**Impacts of FDI on technology upgrade and
employment of Singapore and Malaysia, lesson for
Vietnam**

BY

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**A thesis
submitted to the Victoria University of Wellington
in fulfillment of the requirements for the degree of
Master of International Relations**

Victoria University of Wellington

August 2013

Acknowledgement

I wish to express my deep gratitude to my supervisor, Assc.Prof, Ph.D. Ben Thirkell-White for his disinterested support, guidance and encouragement throughout the process of finalizing this thesis. His ideas and suggestions always infused me with new stronger energy and inspiration.

My great thanks are extended to all lecturers in Political Science and International Relations, Victoria University of Wellington and in Diplomatic Academy of Vietnam whose precious lessons and dedicated support have laid a solid ground for my knowledge and my career in the future. I am also grateful to 165 programs of Vietnam and New Zealand government for strong support during the time of study.

Finally, I am deeply indebted to my family and best friends whose love, support and belief have greatly motivated me in the time of completing this thesis.

MY SINCERE THANK AND APPRECIATION.

Nguyen Minh Trang

Abstract

This thesis evaluates Vietnam's experience with FDI to date and looks at what lessons can be drawn from the experiences of Malaysia and Singapore to help Vietnam deal with emerging problems. The thesis shows that Vietnam's experience with FDI has been successful in the following ways: a significant contribution to growth, constitute 63.1% of exports (2012), some advanced technology are transferred, creation a number of new jobs and improving the quality of domestic products, etc. The main issues for Vietnam, though are limited technological upgrading, disappointing employment performance, fierce competition, crowding out effects and domination of FDI firms in the domestic market, etc. The thesis argues that the Malaysian and Singaporean experiences suggest Vietnam should prioritize tax incentives for pioneer industries, particularly aspects of education; enhancing human capital and technology capacity; improvement of business environment and subsidiaries industry, etc.

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List of Abbreviation

No	Abbreviation	Meaning
1.	AFTA	The ASEAN Free Trade Area
2.	ADB	Asian Development Bank
3.	APEC	Asia – Pacific Economic Cooperation
4.	ASEAN	Association of Southeast Asian Nations
5.	BRICS	Brazil, Russia, India, China and South Africa
6.	EDB	Singapore Economic Development Board
7.	EU	European Union
8.	FDI	Foreign Direct Investment
9.	FIA	Foreign Investment Agency - Vietnam
10.	FII	Foreign Indirect Investment
11.	GDP	Gross Domestic Product
12.	GNI	Gross National Product
13.	ILSSA	Institute of Labour Science and Social Affairs - Vietnam
14.	IMF	International Monetary Fund
15.	M&A	Mergers and Acquisitions
16.	ODA	Official Development Assistance
17.	MNC	Multinational Cooperation
18.	PCI	Provincial Competitiveness Index
19.	PPP	Public - Private Partner
20.	R&D	Research & Development
21.	TNC	Transnational Cooperation
22.	TPP	Trans-Pacific Partnership

23.	UNCTAD	United Nations Conference on Trade and Development
24.	VCCI	Vietnam Chamber of Commerce and Industry
25.	WB	World Bank
26.	WTO	World Trade Organisation

Introduction

FDI is an important source for economic development, especially for developing countries like Vietnam. The thesis has concentrated on evaluating FDI in Vietnam so far and looks to Singapore and Malaysia for ways to deal with problems.

After more than 25 years (since 1986) of opening and attracting FDI, Vietnam has gained a number of significant achievements. Despite the effects of the financial crisis and global recession (from late 2008), the attraction of foreign investment in Vietnam was still high. Total FDI registered capital from 1988 to 2012 reached \$236 billion, implemented capital of over \$96.6 billion. The GDP growth in 20 years (1991-2011), was at 7.34%/year, among the highest group in Southeast Asia. The GDP per capita increase from \$86/year in 1988 to \$1,168/year in the period 2005 – 2010, which helps Vietnam escape from low-income group. The increase of GDP growth must thanks to the FDI contribution with the rate increases over time, from 2% of GDP (1992) to 18.97% of GDP (2011).

By the end of 2011, the FDI sector generated more than 2.3 million direct jobs and millions of indirect jobs, including thousands of qualified engineers and managers, skilled workers, with increasing income, the introduction of advanced management and business. FDI is also becoming important technology transfer channel, contributing to improve the technological level of the economy. Since 1993, the country had 951 approved technology transfer contracts in which 605 contracts are FDI, accounting for 63.6%. Through technology transfer agreements, FDI has

contributed to promote the transfer of advanced technology to Vietnam and improve technology capacity in many areas.

In addition to these successes, FDI inflows have clearly showed instability and insufficiency. FDI into Vietnam is quite large, but the rate of disbursement is only 47.2% of registered capital. Investment partners are mainly from Asia with small and medium enterprises account for the high rate. Vietnam currently has only attracted more than 100 of the 500 leading transnational corporations.

FDI in Vietnam is also facing the issue of imbalance in sectoral and regional investment. In the industrial sector - construction, FDI projects mainly focus on the assembly, low value added, low infrastructure development project. The investment often concentrated in areas with favorable conditions of infrastructure, human resources, and markets.

Besides, the expected transfer of advanced technologies by FDI and actual results is a big gap. Over 80% of technology transfer to Vietnam is average, 14 % is lower and backward and only 5-6% using high technology. Many FDI projects in Vietnam imports outdated machinery, equipment polluting the environment. Spillover effects of FDI on other sectors of the economy are limited.

The number of jobs created by FDI remains low while disputes and strikes are increasing with 75.4% of the total strikes is in FDI sectors. The rate of new jobs created by FDI accounts for only 3.4% of employed workers in 2011. Monthly average income of workers in FDI enterprises

is higher than private sector, but lower than the state sector. Since 1995, there have been 3,122 strikes occurred in FDI enterprises.

Overall, FDI inwards to Vietnam brings about both good and bad effects. Looking back at achievements and weakness can help Vietnam figure out effective solutions to attract more FDI, strengthen the positive impacts and surmount negative impacts.

