol. 9, March 1967, p. 29.

56. See "Report of the Streamlining Committee", p. 108.

57. Walker, *op.cit.*, p. 377. See also Fadem, *op.cit.*, p. 29.

58. One management, in a questionnaire response, noted that "contact with watersiders is mainly restricted to foremen. Anyone of higher status belongs to the 'faceless ones'."

delegate level.⁵⁹ At some ports most disputes are settled at this level. Four managements and four unions said most disputes are settled between the foreman stevedore and either the delegate or union official, while eight managements and one union said most are settled between the supervisor (or, in some cases, superintendent) and the union official or delegate. Responses to the question, "At what level are disputes at this port most often settled?" were as follows:

TABLE 22
Level at Which Most Disputes are Settled

	LEVEL				union official- steve- doring company manager	Other
	delegate- foreman stevedore	union official- foreman stevedore	deleg.- super- visor	union official- supervisor ^a		
Management responses (n=16)	3	1	1	7	2	2 ^b
Union responses (n=13)	3	1	0	1 ^c	5	3 ^d

Notes: a Includes superintendents.

b Consists of one "...union executive and president, foreman and secretary of this (NZPEA) branch" and one "union executive/(NZPEA) branch committee or representatives of both".

c Union officials and wharf supervisor or branch manager.

d Includes two "at all levels".

Several respondents mentioned other parties also being involved, e.g. NZPEA branch secretaries.

Source: Management and union questionnaires.

59. Another type of dispute which may be handled at this level is that over the working of supplementary hours (or overtime). The parties were asked to assess the importance of this factor as a cause of strikes at their ports. Responses were as follows:

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=16)	0	1	2	1	6	6	4.20	3.44
Union responses (n=14)	0	1	3	2	3	5	3.78	3.67

Source: Management and union questionnaire.

On the basis of size of mean response, managements rated this factor nineteenth equal in importance of those assessed and unions twenty-fifth.

In view of their roles, it is not surprising that foremen stevedores and supervisors are frequently involved in conflict situations. It was suggested by some interviewees, however, that the nature of the foreman's position may make it difficult for him to handle such situations. The foreman is separate from the watersiders and also, at least physically and possibly organisationally, from the stevedoring company employing him. As one ex-foreman noted, "the foreman is in a difficult position. He tends to be caught in the middle. He is not part of the workers and not part of management. He also tends to be neglected by management." This position was seen to influence the way in which the foreman performs his work. The same interviewee argued that "the foreman will often not sack a man as he does not want to appear before the port conciliation committee. Often he has not kept full records of the case and has little to argue with, whereas the union has fully prepared the worker's case." The foreman is in an unenviable position. He is responsible for direct supervision but belongs to neither management nor worker groups which are subjecting him to conflicting pressures. In such a situation it would be surprising if the quality of supervision did not suffer.

The importance of the foreman's role was widely acknowledged during interviews.⁶⁰ The quality of foremanship, however, was seen to vary both among and within ports. At a number of ports managers and union officials described the local foreman stevedores as either "O.K." or "good". But at others it was argued that "the quality of foremen stevedores differs between companies".

60. It is interesting to note that in recent years a large number of foremen have attended training courses at the Waterfront Training Organisation (WTO). (From 1 January 1968 to 25 August 1973, 563 foremen attended these courses.) The foremen's course is designed to give foremen an indication of the courses undertaken by watersiders and to cover subjects under the heading of "foremanship". Support for the general work of the WTO was expressed by several interviewees. This support was echoed in a number of responses to a question on whether or not the work of the WTO has influenced the quality of port industrial relations. While several managements and some unions said it has "improved" industrial relations, most unions and some managements said it has had little or no effect. Several respondents indicated that the work of the WTO "has greatly improved the deck and mechanical abilities of the watersiders but I don't see how this enters the industrial scene".

As an aside, several managers and officials indicated that "the ability of a foreman to get on with the men is not related to his being an ex-watersider". One official made the proviso though that "it makes a difference if the foreman is not connected with shipping" (as a former watersider, seaman or ship's officer). At still other ports, it was generally agreed that "the quality of foremen is poor". One manager attributed this to the local town "being a tight community. The foremen have to live with the men they are trying to supervise. They want to straddle both sides of the fence." The result was seen to be "arbitrary judgements". He also argued that "foremen generally would rather not put anyone on penalty. They feel the employers will not back them up." A union official at the same port said, "inefficient foremen cause all sorts of problems".

The nature of this industry results in the foreman stevedore (and, to an extent, the supervisor) occupying a very important but difficult position. In view of his role, it is inevitable that the foreman will be involved in conflict situations. But the very nature of the role at times makes it difficult for him to handle such situations. Variations in the quality of foremen may help explain differences in amounts of conflict both among companies within a port and among ports.

11. Inadequate Communications

It is also argued that conflict can result from poor communications between worker and employer. The argument relates to the inclination to engage in conflict and seems relevant to most conflict forms. Insofar as the size of ports varies, it may help explain differences in port levels of conflict. Variations in the "adequacy" of communications may also assist in explaining the different levels of conflict of individual managements.

The proposition that inadequate communications tend to reflect more basic causes of conflict is supported by the many contexts within which communications have already been

mentioned. They have been discussed in relation to casual employment, the organisation of the industry, the remoteness of the employer, technological change, cohesion and mobility, the size of the port,⁶¹ and foremen and the supervisory structure.

Interviewees seldom mentioned communications, as a topic in themselves, other than to note that they were "satisfactory" or "good". The few who noted the existence of inadequate communications were mainly union officials. One official claimed "industrial relations are not as good as they used to be because there are not the same lines of communications open". He attributed this partly to an alleged centralization of employer decision making.

Despite infrequent mention during interviews, questionnaire responses did sometimes refer to inadequate communications. In answer to a question on ways of "improving" industrial relations, five unions and three managements indicated the need for better communications. One of these unions, for example, suggested "previous communication - mostly none - on proposed plans to vary systems of work". A management saw the need for "increased communications between union and employer - and employer and employer", and another "for (NZPEA) branch secretaries (to) be prepared to meet union people on their own side". One management specified communications between employer and worker (rather than between union official and employers' representative) in arguing for "more - or should I say some - contact between employers and watersiders".

The parties were asked to assess the importance of poor communications as a cause of strikes at their ports. It is clear from Table 23, that relatively more unions than managements considered this factor important. A full 50% of responding managements rated it of no importance. Of the three unions rating it very important, two were from large ports and one from a medium size port. On the basis of size of mean response, unions rated poor communications tenth in importance of factors assessed and managements only eighteenth. Only in one of eight

61. See Evans, *op.cit.*, pp. 158-159.

cases did management and union from the same port provide the same response; otherwise the management thought it less important than did the union.

TABLE 23
The Perceived Importance of Poor Communications as
a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	1	2	2	5	6	4.10	3.36
Union responses (n=14)	3	1	3	0	2	5	2.67	2.59

Source: Management and union questionnaires.