In the region, Singapore and Malaysia are the two most successful countries in attracting and utilizing FDI. There are a wide range of common characteristics in natural and social conditions between these two countries and Vietnam. Therefore, Vietnam could definitely draw many lessons on attracting and using FDI from Malaysia and Singapore.

Malaysia is the country has escaped from colonial rule like Vietnam. This is a multi-ethnic country with the complexity of social economic development. However, after a short time, Malaysia has moved to upper middle-income group. It is expected that Malaysia will be among the group of emerging countries NEXT11 in the near future. The success of Malaysia must thanks to attraction large amounts of FDI. Base on that, the economic structure has shifted from agriculture is to industry.

Singapore is also a small country, lacks of natural resources but they did raise up and becoming one of the 4 dragons in Southeast Asia (including Singapore, Korea, Taiwan, Hong Kong). Singapore has been well known for overcoming weaknesses, exploiting the advantage of geographical location. The country is one of the most successful examples

in attracting a lot of FDI to develop the economy from the assembly to finance, banking and high-tech industry.

Singapore and Malaysia have used effective policies on attracting FDI and encouraging the efficient allocation of this source into sectors. The role of human capital and technology are specially paid attention in all the development strategy. They are also a kind of developmental states, which is a strong supporting factor in boosting macro development. In short, Vietnam will learn the most critical successful as well as failed experiences in attracting FDI to maintain positive effects of FDI and prevent the negative impacts. In the meanwhile, Vietnam ought to indicate the causes of success and failure, including the sound reasons to figure critical solutions.

Another reason for Vietnam to learn from Singapore and Malaysia's experience is those countries have carried out sound policies to advantage FDI inflow to upgrade technology and create employment. Basically although Vietnam has done quite well on attracting FDI to date, it is also experiencing some problems, particularly technological upgrading and employment issues. In the globalization era, technology is the decisive factor in enhancing national competitiveness. Meanwhile, Vietnam is a late-developing country with outdated technology compared to many countries. Vietnam needs to be active in raising the level of technology capability in order to take off and catch up with the region and the world. Hence, learning experience from Singapore and Malaysia is an effective way for Vietnam to map out a better development strategy.

Moreover, there is a lack of literature on attracting FDI into Vietnam, which makes difficulties for investors and managers in approaching to this field. The thesis will participate in providing practical experience and synthesis of impacts on Singapore and Malaysia. The information is useful in backing up Vietnam to establish a completed framework for FDI. The two countries are not only the advanced economies but also have extensive experience in attracting FDI and are members of ASEAN, AFTA, ie "the same opportunity, the same boat with Vietnam". They are important friends, partners of Vietnam. Thus, learning of their experiences will be much more favorable.

The thesis will try to draw lessons for Vietnam by going into a detail process. First, there will be a detailed review of the experience of FDI in Vietnam since innovation in 1986. The author has tried to drawn on existing literature and a range of Vietnamese sources that are not currently available in the English language literature on this topic. The information and data are mainly from Ministry of Planning and Investment, General Statistics Office of Vietnam, United Nations Conference on Trade and Development... In the next part, the author has studied on Singapore and Malaysia to figure out the main reason of success. These two countries are selected for being in the same region as well as possess many similar conditions with Vietnam and has achieved lots of remarkable results. Base on real conditions, thesis will show the ability to manipulate the circumstances as well as the prediction of the risk will happen to the Vietnam so that the country is able to learn from Singapore and Malaysia. It is noticeable that there is only one party leader in Vietnam. Meanwhile, the political system in the two countries is

pluralistic. Therefore, the experience must be applied wisely in order to get the best effects.

The secondary sources are mainly used due to limited English language and primary sources from Vietnam. In addition to material from Ministry of Planning and investment, General Statistics Office of Vietnam..., thesis will explore materials from official source of Malaysia and Singapore. The documentary evidence is also derived from international organizations and economic associations such as the report of the WTO, IMF, ADB, and UN...

The thesis includes 4 chapters with main content.

Chapter 1: Literature review- In this chapter, the definitions and different views by many researchers are presented to give the overview of the FDI impacts on the economy. Supporting views and controversial arguments are discussed to provide a completed picture on FDI theory. Based on theories, the author has tried to figure out solutions and the institutional model that are most suitable for boosting FDI. It is shown that Vietnam also possesses many of those conditions for promoting positive effects of FDI on the economy.

Chapter 2: FDI in Vietnam- This is a long story about the process of attracting and using FDI of Vietnam since 1986. Despite practical experiences have observed lot of issues but it focuses only on impacts of FDI on employment, export and technology transfer of Vietnam. The positive and negative effects are evaluated at the same time to find out solutions for each sector. FDI impacts on employment are quite

impressive at creating job and training employees but the situation should have been better. In export, FDI contribute the majority for this sector and brings benefit for many other subsidiaries industries but the role it is not as effective as the figures. Technology transfer has been at the top priorities of Vietnam in attracting FDI but it is also a disappointed experience as most FDI technology transfer into the country is low-tech. In order to find out the most suitable lessons for Vietnam, the reasons for strengths and weakness are carefully discussed.

Chapter 3: Impacts of FDI on Singapore and Malaysia- Singapore and Malaysia are chosen to be the good example for Vietnam for their success and similarities. The research concentrates on the field of employment and technology upgrade, which are two most noticeable sectors of Singapore and Malaysia. The most important information in this chapter is that the measures to utilizing the FDI source of these two countries that will be useful for Vietnam. Policies, human capital and institutions are those deciding factor of development that Vietnam must learn from them. It is the open and encouraging policies, improving human resource activities, boosting R&D and pursuing developmental state that guarantee for Singapore and Malaysia the present position.

Chapter 4: Lessons for Vietnam- This chapter figures out how Vietnam can transform from theories into practice. Based on theoretical studies and empirical evidence of two neighbor countries, Vietnam can draws lessons for increasing economic growth with optimum support of FDI. Due to differences among three countries in politics, subjective and objective conditions, Vietnam must select the suitable and applicable

measures to follow. The utmost lessons are the Government policies on FDI sector with priority such as technology, education, and human capital; combining with strengthening the developmental institution that Vietnam is applying and planned programs, activities to realize the proposed policies.

Though there are lots of mistakes and limitation, it is hoped that this thesis will be useful in suggesting practical solutions for Vietnam to maximize the benefit of FDI to promote economic growth.

Content

1. Literature review on FDI

FDI is an indispensable capital that not only developing countries but also developed countries do need to attract. Majority of views support FDI for those positive impacts that it brings about such as creating new jobs, boosting technology transfer, restructuring the export and economic structure, etc. However, some researchers show evidence for negative impacts of FDI on the economic growth bases on empirical studies. It shows that there are some areas of widespread consensus in the literature but also some areas that are becoming more controversial. This chapter will sets out broad experiences of FDI elsewhere and give the basic knowledge on both side of FDI effects in theory and examine whether it is applicable in specific case study. It proves that any countries can use FDI as an effective measure to develop the economy with certain conditions and suitable policies.

1.1. Definition:

The development of the world economy, especially the trend of globalization, internationalization has led to the outflow of capital. Foreign investment is a form of international movement of capital, in which capital moves from country to country to carry out one or several investment projects in order to bring benefits to the parties involved. The essence of international investment is the movement of money, property or any form of value between nations in order to adjust the ratio between the factors of production, enabling the national economy to develop, contributing to the development of the global economy in general. As FDI always goes together with capital stocks, know-how, and technology, people expect a positive impact on economic

growth (De Mello, 1997; Dunning, 1992). As the importance of it, lots of big organizations and authors have tried to define FDI in the most completed sense.

According to IMF: *“FDI is the investment of organizations, companies and individuals in order to build the branches; acquire in whole or in part operating firms; buy shares or takeover active businesses abroad. These activities take place in the host country, so the entire deployment process of the project must be governed by the law of the respective country, usually the Foreign Investment Law”*.

De Mello, (1999) said: *“FDI implies a form of international inter-firm co-operation that involves significant equity stake and effective management decision power in, or ownership control of, foreign enterprises”*

The United Nations defines FDI as *“investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy in an enterprise resident in an economy other than that of the foreign direct investor”* (UNCTAD, 2002).

OECD (2008): *“Direct investment is a category of cross-border investment made by a resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) that is resident in an economy other than that of the direct investor. The motivation of the direct investor is a strategic long-term relationship with the direct investment enterprise to ensure a significant degree of influence by the direct investor in the management of the direct investment enterprise. The “lasting interest” is evidenced when the direct*

investor owns at least 10% of the voting power of the direct investment enterprise. Direct investment may also allow the direct investor to gain access to the economy of the direct investment enterprise which it might otherwise be unable to do”.

As listed above, there are many ways to understand about FDI but most definitions have the same point that: FDI is the long-term investment of foreigners in a country that the investors are independent to control the investment in specific methods.

Obviously, FDI brings benefits to both investors and recipients. Foreign investors directly involved in the business operations of the enterprise, depending on the level of contribution they can directly control the operation of the business and make the most beneficial decisions, bring the highest return. FDI helps investors search for material supply stability. The goal of many foreign investment projects is looking for fuel production such as mining, oil and gas, marine resources, forest resources... Developing countries have abundant resources but they lack sufficient condition to exploit such as shortage of capital, technology and machinery (OECD, 2002) Therefore, investment in this area will get cheaper raw materials with high profits after processing which helps investors receive some more additional benefits. Their risk is reduced because they can diversify their holdings outside of a specific country, industry or political system. Diversification always increases return without increasing risk. They can expand the market for products, increasing the influence of economic power as leading economies in the world. FDI helps foreign investors restructuring of production and application of new technology, improve competitiveness.

For recipients, FDI provides the foundation for development in those countries lacking capital and basic technology knowledge. It boosts the transfer of technology skills and know-how in hosting countries through the process of investment. FDI can also contribute to the formation of human capital and resulting in spillover effects to the rest of the economy (Slaughter, 2002). In fact, FDI has solved the difficult part which have contributed to the success of the industrialization process in these countries, notably the ASEAN. Through FDI, developing countries are more qualified to use advanced modern technology, access to technology know-how (OECD, 2002). In addition, recipient countries also learned modern management experience in the marketing and expanding consumer markets in the host country or other countries. Facilitating FDI helps host countries exploit the advantages of natural resources, labor and geography, and improve use of capital, increase saving and contribute to economic growth. FDI is one form of international cooperation investment through which the host country has more extended conditions of international economic relations. FDI contributes to the development of human resources and create more jobs for the host country. The TNCs tend to require more skilled labor force than domestic firms (Te Velde, 2002; Te Velde and Morrissey, 2001), so the growth requirements of FDI in the host country set objective to improve the quality of profession, language skills of the labor. The increase in demand for skills workers is expected to raise the wage and employment opportunities, creating incentives for overall investment in human capital (Liesbeth Colen, Miet Maertens and Jo Swinnen, 2008). It also creates new opportunities for local countries to introduce the domestic products to the international market by joint-venture with TNCs or learning from global firms' experiences which are

known as “market access spillover effects” (Blomström and Kokko, 1998). At the same time, FDI promotes linkage between countries through interdependent economic relation. Overall, FDI can bring positive impacts on the whole economy if the government has a suitable policy (OECD, 2008).

Developed countries have invested abroad as well as being the host country of FDI most and forming two-way investment flows between countries in which multinational companies (TNCs) play a major role. According to Sylwester (2005), MNCs can easily attract the more skilled workers, as offering better career possibilities and local firms will suffer from the losing talent workers. FDI is an important influence on the development of the country's economy and development strategies of TNCs, particularly strengthening the material and technical base of the economy; manufacturing and promoting economic development; expansion of government revenues; participating in addressing unemployment and inflation.