Differences in responses of management and union from the same port to any question have interesting implications for perception and so communications. Assessments of the importance of factors as causes of strikes from the same port were more often different than identical, with the largest number of identical assessments for any port being ten. At two other ports, the parties gave identical assessments for only three of the 29 factors. We have already noted in the last chapter that management and union from the same port quite frequently held different perceptions of relative stoppage, turnover, absence and accident levels.

Unions were also asked how often their officials meet with employers. Ten said "frequently" and four "infrequently". Of these 14 unions, 13 said the meetings were scheduled on an irregular basis, while one said some were on an irregular basis and others regular. Some indicated that these meetings covered a wide range of topics. One union, for example, specified "disputes and also general discussions on the well-being of the

port and exchange of views". Another noted that "(the employer's) door is always open to any officer of the union".

As indicated in Chapter VII, the waterfront industry has an unusually large number of bodies on which workers and employers are jointly represented. At most ports responding to the questionnaire there are at least three such bodies (port conciliation committee, port safety advisory council and port amenities committee). Six ports, however, noted the presence of more than three joint bodies. Three managements specified four committees, with the additional one being a bureau register selection committee. Such a committee (with unions in an advisory capacity) was also noted at two ports where the presence of a cargo flow committee brought the number of joint bodies to five. One management indicated the existence of six such bodies which included, in addition to those already mentioned, a panel to consider exemption from certain classes of work. Only two very small ports reported no joint bodies. While there is considerable contact, both in terms of direct meetings and meetings of joint bodies, between union officials and employers' representatives and employers, the same degree of contact does not exist between the rank and file worker and employer.

As regards communications among members of a particular party, we have already noted that there is a high degree of participation of workers in union affairs. Most unions hold not only monthly meetings but also special meetings should the need arise. Port unions, in turn, appear to maintain fairly close contact with the New Zealand Waterside Workers' Federation. When asked how often they consult the Federation on local port disputes, seven unions said "often" and six "sometimes". Individual employers also seem to be in fairly close contact with the local branch of the New Zealand Port Employers' Association. Managements at nine ports said the branch is often consulted on local port disputes while those at six said sometimes. The branches themselves appear to be in frequent contact with the Association's head office. Six managements said head office is often consulted on local disputes and nine said sometimes.

The volume of communications is relatively high at some levels and low at others. In particular, it is often high at the union official-employers' representative level but low at the worker-employer level. This difference in volume largely reflects the basic features of the industry. From interviews and questionnaire responses it seems this pattern may not be universal. Thus at some ports union officials complained of a lack of communications with local employers. Also, there may be variation in the quality of communications. Variations in volume and quality may exist both within and among ports and help explain differences in amounts of conflict at those levels. But inadequacy of communication, we have argued, reflects more fundamental features of the industry and so is a precipitating rather than basic influence.

12. Personality Differences

We have also argued that personality differences are a precipitating influence, largely reflecting more basic ones. Relatively few interviewees mentioned such differences as a source of conflict. Those that did, not surprisingly, placed emphasis on the personalities of key personnel such as union officials, foremen stevedores and supervisors, and NZPEA secretaries. One manager argued that "personalities enter into different port stoppage records", citing local examples of a supervisor who was "conscientious but caused a lot of trouble because he could not get on with the men", and of a union official whom "employers bristled at the sight of every time he walked onto the wharf". One union official contended that "industrial relations are built on personalities".

As with the other two industries, there was mention of the effect of a change in personnel or in the position occupied by a person. One NZPEA secretary argued that a local union official, on being elected to a full-time position, "caused trouble by stopping gangs" because "he had to prove to the men his appointment was worthwhile and his own personality causes problems". Interestingly, the officials at this port turned the argument around and directed it at the NZPEA secretary. They said "industrial relations have been

deteriorating because of a change in personality. Lately employers have been provoking trouble. You sometimes strike this with a change in personnel (i.e. the NZPEA secretary). The new appointment wants to set a good example."

Managements and unions were asked in the questionnaires to assess the importance of personality differences as a cause of strikes at their ports. Responses of unions reinforced the impression gained from interviews. It can be seen from Table 24 that most unions considered this factor of no importance. Management responses were more varied, although managements generally placed more emphasis on it than did unions. On the basis of size of mean response, managements rated personality differences ninth equal in importance of the 29 factors assessed and unions only twenty-seventh. In just two cases did management and union from the same port provide identical assessments. In all six others, the management rated the factor more important than did the union. Interestingly, the one management rating it very important was from a port for which the union rated it not important.

TABLE 24
The Perceived Importance of Personality Differences
as a Cause of Strikes

	Scale of importance					No Answer	Mén response	SMR
	1 Vér import ant	2 Aver age import ance	3 Aver age import ance	4 Aver age import ance	5 Not import ant			
Management responses (n=16)	1	2	4	0	3	6	3.20	2.62
Union responses (n=14)	0	0	2	0	1	11	4.56	4.43

Source: Management and union questionnaires.

questionnaire responses managements clearly attached importance, but unions little importance, to personality differences. During interviews relatively little emphasis was placed on such differences and, of the comments

in qu
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that were made, several indicated that they partly reflect basic causes of conflict in the situation. For example, if newly appointed full-time union or employer representatives appear to "make trouble", this is not just because of a change in personnel or personalities but also because the appointees are attempting to fulfil the perceived expectations of members. That members are seen to have such expectations suggests the presence of more basic causes of conflict, as does the appointee's apparent ability to "make trouble". Nonetheless, the existence of personality differences may help explain variations in amounts of conflict at most levels. In particular, changes in personnel or in the occupancy of key positions may lead to sudden changes in amounts of conflict.

13. The Presence of Agitators

There was less emphasis in this industry on the presence of agitators than in either of the other two studied. No interviewee specifically mentioned the existence of agitators as a cause of conflict. One manager said "we have some militant types who cause trouble if there are a few in a gang" but refrained from calling such workers agitators, arguing "years ago we had agitators planted but not nowadays". One union official at a large port firmly stated "the talk about agitators is nonsense" and elaborated that it "doesn't pay a leader to belong to a political party. Policy should not be determined by a political party. There is a political awareness among the men but they are not communist infiltrated. You could never have domination by a left wing group here."

The parties were asked in the questionnaires to assess the importance of the presence of agitators as a cause of strikes at their ports. As can be seen from Table 25, there was some difference in responses among managements and also between managements generally and unions. All unions considered this factor of little or no importance. While some managements also gave these assessments, others considered it of average or above average importance. Interestingly, the four managements rating it of above average importance were all from high or

medium stoppage level ports. On the basis of size of mean response, managements rated the presence of agitators eleventh equal in importance of the 29 factors assessed and unions only twenty-eighth. Management and union from the same port provided identical assessments in two cases (assessments of "not important" in both). In all five others, the management rated it more important than did the union.

TABLE 25
The Perceived Importance of the Presence of Agitators
as a Cause of Strikes

	Scale of importance					No Answer	Mean response	SMR
	1 Very import- ant	2 Above Average import- ance	3 Average import- ance	4 Below Average import- ance	5 Not import- ant			
Management responses (n=16)	0	4	2	1	3	6	3.30	2.70
Union responses (n=14)	0	0	0	2	6	6	4.75	4.61

Source: Management and union questionnaires.