1.2. Literature review on FDI:

1.2.1. Positive viewpoint:

Studies on FDI and its impacts show different results and conclusion depending on particular case study and point of view but the majority seems to fall to positive rather than negative effects. FDI normally brings whole package of resources: physical capital, modern technology and production techniques, managerial and marketing knowledge, entrepreneurial abilities and business practices which participates in improving efficiency and productivity (Todaro, 1985; De Mello, 1997). Hence, FDI would contribute directly – and more strongly than domestic investment to the growth of the economy. Many researchers such as Blomström (1986), De Gregorio (1992),

Mody and Wang (1997), Nair-Reichert and Weinhold (2001) agreed that FDI do play an important role in economic growth of hosting countries. In the recent research, Doucouliagos et al. (2010) has estimated that 43% studies show a positive coefficient between FDI and economic growth, while 17% are significantly negative and 40% insignificant. UNCTAD (1999) studies of 183 countries also found out that FDI has positive impacts on the economy of the majority countries (55% to 75%) while the remaining countries suffered from negative impacts. In the research, OECD (2002) also reported that there are only 11 in each 14 studies concluded that FDI contribute positively to economic growth. Vissak and Roolaht (2005) had the same view that the number of studies resulted with positive effects of FDI is much higher than those with negative effects. Many others studies on empirical countries showed that FDI do really bring good effect to the economic growth and development. Bosworth and Collins (1999) studied on the sample of 58 countries and found out that FDI seems to bring about close to a one-for-one increase in domestic investment. Using econometric approach to estimate the relation between FDI and domestic investment consists of 64 developing countries in the period from 1976 to 1997, Assaf Razin (2004) also reported a positive correlation in both short-run and long run. Nair-Reichert and Weinhold (2001) find that FDI causes growth on the average even though the relation is different from countries to countries. De Gregorio (1992) made research on 12 Latin American countries and draw a conclusion that the effect of FDI on GDP growth is about three times larger than for domestic investment. Borensztein, De Gregorio, shares that positive correlation and Lee (1998); Balasubramanyam et al. (1996); and Xu (2000) Hansen and Rand (2006) studies on 31 developing countries find positive impacts of FDI on the level of GDP. Balasubramanyam (1998) also noted that FDI could be a

powerful instrument for economic development under some certain circumstance.

Particularly, empirical study in various countries around the world shows positive impacts of FDI as well. In Malaysia, FDI is the main channel for technology transfer and upgrading. The relation between the economic growth in the short term and long term with FDI is effective (Baharumshah, A. and Almasaied, S., 2009). In Mauritius and Bangladesh, the entry of FDI makes the economy bloom (Aitken, B. and Harrison, A. (1999). Studying on Ireland and Spain by Barrios, S., Dimelis, S., Louri, H. and Strobl, E. (2004) found out that FDI bring positive the spillover effects to the economies. Even though it was applied to firms with technological ability to absorb spillovers and potential, creator recipients of technological spillovers, FDI still works as an effective tool in improving technology skills. Bende – Nabende et al (2001) studies on ASEAN countries also bring positive results. Chakraborty and Basu (2002) made conclusion that FDI have good effects on growth of India in the long run. Other studies such as Oladipo (2007) on Mexico; Varamini and Vu (2007) on Vietnam; Xu and Wang (2007) on China; Chang (2006) on Taiwan...also resulted in positive impacts.

1.2.2. Negative viewpoint on FDI:

Despite many studies have confirmed positive effects of FDI, some authors stress that there is still no consensus on the degree of these effects (Blomström and Kokko, 1998; Lim, 2001). Many other authors said that the impacts of FDI on the economic growth and development is ambiguous such as Also Pessoa (2007); Wang (2009). Some concludes that FDI does not lead to economic growth: Haddad and Harrison (1993), Grilli and MilesiFerretti

(1995) and Javorcik (2004). Krugman (1998); Hausmann and Fernandez-Aria (2000) pointed out that foreign firms do not always operate more efficiently than domestic firms. Hence, FDI is not necessary the cause for the growth. De Mello (1999) studies on 17 non-OECD countries in Africa and America finds negative impacts of FDI on the economic growth.

In specific research, Aitken, B. and Harrison, A. (1999) studies on Venezuela only get positive results on small enterprises, when comes to larger firms, this disappear. It also causes a negative spillover effect and overall effect of productivity is quite small. Kholdy (1995) finds no relation between FDI and productivity. FDI in Nigeria only has a positive effect on growth after a long time and mainly on oil production (Akinlo, A., 2004). On the studies on Turkey, Gunaydin and Tatoglu (2005) could not find the causality of the relationship.

In facts, as De Mello (1997) says: "whether FDI can be deemed to be a catalyst for output growth, capital accumulation, and technological progress, seems to be a less controversial hypothesis in theory than in practice". In theories, FDI do bring a lot of benefit to the investors and hosting countries but reality shows that theories are not applicable to all the cases. There is a relation between these two factors but the direction of causality is not always clear (Carkovic and Levine, 2002; Nunnenkamp, 2004). According to Nair-Reichert and Weinhold (2001) errors in the estimation method may be the reasons for the different results. Wang (2009) believes that it may come from the use of total FDI. Another way of explanation is that the studies use different variables lead to different empirical results (Rui Moura and Rosa

Forte, 2010). Also the inconsistency of the host economies is the cause for the ambiguous relation between FDI inflows and growth (Nunnenkamp, 2004).

Though there are some mixed views on the impacts of FDI on the economic growth but the majority falls to the positive effects. Depending on some changeable objective and subjective factors that FDI may bring different results to different countries. Each country should study carefully on the conditions of their economies to find out the most suitable policy and method of applying FDI.

1.3. Factors affect to attracting and utilizing FDI

FDI is an extremely important source of capital, not only for developing countries but also for developed countries. Therefore, the researchers sought to understand and offer a number of factors can affect the attraction and enhance the effectiveness of FDI. Through the development and create favorable conditions for the positive factor, limiting the negative factors, the investment can be expanded and achieve the highest efficiency. When considering the source, the nature of FDI, we need to consider the factors that decide the real movement trend and development of FDI inflows in the world. It is the changes in development policies, multilateralism and integration of the country, the development of science and technology, trade, global services Especially the investment environment of the host country. The investment environment directly affected to attract and process of effective implementation of FDI. Environmental investments include: legal environment, geographic location, natural conditions, population, level of economic development ... These factors vary between countries, so FDI inflows into countries also differ. Besides the investment

environment factors, there are some factors equally important for the operation that is FDI investment promotion activities.

1.3.1. The technological gap

Technology discussion plays an essential role in the development and the interaction between FDI and technology is a critical factor for that (Imad A. Moosa, 2002). The imitation of technology is normally cheaper than the invention of new ideas as saving of time, cost and effort. Hence, less developed countries will grow relatively faster and catch-up with the developed nations because they can take the shortcut (Romer, 1993; Barro and Sala-i-martin, 1997). However, large gap between recipient countries and investing countries can slow down the process of technology transfer. The hosting countries need to improve human capital and other facilities to fasten the transfer so that FDI can have effective impacts on the economy.

1.3.2. Macro-economic conditions

1.3.2.1. Geographical location, natural conditions and population

It is these factors that are the interest to investors. When the investment is no longer a one-way as before, not only capital flows from developed countries to less developed countries but it become multi-dimensional activities. Any investor has comparative advantage can proceed the investment. Rich in natural resource plus abundant and cheaper labor or favorable geographical location is an important advantage of the developing countries.

The movement and development of FDI inflows depend very much on the changes of the international investment environment. External trends and increasing cooperation in the world, the process of regionalization,

globalization takes place rapidly with the continuous development of science and technology has led to the development of FDI both in width and depth.

1.3.2.2. The socio-economic factors

Critical factor for the investors when considering investment decisions are political - social stability. The unstable political situation of a country would discourage investors because it is difficult to ensure capital adequacy and implementation of the agreement between the investor and the host country. In addition, the political instability can lead to economic instability and increases the risk of the investment as the sake of investors are looking for profits. In fact, throughout the twentieth century, the country has a stable political situation as the developed countries and the developing countries in Asia such as China, Thailand attract more FDI, while in African countries that always happens the civil war between factions, the FDI inflows to the country is very little.

1.3.2.3. The legal environment of the host country

This is another factor directly affects to the FDI attraction process. Regulatory environment helps ensuring legal ownership of private property and the healthy competition between domestic investment and foreign investment, the FDI management organizations, the legislation of FDI, the economic policy. These factors create the attractiveness of the environment or impede investment.

The provisions of the law on the distribution of profits and profit transfer back to the foreign countries. This rule creates incentives for investors to earn profits overseas and enjoy a favorable environment for the

movement of profits. It also encourages local investment as foreign investors feel assured of a favorable investment environment.

1.3.2.4. The level of economic development

The level of economic development also plays an extremely important role for creating an attractive investment environment. It identifies potential funding, and also measure the effectiveness of the use of these funds. The growth of the economy related to some of the basic elements of macroeconomic stability as fiscal and monetary ... market structure, infrastructure, openness of the economic, labor quality, the purchasing power of the population .. and finally the administrative procedures. Besides, the strategic planning of economic development of the country as well as investment strategies also play a significant role in the process of attracting FDI and makes FDI activities operate more effectively.

1.3.2.5. Institutions:

According to Andrian Leftwich (1995), the most important factor in generating developmental momentum is the presence of “developmental state”. He also defined it “*as states whose politics have concentrated sufficient power, autonomy and capacity at the centre to shape, pursue and encourage the achievement of explicit developmental objectives, whether by establishing or promoting the conditions and directions of economic growth, or by organizing it directly, or a varying combination of both*”. Johnson (1999) defined the developmental state as “*a state that is focused on economic development and takes necessary policy measures to accomplish that objective*”. The label “developmental” is given to states that have successfully directed or managed industrial transformation and sustained

economic growth (Edmund Terence Gomez, 2006). Hence, the institution plays an utmost role in facilitating one country in deciding development strategy which is the basis for sustainable growth.

Recognizing the important role of FDI for economic growth and job creation, both developing countries and developed countries are focused on attracting FDI, creating a fierce competition in this activity. Many countries have policy reduced limits on the form of investment, hiring authority, regulations in the capital contribution. At the same time they carry on the policies attractive to investors. On the regional level and international trends, FDI liberalization has been getting stronger. It is the establishment of free investment region, the signing of the multilateral and bilateral investment treaties in each region and in the international organizations in order to create favorable conditions for FDI development activities. According to a report by UNCTAD (2010), for the first time developing countries have attracted more than 50% of world FDI, more than the developed country. This suggests that developing countries strive to improve the investment environment to attract FDI, which first to focus on increasing human capital resources and macro-environment quality.

In summary, impacts of FDI on the economy are a controversial issue. There are both for and against argument on the role of FDI in the economy. Majority of studies show that FDI promotes efficiency, productivity, economic growth, development and technology transfer in hosting countries as the inflows of addition capital compensate for the shortage and enter of MNCs put pressure on the domestic market. However, some other authors still hold debates on its impacts. They argue that FDI do not always brings about

positive impacts on employment, technology transfer, etc. Some empirical studies on particular countries have shown that the presence of FDI does not affect to the economy or may cause some bad consequence on environment and legal system. The supporting factors such as technology gaps, population, legal environment, institutions, etc play an active role in attracting and utilizing FDI of recipient countries. These are the basic conditions that any countries need to improve be able to use the investment in the most effective manners. Vietnam has experienced the attraction of FDI for nearly 3 decades and observed a positive relation between FDI and economic growth. Internal efforts and external environment have encouraged the country to receive more FDI with increasing efficiency on the GDP, employment, exports and technology upgrade. Though limits and difficulties still remain in quantity and actual quality of FDI inwards, Vietnam is struggling to strengthen the positive effects and steply improve the negative effects by learning from achievements and weakness of itself and regional neighbour countries.