It appears that different frames of reference have in some cases produced different perceptions as between the parties. Despite this, the presence of agitators is generally accorded little importance in this industry. It seems the "agitator argument" here has minimal explanatory value.

III. CONCLUSION

Our study has traversed a wide range of possible influences, included among which, we would argue, are the major ones.⁶² In

62. A factor included in the questionnaires but clearly considered unimportant was racial frictions. Assessments of this factor were as follows:

(Footnote 62 is continued on the next page.)

so doing several connections between factors have been documented but, by necessity, factors have basically been studied individually. We must now bring these together into an overview of the determinants of the waterfront industry pattern of conflict.

Our evaluation suggests the following factors are important influences on at least one form of industrial conflict: overseas ownership of shipping and stevedoring companies; technological change; the nature of the work and of the worker; variations in cargoes and conditions; the volume of trade and bargaining power; the size of the port. The casual nature of employment is also an important influence and has led to a system of waterfront organisation which itself has an influence on conflict. One aspect of this system is the Waterfront Industry Commission, the presence and nature of which probably results in a level of conflict lower than that which would prevail under a significantly different arrangement. Factors of some importance in particular situations include the quality of foremen and nature of the supervisory structure, inadequate communications and personality differences. The origins of these influences are largely in the more basic ones listed above. Others of little or no importance are the presence of agitators and racial friction.

The importance of technical and economic conditions in a composite pattern of determinants is obvious. A feature of the

(Footnote 62 continued):

	Scale of importance					No Answer	Mean response	SMR
	1	2	3	4	5			
Management responses (n=16)	0	0	1	0	9	6	4.80	3.93
Union responses (n=14)	0	0	0	0	9	5	5.00	4.86

Source: Management and union questionnaires.

On the basis of size of mean response, both parties rated this factor last in importance of the 29 assessed (in the case of managements the rating was twenty-seventh equal).

industry's technology is that the volume of cargo requiring handling varies with the flow of vessels in and out of port. This produces a casual system of employment with a transient employer-worker relationship and fluctuations in the availability of work. Such a system might be expected to predispose the industry toward conflict, a predisposition which may be modified by organisational arrangements such as the Waterfront Industry Commission. Variation in the degree of "casualness", and particularly in the number of employers engaging a worker over a period, may help explain variations in levels of conflict (especially of stoppages, absence and penalties) as among ports. The technology is a changing feature of the industry. At ports where technological change is occurring conflict, largely of a collective and employer-initiated sort, often results. Where it is not, levels of these forms may be reduced. Technical conditions also determine the nature of the work, and in part, of the worker. Conflict may be particularly associated with dangerous or unpleasant work. Variations in features of the work within and among ports may produce differences in amounts of stoppages and possibly of some individual forms at those levels. Variations in types of cargoes and in conditions under which they must be handled are also important. Aside from directly affecting conflict, this variation creates numerous subsidiary influences on it. The greater the variation at any port, the greater might be the level of conflict.

Economic conditions, possibly along with historical ones, shape the ownership pattern of the industry and in particular its overseas-owned character. The pervasiveness of overseas ownership suggests it has a general influence but, insofar as the proportion of such ownership varies among ports, may assist in explaining differences in port levels of conflict. Economic and technical conditions determine a port's volume of trade and the bargaining power possessed by the parties. The size of a port can also be seen to be determined by economic and technical conditions and influences the level of conflict in numerous ways (and particularly of stoppages, absence and possibly accidents). Moreover, those same conditions strongly influence the nature of the foreman's role and

of the supervisory structure. Less basic and systematic influences on conflict include inadequate communications, and personality differences.

Many of the basic features of the waterfront industry predispose it toward conflict. Variations in these features and the presence of other, less general, ones account for differences in amounts of conflict both within and among ports. Changes in these over time, together with those in most widespread factors, account for inter-temporal variations in amounts of conflict.

It is difficult to change the basic features of this industry. The irregular nature of trade results in a system of casual employment. While some of the characteristics of this system would be changed by the adoption of a form of permanent employment, others, such as fluctuations in the availability of work or even rotation on a temporary basis to other employers, may remain. In any event, the operation of past variants of the casual system, some of which involved working for a particular employer or in set gangs, has predisposed workers against any form of permanency. It appears as a result, that a central administration body along the lines of the WIC will remain a key part of waterfront organisation. The extent of feasible change to such a body is limited by the very features which predispose workers against permanent employment. Alterations in conflict levels are possible, but only with changes in some of the basic features of the industry. Such alterations might, for example, require changes in the programming and phasing of shipping, the methods of introducing technological change, ownership structures, the nature of some of the work, the content, layout and number of agreements and other documents, payment systems, the supervisory structure and the role of foremen, the relationship of companies to workers, the size of the port and so on. Some of these changes may have been contemplated but not adopted because their expected costs exceed expected gains. They may not, however, have even been seriously considered.

While this industry has a predisposition toward conflict,

ports need not necessarily be conflict prone. We saw in the last chapter how some ports have virtually no stoppages and relatively low levels of turnover, absence, accidents and penalties. While not all of these incorporate features put forward above as possible changes, those that do point to the possibility that any predisposition toward conflict can to some extent be modified.

PART 4

CONCLUSION

Chapter XV

CONCLUDING OBSERVATIONS

None of the three industries studied conform to the stereotype of a "normal" industry. Rather than offering the steady, long term employment of the stereotype, all three, because of their production processes, have fluctuating demands for labour and so offer mostly temporary employment. In meat freezing the typical employment period is the season, which lasts from a few to several months depending on area. In building and construction the typical period is the duration of the contract or project which may last a few to several years. In the waterfront industry the worker is typically in the employ of a particular employer for the duration of a job (i.e. the loading or unloading of a vessel), which may be as short as a few hours but not longer than several days.

The factory situation of the stereotype is found in only one of the industries. Meat freezing, with its processing and machine paced operations and its assembly line organisation, replicates many of the factory characteristics of the stereotype. In the building and construction and waterfront industries the place of employment is not stationary nor is it necessarily physically enclosed. Rather, work may be performed in a variety of places and conditions within the project or port area.

The stereotype industry is a manufacturing one and again only meat freezing has this characteristic. Construction is usually treated as distinct from manufacturing, its product differing fundamentally from the typical manufacture. The waterfront industry is of course a service rather than product industry. Much of the analysis of industrial conflict in the literature is set, at least implicitly, within the context of the stereotype "normal" industry. Its relevance is questionable if conflict prone industries do not conform to the stereotype. In many cases it appears that the analysis of conflict ironically is developed within models appropriate to industries

with relatively low conflict levels.

Despite their obvious differences, the three industries have several common features which directly or indirectly give rise to conflict in each. One such feature is casual employment. In meat freezing it takes the form of seasonality. While the seasonal nature creates a climate conducive to conflict and influences many factors, its direct effect on conflict levels among works appears to be modified by other factors, particularly their size and location. The project nature of construction produces casual employment which in turn has several effects on conflict. One of these is the lack of familiarity which often exists both between workers and managers, and within each of these two groups. Another is the impermanence of employment which shapes attitudes in a way conducive to conflict. The nature of casual employment in the construction industry differs from that in the other two industries because the project, unlike the freezing works or port, is not a permanent employment unit. Casual employment also has a pervasive influence in the waterfront industry. It predisposes the industry toward conflict but also influences other factors, such as the organisational structure, which themselves have implications for conflict. In all three industries the parties tended to place heavy emphasis on casual employment in all aspects of our investigation, except for questionnaire responses of waterfront managements.

The seasonal nature of meat freezing, the project nature of construction and the irregular work of the waterfront industry influence the cost of conflict action and bargaining power. In the meat industry the cost of stoppage to the worker may be low providing stock numbers are unaffected. The stoppage may merely extend the season. Moreover, the relative bargaining power of the parties varies during the course of the season. The worker enjoys an advantage during the "build-up" and peak periods, as does the employer during the "run-down" and off-season and other slack periods. In construction, bargaining power obviously exists only as long as does the project. A stoppage may extend the completion date and result in a relatively low cost to workers, in terms of income foregone,

but a high cost to the employer because of such costs as penalty payments. During the early stages of a contract, the employer may possess considerable bargaining power if only because he can withdraw at a relatively low cost. In the middle and latter stages, however, workers possess a bargaining advantage in that the employer is then committed to the project and to meeting its completion date. In the waterfront industry the cost of stoppage to the worker, in terms of income foregone in the short run, may be relatively low if there are no immediate prospects of further work being available on other vessels. To the employer, however, the cost of stoppage, in terms of a slower turn-around of the vessel, is the same irrespective of whether or not work is intermittent.

Another feature which influences conflict in all three industries is the nature of the work and of the worker. An important common aspect of the nature of the work is danger which not only produces disagreements over safety matters but also creates an atmosphere conducive to conflict. In each industry managements placed less importance on safety (or dangerous work) as a cause of strikes than did unions. All parties (with the partial exception of construction managements) nonetheless attached considerable importance to this factor. Another aspect present to some extent in all three is dirty or unpleasant work. In the meat freezing and construction industries, managements again rated this factor less important than did unions. The parties in these two industries accorded it less importance than did their counterparts on the waterfront. An aspect of the work of great importance only in meat freezing is monotony, boredom and repetition. Meat freezing work has this aspect because of its assembly line, machine paced, processing nature. Work in the other two industries is far more varied and individually paced. A factor unique to building and construction, and resulting from its project nature, is the temporary character of facilities and amenities. The outdoor nature of much construction and waterfront work may also at times be a cause of conflict, but then so may the indoor character of meat freezing work (for example, because of heat). The importance attached by unions to the forceful character of workers as a cause of strikes was

similar in each industry. Management assessments were also similar in the waterfront and construction industries. In the case of meat freezing, however, managements placed greater importance on the forceful character of workers than did those in the other two industries. In all cases, both parties rated it as of at least average importance. Certainly workers in these industries appear forceful.

Workers in all three industries are generally cohesive in a conflict with the employer. This view was shared by most management and union respondents. Workers tend to identify with their fellows rather than managements, partly because occupational mobility is limited. Although a significant proportion of foremen in each industry is appointed from among manual workers, the proportion of managerial staff above the foreman level who began as manual workers is much lower. Superficially, the degree of homogeneity of the labour force appears high in each industry but this is misleading except in the case of the waterfront. Workers in meat freezing are often differentiated along departmental lines and in construction along occupational lines. Nonetheless, the overriding consideration in a conflict with the employer is that workers are all "freezing workers" or all "construction workers". Similarly, workers in each industry superficially appear socially isolated. There has been a traditional social stigma attached to being a watersider, freezing worker or, to a lesser extent, construction labourer, but the situation today is somewhat different. In many places watersiders and freezing workers are an integral and important part of the local community. Even in the construction industry, only those living in camps are highly isolated. Certainly both managements and unions in meat freezing and unions in the waterfront industry tended to place little importance on social isolation as a cause of conflict. Some managements and unions in construction and a few waterfront managements though attached importance to this factor.

Payment systems and earnings relativities seem important causes of conflict in all three industries. In meat freezing the seasonal nature and need to process the raw material rapidly has resulted in the extensive use of piecework and

incentive schemes. Conflict may result from such schemes as, for example, when the rate of output is, for any of a number of reasons, slowed to the detriment of the worker. The variety of conditions in construction results in a host of allowances, the negotiation and application of which may produce conflict. In the waterfront industry the diversity of cargo means many special rates, some of which must be negotiated. These, along with the incentive contract system, have been sources of conflict. In questionnaire responses, unions in each industry considered the bases on which wages are calculated to be a more important cause of strikes than did managements. Among unions, those in construction considered it most important (rating it of above average importance) as did construction managements. Managements in the meat freezing and waterfront industries rated the bases on which wages are calculated of below average importance (although those in waterfront rated disagreements over claims for special rates of considerable importance).

Meat freezing and, especially, building and construction have a multiplicity of bargaining relationships and of earnings relativities. These are also numerous on the waterfront but to a lesser degree. All three industries offer possibilities for continuing negotiations and informal agreements. Relativities are therefore not only numerous but likely to be frequently upset. The potential for conflict from this source is therefore high. The complexity of bargaining relationships, relativities and other factors, such as types of cargo in the waterfront industry, results in complexity of agreements and other codes of rules which itself may produce conflict.

Units in all three industries are typically very large. The smallest average size of employment in these industries, the waterfront, is over 10 times the average of manufacturing units and the largest, the meat freezing industry, is twice that again. Units in the industries under study are also physically very much larger than those in most other industries. If the level of conflict is related to size, these three industries might be expected to be conflict prone. There is good reason for thinking such a relationship exists, although the effects of size are difficult to disentangle from those of

other factors. As well as impersonal relationships and inadequate communications, bigness may be associated, at least in one or two of the industries, with a multiplicity of bargaining relationships, a bargaining advantage on the part of workers, a labour force with "traditionally militant" groups in it, greater technological change and so on. The effects of size on levels of conflict among units within the three industries are more amenable to testing in this study. Certainly, size (in terms of labour force) was significantly related to stoppage frequency and accident frequency rate within meat freezing, and to stoppage frequency and absence rate in the waterfront industry. In construction, size is positively, but weakly, related to stoppage frequency and not significantly related to any individual form of conflict. In this case, it appears the effect of size is to some extent counteracted by that of other variables. Despite the importance of size in the meat freezing and waterfront industries, and its fairly frequent mention during interviews, this factor was not rated of importance as a cause of strikes by the questionnaire respondents. In meat freezing, however, there was a tendency for respondents from larger works to consider size more important than those from smaller ones. Waterfront responses were more confusing.

In all three industries there is an impression among union representatives that top management is remote and that conflict can result because of this. In meat freezing this remoteness derives from the separation of works from company head offices, overseas ownership and the seasonal nature of employment. Casual employment is also important in this respect in construction, as is the isolation of the project from head office and the technical/engineering bias of some managements. In the waterfront industry, casual employment, especially the rotation of workers among different employers, the organization of the industry and the centralization of shipping and stevedoring company offices along with their being overseas-owned are important sources of remoteness. Managements in questionnaire responses tended to place little importance on this factor but several, during interviews, placed emphasis on particular features mentioned above. Unions in all aspects of our study considered it important.