2. FDI in Vietnam:

FDI has played an essential role in industrialization and modernization process in a number of developing countries in general and in Vietnam in particular. Vietnamese government, therefore, has launched a wide range of incentive policies in order to attrach more and more FDI. This chapter would represent an overview of FDI in Vietnam since the economic reform in 1986. Through the overview; go on to chronology, it is the application of theory into practice. Overall we'll see that Vietnam has received many of the benefits that chapter one led us to expect but they have often been limited and not as comprehensive as we might have planned and there are a set of emerging problems, especially on employment and technology issues. In particular, the

impacts of FDI on the economy as a whole would be shortly analyzed. In fact, FDI has affected to all sectors in the economy of Vietnam but most evident on employment, technology and exports. In the main part of this chapter, the influences of FDI on employment, export and technology transfer in Vietnam would be sharply studied. In order to have a comprehensive analysis, both against and support views as well as positive and negative impacts of FDI are taken in consideration. The achievement of Vietnam may be listed as larger export volume, increasing in number of jobs creation with skilled labours and average wages, adapting new technology, etc. However, besides the positive influences, some economists believe that FDI does not really effective as expected. The low spillover effects, low ratio of foreign jobs and limited technology transfer are those issues troubling the government.

2.1. Overview:

2.1.1. Achievements:

Vietnam is a young and dynamic country in the era of globalization. Recognizing the importance of FDI in economic development, the Party and the government are very active in the attraction and effective utilizing of these investments. After more than 25 years of attracting FDI, Vietnam has achieved many wins that not many countries in the regions as well as in the world can do. FDI has a positive contribution to the achievement of growth, socio-economic development in many ways. This is a significant additional source of capital for the economy (accounting for about 25% of the total social investment capital); inspire and improve efficiency in the use of national resources.

Since 1986 (Doi Moi) to the end of May 2013, Vietnam has attracted 14,918 valid projects with a total registered capital of \$ 216,928 billion and implemented capital of more than U.S. \$ 100 billion¹. Through years, it accounts for 37% of industrial output, 56% of the total export turnover; 15.5% of GDP and \$1 billion for budget (Nguyen Thi Bich Van, Deputy Head of foreign investment department). Contribution of FDI to GDP increased from 2% of GDP (1992), up 12.7% (2000), 16.98% (2006) and 18.97% in 2011 with share of 31.2% by FDI². It is interesting to note that the impacts of FDI on economic growth of Vietnam and the economic restructure have been impressive.

Partially thanks to FDI, the balance of payments surplus in 2012 was \$10 billion and foreign reserves were \$23 billion. The exchange rate forecast for 3013 state that it will remain stable. FDI helps promoting economic restructuring in industrialization – modernization. About 58.4% of total FDI in Vietnam focused on industrial – construction sectors with a higher technological level in general. Industrial growth - construction of FDI increases on average of 18%/year, higher than the national industry growth rate. So far, FDI has generated nearly 45% of industrial production, contributing to the formation of a number of key industrial sectors of the economy such as telecommunications, mining, oil and gas processing, electronics, public information technology, steel, cement³...This is foundation for Vietnam to develop towards to goal of industrialization and modernization.

¹ Data from Ministry of Planning and Investment, Foreign Investment Department, <http://fia.mpi.gov.vn/>

² According to Mr Dao Quang Thu, Deputy minister of Ministry of Planning and Investment

² According to Mr Dao Quang Thu, Deputy minister of Ministry of Planning and Investment

³ Data from Ministry of Planning and Investment, Foreign Investment Department, <http://fia.mpi.gov.vn/>

In addition to boosting economic growth, FDI also participates in restructuring the economy through the application of science and technology in agricultural production (Ministry of planning and investment, 2012); creating jobs for 2 million workers directly and 3-4 million indirect jobs. The FDI technology transfer channel is important as it contributes to improving the technological level of the economy. According to statistics from Department of foreign investment, from 1993, Vietnam had 951 approved technology transfer contracts of which 605 are contracts of the FDI sectors, accounting for 63.6% of total the technology transfer contracts⁴. It creates spillovers of FDI to the region's economy through production linkages between FDI enterprises and domestic companies, thereby creating favorable conditions for domestic firms to access technology transfer. Many businesses product brand FDI Vietnam has certain position on the U.S., the EU, and Japan market such as fishery, rice and coffee products...

To date (5/2013), there are 100 countries and territories are investing in Vietnam, of which Japan is the largest investor with a total registered capital of U.S. \$ 32.33772 billion respectively, followed by Taiwan, Singapore and Korea⁵. Notably, the numbers of investors in Vietnam are many leading corporations with investment in many different fields, such as Toyota, Canon, Samsung, Intel, and Unilever... with the international quality products, contributing to the competitiveness of domestic enterprises in the context of adapting globalization (Sanjaya Lall, 2003). Many of that have the invested capital over 1 billion dollars: Lion Group of Malaysia joint venture with CN and Vinashin with investment capital of 9.8 billion USD, Asian Coast Development Ltd (Canada) with 4.2 billion USD, Galileo Investment Group

⁴ Ministry of Planning and Investment, Foreign Investment Department, <http://fia.mpi.gov.vn/>

⁵ Data from Ministry of Planning and Investment, Foreign Investment Department, <http://fia.mpi.gov.vn/>

Inc (the U.S.) with 11.4 billion USD...⁶. The impacts of FDI on the overall economy are uncountable and potential is still under-exploited.