The private ownership of companies appears of some importance in each industry. In meat freezing some union officials saw private ownership as influencing the inclination to engage in conflict and expressed a preference for a nationalised industry with union and farmer involvement in its operation. In construction private ownership was seen to influence both the inclination and ability of workers to engage in conflict and appears useful in explaining differences in stoppage levels between government and private contracts. Private ownership seems a less important influence in the waterfront industry, if only because of the prominent role played by a statutory body (the Waterfront Industry Commission) in its operation. Certainly even if the WIC makes employers more remote it has compensating advantages and there is enthusiastic support for it among port unions and, in some cases, a desire to see its role expanded. Some union representatives would like to see at least part of the ownership of stevedoring companies in the hands of watersiders' unions. Such a move may reduce conflict from this source and increase the participation and involvement of workers in the industry. Its total effect on conflict would depend on what other features of the industry it changed.

Up until now we have largely been concerned with factors which are directly related to the nature of these industries. These "basic" factors not only influence conflict but may also shape other "precipitating" ones which themselves influence conflict. A precipitating factor common to the three industries is inadequate communications. Each industry has numerous features making for communications difficulties. Among these are casual employment, the multiplicity of bargaining relationships, remoteness of top management, the size of the unit and the nature of the supervisory structure. Each industry also has particular features, such as the isolation of the project and remoteness of union officials in the case of construction. It appears that communications between union representatives and managers are on an informal and irregular basis, except possibly in the waterfront industry. The existence of numerous joint bodies in the waterfront industry may help explain the apparent greater level of communications between union representatives and managers there than in the other two industries.

Communications between managements and workers, on the other hand, appear deficient in all three industries. In each industry managements rated poor communications a less important cause of strikes than did unions. Moreover, respective management assessments, on the one hand, and union assessments, on the other, were similar between meat freezing and construction, with managements rating it between average and above average importance and unions between above average importance and very important. In the waterfront industry, by comparison, managements accorded it somewhat less than, and unions somewhat more than, average importance.

Another common precipitating factor involves the quality and role of foremen and the nature of the supervisory structure. In each industry the foreman is the staff member most directly involved in conflict situations. This is so if only because he may be the single point of direct contact between management and worker. The nature of the foreman's role, however, results in his often being ill equipped to handle such situations. In many cases he has not been given adequate training or preparation by higher management. He is exposed to opposing pressures but belongs to neither the management nor worker groups applying them. He is charged with getting the job done but has little authority with which to do it. The unattractiveness of the position is in no way relieved by the small additional reward associated with it. In these circumstances it would not be surprising if managements found it hard to recruit and retain "good" foremen. In the waterfront the foreman's role appears even more closely related to the industry's basic features than in meat freezing and construction. The rotation of workers among employers, the existence of the WIC and the frequent remoteness of stevedoring company offices places the foreman stevedore in a particularly important position. In meat freezing a lack of training in foremanship was complained of, especially by union representatives. A lack of training, as well as of technical ability, was also emphasised in construction.

Personality differences are a precipitating factor, the

influence of which is difficult to disentangle from that of other factors. Where "personality clashes" were mentioned by the parties, it was often implied they were added elements in a situation already conducive to conflict. Emphasis in each industry was placed on the effects of changes in personnel, and so in personalities. Some interviewees thought that newly appointed key personnel sometimes "make trouble". Reasons suggested for this include the "testing" of new appointees by the other party and the appointee attempting to fulfil the perceived expectations of members. Some building and construction managers argued that if the "testing" of a new manager results in the establishment of precedents and a "tradition" of direct action, the best way to change the situation was another change in personnel but this time with a particularly competent replacement. Irrespective of the direction of change in conflict, changes in personalities may help explain sudden variations in conflict levels. In meat freezing there was a range of assessments of the importance of personality differences as a cause of strikes among both parties, although each rated it of about average importance. In the waterfront industry, management respondents placed some importance on personality differences as a cause of strikes but unions were almost uniformly of the opinion that they are of no importance.

The past may itself have an influence on conflict in that events in the past shape attitudes and so behaviour. Certain historical conflict situations have had pervasive effects in each industry, including the creation of an "atmosphere" which may be conducive to conflict. The variability of conflict levels among units within each industry, however, suggests that any widespread atmosphere can be modified by, among other things, local custom and tradition.

So far we have concentrated on factors which are not only common to but of some importance in each industry. There are several other factors of importance in just one or two of the industries. One of these is the formation and nature of work groups. In meat freezing the sequential, integrated nature of the production process results in the departmental work

group being the focal employment unit. The technology of construction also produces distinct work groups there. In each case, the technology confers a bargaining advantage on particular groups which, for this reason among others, tend to be stoppage prone. Several managements in meat freezing consider the decision to strike is usually made at departmental level, although this view is not shared by most unions which argue it is made at works level. Numerous construction managements and unions see the decision as usually being made at job level. Despite the importance of the work group neither party in construction considered friction between occupational groups of great significance as a cause of strikes. This may be due to the same joint action of unions which prevents job demarcation and friction between unions from becoming causes of stoppages on projects. Freezing industry unions also attach little significance to friction between occupational groups although some managements consider it important. There was possibly greater evidence of inter-group conflict in this industry than in construction. Job demarcation and friction between unions again do not appear important causes of stoppages. In the waterfront industry the rotation of workers among employers prevents the formation of distinct work groups with the result that these groups are of little relevance there. Partly in consequence, most stoppages in this industry involve the whole labour force, whereas in the other two a considerable proportion of stoppages is confined to particular work groups.

The factors producing casual employment are also responsible for the existence of camps in meat freezing and in building and construction. Camps are a very important influence on conflict in construction but not in meat freezing. There are a number of reasons for the difference. First, construction camps are very much larger both in terms of number of inhabitants and in the percentage of the total labour force housed in them. The smaller camps of the meat industry are generally not the source of leaders that they are on some construction sites. Second, camps are relatively more numerous in the construction industry. Only half of meat freezing works have camps and some of them are now virtually unused.

Thirdly, construction camps are generally temporary structures while those in the meat industry are largely permanent. Despite this, construction workers may live in their camps for several years on end while freezing workers may spend only part of a season in theirs. The camps of the construction industry differ greatly in nature from those of meat freezing, and exert a relatively stronger influence on its conflict patterns.

Technological change is a very important cause of conflict in meat freezing and the waterfront. In the meat industry it is largely associated with the hygiene regulations. The reasons for these regulations, their exact nature, their effects and the methods of introduction and application have all been major sources of conflict. Both managements and unions regarded new technology and changes resulting from hygiene regulations as the most important of the factors assessed as causes of strikes. Unions, and managements to a lesser extent, also attached considerable importance to the associated factor of heat. The hygiene regulations appear a significant part of the explanation of the strong upward trend in meat freezing stoppage activity in recent years. Technological change has been very rapid in the waterfront industry, affecting conflict in numerous ways. At ports where it is occurring, such change influences the inclination and ability to engage in conflict, to an extent increasing both. At other ports the effect is the reverse as the parties strive to retain trade. Technological change opens up possibilities for demarcation frictions which are an important cause of conflict in this industry. The differential impact of change seems a fruitful explanation of differences in levels of collective and some employer-initiated forms among ports and also of changes in these levels at a particular port over time. Both managements and unions placed considerable importance on the impact of new technology on waterfront work and on demarcation frictions as causes of strikes. In the construction industry the role of new technology is less clearcut and its effects were consequently seldom mentioned in interviews. While technological change undoubtedly causes conflict in particular circumstances in that industry, it does not appear to be a factor of widespread importance as it is in the other two.

The low status and lack of pride in an industry probably has little effect on conflict independent from those resulting from more primary factors. A possible primary factor in the meat industry is the poor physical environment of some works. In the other two industries low status appeared of little importance. In neither was it mentioned, except by implication in discussions of social isolation.

The location of a unit seems an important factor in meat freezing. In particular, workers at rural works appear less prone to stoppages than those at urban ones, possibly because of closer ties with farmers and the local community and of fewer alternative employment opportunities. Rural works also tend to have lower accident frequency rates than urban ones. In waterfront, location may have some effect in that small ports have close links with the town while conflict activity at large ones may be influenced by that occurring in surrounding areas. The region probably has less effect on construction projects than on units in other industries. Projects have limited lives and are often undertaken by workforces, a high proportion of which comes from other areas and is housed in camps. These features reduce the effects of local attitudes and restraints imposed by the state of the regional economy.

Overseas ownership of companies appears an important influence on conflict in the meat freezing and waterfront industries. Overseas-owned companies are seen by union representatives to have remote top managements, local negotiators with little power, relatively "rigid" attitudes to workers and little understanding of the New Zealand industrial relations scene and to be international organisations which run their local operations to suit their global interests. Some managers, particularly in meat freezing, also hold some of these views. Certainly, in the meat industry there is a significant difference between the average stoppage and accident levels of overseas-owned and New Zealand-owned companies. In the waterfront industry, where most companies are overseas owned, the influence appears a fairly pervasive one. In both industries, union respondents attached considerable importance to overseas ownership as a cause of strikes, while management ones attached

little or no importance. Unions at overseas-owned meat freezing works attached particular importance to it. In building and construction overseas ownership appears a relatively unimportant factor, if only because most major employers are New Zealand companies. In specific cases, however, it has been of importance; for example, on a particular contract where an overseas subcontractor was employed.

The nature of the product or service is an important influence on bargaining power and possibly on conflict in at least meat freezing and waterfront. The raw material and product in the meat industry is highly perishable and this confers a bargaining advantage on workers. Employers as a result are under pressure, at least in the short run, to keep operating. Whether or not the bargaining advantage from this source will translate into stoppage action depends, among other things, on the expected cost to the employer of concession and on the accuracy of his expectations and interpretation of the situation. In waterfront the service obviously cannot be stockpiled so that under normal events the employer suffers an immediate cost through a stoppage in the form of a slower turn-around of the vessel and so longer time in port. As the cost of time in port is high relative to that at sea, workers gain a bargaining advantage as a result. This short run advantage may be more than counteracted, however, by the shipping company's ability to divert future trade away from the port. Thus the bargaining power of workers is relatively high at some ports and low at others. Whether a bargaining advantage on the part of either party is translated into direct action again depends in part on the expected cost of concession and the accuracy of interpretations of the situation and of expectations. In building and construction, normally neither the raw material nor product is highly perishable so that the nature of the product confers relatively little bargaining power on workers. A stoppage may result in the completion date not being met but bargaining power in this context derives from the nature of the project rather than of the product.

Bargaining power may also be influenced by the effect of

collective action on third parties. In the meat industry the employer is at various times under pressure from the farmer to keep operating because the farmer loses income if his stock is not killed in prime condition. Such pressure confers a bargaining advantage on workers. A stoppage on the waterfront is highly visible and affects numerous third parties including importers, exporters and consumers generally. Third party pressure is therefore strong although not necessarily as focused on the employer as in the meat industry. But insofar as the employer is more susceptible to it than the worker, it may again confer a bargaining advantage on the worker. Construction projects are often isolated and therefore less visible to the general public. The third party most affected by a stoppage is the client who may be able to exert only limited pressure on those directly involved. Only in exceptional cases is sufficient third party pressure applied to significantly influence bargaining power.

The form of organisation of the industry is considered an important cause of conflict by waterfront managements. In particular, they see the Waterfront Industry Commission as a barrier between employer and worker. Waterfront unions, on the other hand, take the opposite view in regarding the WIC as a buffer between the parties. In the light of the characteristics and history of the industry, the union argument appears stronger. Substantial alteration of the WIC will undoubtedly result in conflict and on this basis it is difficult to accept that the WIC is a cause of conflict. In meat freezing and construction, the organisation of the industry was not, in itself, considered an issue and therefore a cause of conflict.

There are several factors which our evaluation suggests are of relatively little importance or of importance only in particular situations. One of these is the nature and operation of unions. Some managements in meat freezing and construction, however, consider this factor an important cause of conflict. In the meat industry it was argued that the election system means aspiring and incumbent office holders must demonstrate their "worth" by creating "trouble"; that those wishing to become delegates lack training and are likely to be "anti-

company"; and that many shed unions are "super democracies" within which the workers, rather than officials, exercise control. In construction it was argued, in addition, that conflict results from the unavailability of union officials. But all these features are reflections of more basic ones of the industries. Candidates for office cannot create conflict out of nothing. Moreover, delegates complained of by managements often reflect the wishes of workers and so the basic features of the employment situation. They, rather than other types of workers, are elected because they have the support of the majority of members. In construction, off-site officials may have a different perspective and be less prone to embark on stoppage activity than on-site delegates but only because they are removed from the actual situation. In order to retain this support it is necessary for union representatives at many sheds and sites to report discussions and agreements back to the workers. The above management views were certainly not shared by most meat industry union officials and delegates nor by on-site union representatives in construction. Views on this factor depend largely on the frame of reference being brought to bear. In waterfront the only aspect of the nature and operation of unions mentioned was the election system and then only by a few managers.¹ It appears that unions are

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1. The difference between views of meat freezing and construction managements on this factor, on the one hand, and those of waterfront managements on the other is reflected in assessments of the control exercised by union representatives over members. Assessments of this control were as follows:

	Too Strong	About Right	Too Weak	Other
Meat freezing - control exercised by shed union (n=27)	4	14	9	0
Building and Construction (n=14) - control exercised by:				
delegates	3	5	4	2
officials	0	5	9	0
Waterfront - control exercised by officials (n=16)	4	11	1	0

Source: Management questionnaires.

The proportion of managements considering the control exercised by union representatives to be "unsatisfactory" (i.e. other than "about right") was 48.1% in meat freezing, 64.3% in construction and only 31.2% in waterfront.

accepted as an integral part of industry to a greater extent in this one than in the other two. It is difficult to sustain the argument that the nature and operation of unions is in itself a cause of conflict.