2.1.2. Challenges:

Besides the outstanding contribution above 25 years, attracting FDI into Vietnam is still limited. According to Deputy Minister Dao Quang Thu, “the overall effect of FDI is not high”. The serious problems is that the imbalance of investment in sectors of the economy. In the industries – construction sector, even though the number of investment is high (50% of total FDI investment in 2012⁷) but mainly focus on the assembly, which brings low value added. The number of projects in the infrastructure sector is very limited. The proportion of agricultural projects is just 0.7% of total in 2012⁸ despite this is the advantage of Vietnam. The fishing, forestry sectors show a declining trend. In services sector, there is a positive movement in the real estate project scale (24% of total FDI investment in 2012⁹) but a higher increase in the delayed project implementation, land waste, domestic loans. However, many people are worried about an estate bubble like the case of the U.S. in 2008 (Dominic Mellor, chief economist of ADB in Vietnam). FDI in intermediary services with high added value such as education, health care, and environment ... is very rare.

Moreover, FDI is concentrated in areas with favorable conditions of infrastructure, human resources, and product markets cause regional imbalance. It results in developed region attracting most of FDI and backward

⁶ Số phận những dự án FDI khổng lồ ở Việt Nam, <http://www.baomoi.com/So-phan-nhung-du-an-FDI-khung-o-Viet-Nam/45/11139434.epi> (Tieu Dao)

⁷ Ministry of Planning and Investment, Foreign Investment department

⁸ Ministry of Planning and Investment, Foreign Investment Department

⁹ Ministry of Planning and Investment, Foreign Investment Department

regions have lot of difficulties in attracting. In 2012, top attracting FDI cities are Ho Chi Minh, Ha Noi, Da Nang, Vinh Phuc, Bac Ninh¹⁰...where the economy have developed quite well before appearance of FDI. The investment in these big cities makes the gap of development among regions become wider. At the same time, it causes the phenomenon of population imbalance because the workers tend to move to place with abundant of job opportunities.

The investment partners in Vietnam are mainly from Asia. Foreign investors are dominated by small and medium enterprises. Currently, Vietnam only attracted more than 100 of the 500 leading transnational corporations¹¹. The goal of attracting technology (high-tech and technology transfer), has not achieved as expected. Only 5-6% of FDI firms using high-tech (Ministry of Planning and Investment, 2012). Technology transfer is mainly done horizontally - between business-to-business, with little change in the level and technological capacity (Dao Quang Thu, 2013). Meanwhile, Vietnam needs high quality technology to improve production capacity as well as saving resources. If applying of new technologies, the production of steel can save 40% energy and reduce 50% carbon emissions 50%. The corresponding figure is 35% and 25% for cement; with paper and pulp are 80% and 60%¹². "

Another problem is about the rate of new jobs created by foreign investment sector disproportionately (only 3.4% of the total labor force in 2011). Monthly average income of workers in the FDI sector is only higher than the private sector but less than the state sector.

¹⁰ GSO

¹¹ Bui Quang Vinh, minister of planning and investment Ministry

¹² Prof, Dr Nguyen Mai is the former Deputy Chairman of the State Committee for Cooperation and Investment Analysis

In addition, the spillover effects of FDI into other sectors of the economy are limited. Some projects are licensed but not guarantee for sustainability, environment, and energy consumption... Besides the phenomenon of crowding out domestic firms, a number of FDI companies have applied transfer pricing such as raising the contribution value (in machinery, equipment, copyright...), prices of purchase of raw materials, semi-finished products, finished products, service, management fees, royalties, cost of guarantees, loans, pay, training, advertising...causing loss. It makes majority of Vietnam party withdraw from the joint venture and become 100% foreign capital.

In summary, in parallel with positive impact from FDI, Vietnam also has to face with dealing ineffective investment in job creation, technology transfer, balance of investment in sectors and regions, competition capacity and attracting more of this important capital sources. The attraction of FDI through period shows a positive trend in the growth.

2.1.3. FDI in periods:

2.1.3.1. Period 1988-1990:

In this period, the new foreign investment law was newly introduced so the impact of FDI to the economy is not significant. Total registered FDI in this 3 three years is just 1.6 billion dollars with 211 projects (MPI, 2012). Implemented capital was also low because the FDI firms have to follow many compulsory procedures to bring capital to the domestic market.

2.1.3.2. Period 1991-1996 (first wave of FDI):

This period witness a rapid increase of the FDI inflow to Vietnam. After 3 years of implementing, the foreign investment law started to be effective. Vietnam's open policy also plays a vital role in attracting investors who seeks for new investment environment with potential capacity. Vietnam with the advantage of cheap labor cost, large labor market and young population... became a good destination for all investors (Le Xuan Thanh, 2011). Moreover, there are some external reasons from outside that encourage FDI flow to Vietnam such as: The capital wave flow to emerging countries in the 80 and 90s in which South-East Asia is the main destination. In 1990, South-East Asia received about 36% of total FDI to developing countries (ADB, Connecting South Asia and Southeast Asia, 2013); The capital wave to the ex-socialism- transition economies, where the investor believe that they can find new opportunities to gain profits; The capital wave from emerging countries in the region (Malaysia, Thailand, Singapore...) started to export capital. Within 5 years, Vietnam received 28.3 billion dollars of FDI and 1781 registered projects (MPI reports, 2012). The event of joining ASEAN in 1995 and AFTA in 1996 is also another effective factor pushing up FDI inflow to the country. This brings positive impacts on the general economy with GDP growth rate in this period stands at 8.2%/year, a high level in the world¹³.

2.1.3.3. Period 1997-2000:

In this time, the number of projects is 961 with value of 13 billion dollars. Even though the total value of FDI increases but the trend seems to decrease. Vietnam has experienced a downfall of FDI, which was separately

¹³ <http://fdivietnam.org/nssportal.php?name=news&opt=art&id=57>

49% in 1997, 16% in 1998, and 59% in 1999¹⁴, partly due to the Asian financial crisis. The five largest investors in Vietnam are from Asia and faced with real difficulties in their country. To ensure that business activities in home country, investors were forced to cancel or postpone plans to expand abroad. The crisis also forced investors to revise lower targets expansion into Asia (UNCTAD, World Investment Report 1998). The crisis has also led to the Southeast Asian countries devalued currencies. Therefore, Vietnam becomes less attractive for projects focusing on exports. Moreover, foreign investors also recognize that the demand of the market has been inflated. The radiation barriers for businesses also become more apparent.