Another factor, the perceived importance of which depends greatly on the frame of reference being applied, is the presence of agitators. Managements may consider leaders of workers in conflict situations as agitators but union representatives and workers hold a very different view. That such situations exist suggests more basic causes of conflict than does the presence of leaders in them. In each industry, managements considered the presence of agitators a more important cause of strikes than did unions. Not one union respondent in any of the three rated it very important and only two of above average importance. Management ratings ranged from between above average importance and very important in construction, to about average importance in the waterfront industry. Union ratings ranged from below average importance in construction, to between below average and no importance in the meat freezing and waterfront industries. It seems the "agitator argument" has minimal explanatory value by comparison with more basic factors.

All three industries have predominantly male labour forces but only in meat freezing was this predominance considered a source of conflict. Several meat industry managements and unions regarded women as better suited to particular jobs and as leading to lower levels of conflict. But this view was not shared by some managers at works with substantial female labour forces who were therefore better placed to make assessments and who argued that women are at least as conflict prone as men. It seems where significant numbers of women are employed, they will be found to exhibit behaviour patterns not dissimilar from men. Women will also be influenced by such factors as the nature of the work.

We have noted the parties' assessments of the importance of numerous factors as causes of strikes. In each industry there are several factors assessments of which, in terms of

ranking of mean response, differ significantly as between managements and unions. Using an arbitrary cut-off point,² there are eight such factors in meat freezing. An interesting feature of seven of these is that the party to which they most directly relate (or which is "responsible" for them) invariably rates them much less important than does the other party. Thus unions rated the following factors less important than did managements: the presence of agitators (rank of union mean response 20 of 23 and rank of management mean response 6 of 23), frictions between different occupational groups (union rank 22, management rank 15), national disputes (union rank 17, management rank 3) and the forceful, combative character of freezing workers (union rank 15=, management rank 5). The factors rated less important by managements than unions were the bases on which wages are calculated (management rank 17, union rank 9=), remoteness of top management due to overseas ownership (management rank 23, union rank 9=) and safety (management rank 13, union rank 4).

Again using an arbitrary cut-off point³ there are six factors for which assessments of the two parties in construction differ significantly. Four of these follow the rule that the "related" party rates them less important than does the other. (For the two others, outlined later, it is difficult to identify a "related" party.) The factors rated less important by unions than by managements were the presence of agitators (union rank 16 of 19, management rank 1 of 19) and any tendency for construction workers to be separate communities with few outside social contacts (union rank 15, management rank 10=). Those rated less important by managements than by unions were the inaccessibility of top management due

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2. Meat freezing managements and unions each assessed 23 factors. The criterion for a significant difference between assessments is that the ranks of mean response differ by a margin of at least seven. For example, on the basis of size of mean response, managements rated poor communications eleventh in importance of the factors assessed and unions third. We would therefore say assessments of poor communications differ significantly.
 3. Construction managements and unions each assessed 19 factors. The criterion for a significant difference is that the ranks of mean response differ by a margin of at least five.

to the locality and project nature of the job (management rank 18, union rank 4) and disagreements over safety matters (management rank 16, union rank 2=).

In the waterfront industry there are eight factors for which assessments differ significantly.⁴ Of these, four are not readily associated with a particular party. The other four follow the rule that the "related" party rates the factor less important than does the other. Factors rated less important by unions than by managements were again the presence of agitators (union rank 28 of 29, management rank 11= of 29), and any tendency for waterside workers to be socially separate communities (union rank 26, management rank 17). Those rated less important by managements than by unions were the bases on which wages are calculated (management rank 27=, union rank 12) and overseas ownership of shipping and stevedoring companies (management rank 25=, union rank 7).

There were significant differences in assessments in each industry in the case of the presence of agitators. Significant differences also existed in two industries with respect to the bases on which wages were calculated, overseas ownership, safety or disagreements over safety and social isolation. Factors assessed differently but not readily associated with a particular party were poor communications (in the meat freezing and waterfront industries, with managements rating it less important than did unions in both), large numbers of men living under camp conditions, impermanence of employment (both in construction), casual employment, personality differences and complex general harbour regulations and Ministry of Transport regulations (all in waterfront). It is clear that factors involving significant disagreement include both ones which we class as "basic" causes of conflict and ones classed as "precipitating" causes.

A very high proportion of factors rated important by both parties were ones we have identified as basic causes of conflict.

4. The parties each assessed 29 factors. The criterion for a significant difference is that the ranks of mean response differ by a margin of at least eight.

In meat freezing all such factors involved basic causes. They were the chain nature of the production process, the seasonal nature of the industry, new technology and changes resulting from hygiene regulations, heat, and boring and monotonous work. Three of the five such factors in construction involved basic causes. They were the bases on which wages are calculated, the forceful, combative character of construction workers and alleged wrongful dismissals. One of the other two factors rated important by both, the inaccessibility of union officials due to the locality and project nature of the job, is closely related to basic causes; and the remaining factor was a precipitating one, namely, poor communications. Five of the seven factors mutually considered important in the waterfront industry also involved basic causes. These were disagreements over claims for special rates, the impact of new technology on waterfront work, dangerous work, dirty and unpleasant work and disagreements over safety matters. The other two factors were national disputes over waterfront issues and those over other than waterfront issues, both of which are difficult to categorise as either basic or precipitating.

The importance of the technology and some economic aspects of each industry in shaping patterns of conflict is obvious. Technical conditions and fundamental economic features, such as the nature of worker remuneration, ownership patterns and the level of throughput, underlie most of the important determinants of the conflict patterns. This is not to say that these characteristics are the only ones involved but that many other types of characteristic are derived from or related to them. It follows from this conclusion that for a change to have a significant and lasting effect on levels of conflict, it must generally involve alteration in the underlying conditions specified. These conditions are fairly numerous and to a large extent interrelated, forming a web of influences.

These general influences predispose the industries toward conflict. While usually being pervasive, their variation in degree among units partly explains differences in amount of conflict at levels within the industries. Such differences are also partly due to the presence of specific and often less

systematic influences.

The complexity of the industry patterns of conflict means no single factor can be expected to explain a high proportion of any one of them. Even the distribution of a particular form is, in each industry, highly complex. Stoppages are a good example. While all three industries are stoppage prone, there is a wide variation of stoppage propensities among units in each. In meat freezing six works had less than an average of one half a stoppage per year over 1967-73, while another six had an average of over three per year (with the highest number being 10 a year). In the projects section of the construction industry seven of 24 projects had no stoppages over this period, while three had more than 20. The situation in the waterfront industry was fairly similar with five ports having no stoppages over 1967-73 but another three each having an average of over two and a half a year. It is apparent that in each industry no single factor could account for this complex pattern of stoppage activity among units. A similar situation prevails with respect to most of the other forms of conflict studied.

This variation in stoppage activity can in some years take the form of most units being virtually stoppage free and a few stoppage prone. There are few explanatory variables with this type of distribution, so it is not surprising that the degree of explanatory power of any one is not exceedingly high. In fact, an interesting feature of these industries is that, while they are considered stoppage prone, the level of stoppage activity in most of their units in any given year is not high. This feature alone means any single variable is likely to have fairly low explanatory power. This characteristic is found in some of the other forms of conflict studied. It is clear that any explanation, if it is to be at all fruitful, must consist of a pattern of determinants.

The published official data, which are largely at the industry level, give little indication of this diversity in the distribution of most conflict forms. But it is significant to an understanding of industrial conflict that its forms are distributed unevenly within an industry. There seems little

reason why some of the information collected, especially on stoppages, should not be presented at much lower levels of aggregation. From the viewpoint of conflict analysis, the more information available on conflict forms the better.

The official statistics also cover only a few forms of conflict. Largely using unpublished data, we have in some cases found a significant relationship between forms of conflict and, in others, an insignificant one. For an adequate understanding of conflict it is again necessary to know whether a unit has, say, a high level of stoppages and of employer-initiated forms but a low level of individual forms. Official statistics on absence are particularly necessary as are comprehensive turnover statistics for industries such as building and construction and meat freezing. Moreover, greater effort to distinguish, and collect information on, employer-initiated forms is desirable. In view of the possible costs of individual and employer-initiated forms, data on them are all the more necessary. While man-days lost is an inadequate measure of economic cost, we noted in the waterfront industry, for example, that in recent years absence has accounted for about six times, and accidents and sickness each about four times, more man-days lost than stoppages.

These three industries are the most stoppage prone in the country and also have high levels of some other forms of conflict. Despite this, the parties in all three tend to view relations between managements (or employers) and workers as anything but bad. It is clear from Table 1 that most respondents considered management-worker relations at their units to be good or fair.

In all the industries no management and only three unions described relations as bad. In meat freezing a majority of both parties considered them to be good. Four of the managements and one of the unions rating them good were from high stoppage level works. Of the two unions rating them bad, one was from a high stoppage level and one from a medium level works. Management and union assessments from the same works were different in seven of 12 cases. Managements rated

TABLE 1
The Perceived State of Management-Worker Relations

	MEAT FREEZING		BUILDING AND CONSTRUCTION		WATERFRONT	
	Manage- ment responses (n=27)	Union responses (n=16)	Manage- ment responses (n=14)	Union responses (n=13)	Manage- ment responses (n=16)	Union responses (n=14)
GOOD	18	9	8	4	16	9
FAIR	8	4	6	7	0	3
BAD	0	2	0	1	0	0
Fair to Good	1	0	0	0	0	2
Fair to Bad	0	0	0	1	0	0
Other	0	1 ^a	0	0	0	0

Notes: a "Good and bad".

Relations described are:

- "between management and workers at your works" (meat freezing)
- "between management and workers on your part of this project" (building and construction)
- "between employers and waterside workers at this port" (waterfront).

Source: Management and union questionnaires.

relations "better" than did unions in five and "worse" in two. In construction a majority of managements again rated relations as good but of unions fair. Respondents rating them good were all from medium or low stoppage level contracts. Assessments by management and union from the same contract were different in nine of 13 cases. In seven, managements rated relations "better" than did unions and in two "worse".⁵ Unlike the other two industries, no respondent in waterfront rated relations as bad. Indeed all managements and most unions said they were good.

5. Managements were asked to compare the level of productivity on their projects with that on other projects or types of construction carried out by their company or department. Responses were as follows:

	(n=14)
High	1
About the same	10
Low	3

Two of the three managements describing it as low were from high stoppage level contracts but one from a low level one.

Two of the three unions rating them fair were from high stoppage level ports. Assessments of management and union from the same port were different in five of 14 cases, with managements in all five rating relations "better" than did unions. Waterfront managements were also asked to assess relations between employers and union officials. In 14 cases these were described as good (i.e. in the same way as were relations with workers) but in two as fair.⁶

A feature of questionnaire responses and, to an extent, of interview material was the divergence of views between managements and unions. In response to many questions management and union from the same unit gave very different, and sometimes opposite, answers. This divergence reflects the characteristics making for conflict in these industries. It may also suggest that each party knows little about the views of the other. A greater knowledge of such views may be necessary for conflict to be significantly reduced. While improvement in communications alone cannot affect more basic causes of conflict, it may eliminate some conflict and promote mutual understanding of more important issues.

These divergent views, among other things, point to the existence of groups with different interests. They also indicate that conflict is inherent within these units. Certainly there was a measure of conflict, in one form or another, in all units studied.

Our investigation has covered many influences on the patterns of conflict of these industries. Connections have been shown between these influences and they have been placed within overall patterns of determinants. But it has not been

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6. In waterfront, rates of turn-around of ships at the local port were described by managements as follows:

	(n=16)
Good to excellent	9
Satisfactory	6
Very poor	1

The management describing turn-around as very poor was from a high stoppage level port but another from a similar level port described the turn-around as good.

possible to study the influences within a simultaneous system. While their simultaneous effect is of considerable interest, the necessary micro-data are not available. Such an analysis requires access to detailed information for each unit. This may suggest the desirability of specific studies concentrating on a sample of units within an industry. But such studies, employing multivariate statistical techniques, would still encounter problems of the availability of information and possibly new ones such as the incorporation of qualitative influences within estimating equations.

This has been an investigation of conflict prone industries. It would be interesting to compare the factors shaping their patterns of conflict with those of other industries with different conflict levels. In particular, it would be of interest to see if the factors making for low levels of conflict in an industry were the inverse of those creating conflict in these three industries. It is desirable therefore that studies comparable to this one be undertaken of other industries.

While we have not been concerned with policy prescription, it is clear that some of the basic causes of conflict in these industries are more amenable to change than others. In all three industries payment systems, for example, are an important influence on conflict yet have the potential for considerable modification. Each industry also has particular causes which are relatively susceptible to change. For example, in meat freezing changes may be made to the physical environment of plants and to methods of introducing and coping with new hygiene regulations; in building and construction changes may be made to the nature of worker accommodation; and in waterfront to ways of introducing new methods of cargo handling. While some other basic causes may be more intractable, efforts to modify them may be worthwhile as even apparently marginal alterations may yield significant results.

Factors with origins in more basic causes may have considerable potential for change. As indicated with respect to improvement in communications, changes in these factors may

not affect fundamental causes but may nonetheless eliminate some conflict. A change that could be instituted, especially in meat freezing and building and construction, is the provision of adequate training and preparation of foremen by higher management.

Some of these changes may require a re-orientation of policy, and particularly that of management, toward industrial relations. Such a re-orientation may involve a closer understanding of industrial conflict and a greater recognition of its role in the enterprise. The realisation that conflict is not a disease which occurs occasionally but an inherent feature of the enterprise, and an appreciation of the costs of different forms of conflict, may induce a change in the status of those involved in industrial relations from that of emergency firemen to a permanent and important part of the management process.

The three industries of this study have features predisposing them toward conflict. The variation of levels of conflict forms among units within each, however, suggests these features can to an extent be modified or counteracted. But that they often involve fundamental technical and economic conditions also suggests any desired lasting change in conflict levels will, at the very least, require a conscious effort to create change.

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