2.1.3.4. Period 2001-2005:

This period observes a slightly increase in the FDI trend to Vietnam with total capital of 20.7 billion dollars. The Asian crisis gradually recovered plus the economic situation in Vietnam has been improve make the investors feel more reliable in this market. In addition, in 2000, Vietnam and the U.S. signed a comprehensive bilateral trade agreement (BTA), allowing Vietnamese goods to enter the huge American market with a significant reduction in tariff rates. In exchange for this significant market access, the Vietnamese government made a series of commitments to give American businesses and investors a level playing field in its growing domestic market (F. Gerard Adams and Anh Le Tran, 2010). This creates a favorable condition for TNCs from the U.S. to enter and operate in Vietnam's market and increases the level of FDI in this country. This period has the average GDP growth of about 7%/year (MPI, 2012).

¹⁴ Ministry of plan and investment

2.1.3.5. Period 2006-2008 (second wave):

This is the strongest wave of FDI flow into Vietnam. Total registered FDI capital in 2006 is more than 12 billions dollars, 21 billions in 2007 and especially in 2008 this increase to 71.7 billions¹⁵. There are many reasons for this trend, which may be listed down: First, the M&A activities of many firms helps pushing up the FDI flow (Miao Wang and M.C. Sunny Wong, 2009; Julian di Giovanni, 2002). In 2006, the number and value of M&A increase 14% (6974 transactions) and 23% (880 billion dollars, account for 67% of total FDI in the world) comparing to figures in 2005¹⁶. Second, the event Vietnam joining WTO was a positive signal to all investors to this potential market.

2.1.3.6. Period 2009-2012:

Figure 1 - FDI inflow period 2009-2012 (billion USD)

Source: calculated by the author based on the data from the Foreign Investment Agency, Ministry of Planning & Investment

¹⁵ FDI tang vot sau 3 nam Vietnam gia nhap WTO <http://kinhdoanh.vnexpress.net/tin-tuc/vi-mo/fdi-tang-vot-sau-3-nam-viet-nam-gia-nhap-wto-2711546.html>

¹⁶ Xu the FDI the gioi 3 nam gan day

From 2009, FDI in Vietnam has clear signs of decline. According to the report of the UN Conference on Trade and Development, due to the impact of the financial crisis and economic downturn, FDI in 2009 of the world has fallen from 30% to 40% compared to 2008 levels and Vietnam is also affected (MPI, 2012). Many TNCs from developed countries have to stop or limiting investment abroad due to shortage of capital. The crisis also decreases the demand of consumer in all fields of goods that make producer become more careful in manufacturing. Lots of powerful TNCs like Toyota, AIA... and many others face a strong fall in the demand of people at domestic and international market. However, the positive outlook followed FDI in Vietnam in 2013. According to the latest report on the situation of foreign direct investment by the Foreign Investment Department (Ministry of Planning and Investment, 2013) published on 04.01.2013, FDI is expected in 2013 will reach 13 -14 billion, which is higher than in 2012 and this indicates the start of the recovery in FDI inflows into the country.

After 25 years attracting foreign direct investment (1987-2012), Vietnam now has more than 14,000 valid FDI projects with total registered capital of nearly U.S. \$ 207 billion, of which implementation has disbursed more than U.S. \$ 97 billion (47% of the registered capital). According to leading experts on FDI Vietnam, Mr. Nguyen Mai, FDI has contributed to Vietnam economic growth about 3-4% per year. The proportion of FDI enterprises accounted for about 20% of GDP in 2012. In 2012, the contribution to budget of the FDI sector (excluding crude oil) is \$ 3.7 billion, accounting for 11.9% of total revenues (MPI, 2012). Over all, FDI does bring positive impacts on the whole economy and gradually become a vital capital source for the development.

2.2. Impacts on employment:

2.2.1. Population advantage:

FDI has a direct impact on employment. Vietnam is a country with young population and hard working labors which is a great advantage in attracting FDI from developed countries. The population of Vietnam increases stably though years in both quantity and quality. More and more people are capable of working in foreign company with high requirement of skill and experience.

Figure 2 - Population in Vietnam 2001-2012 (thousand people)

Source: Datas of the Bureau of Population - Family Planning

The population is considered to be basic factors determine the number of employee. Therefore, the increase of labor is closely related to population growth. 10 years ago, Vietnam's population increased by nearly 1 million people each year, contributing to average annual employment growth of 2% (GOPFP, 2012). More specifically, the labor force in the country has grown from 40 million in 2002 to 53.01 million in 2012. According to the General Department of Population & Family Planning, in the period 2011-2020,

Vietnam's labor force will increase by 1.43%/year, reaching 58.2 million people in 2020. This is a golden opportunity for Vietnam to speed up economic growth if the specific strategies and reasonable policies are timely mannered.

2.2.2. Positive impacts on employment:

Though Vietnam has just implemented “doi moi” policy since 1986 and started attracting FDI recently, the impacts on the employment can easily admitted. FDI is an active instrument in creating new job, increasing wages level, training workers and improving products quality.

2.2.2.1. *Creating new jobs:*

FDI can create new jobs, solving the unemployment problem through the presence of TNCs (Beata Javorcik, 2013). Areas with foreign investment not only directly create jobs for workers, but also indirectly create jobs in other areas through spillover effects such as promoting the establishment and development of a number of industries and services concerned. Jenkins (2006) found out that FDI inwards to Vietnam has positive impacts on employment by increasing number of jobs. Direct jobs are created in the system of foreign-invested enterprises; including foreign affairs, such as manufacturing, distribution, and research ... The workers are directly employed and paid higher wages by FDI enterprises (David Payne and Fenwick Yu, 2011)¹⁷. In the country for many years, along with the increase of foreign direct investment capital, there is a growing number of industrial zones, export processing zones and labor intensive, including common labor and qualified technological labor. According to the statistics for the period

¹⁷ Foreign companies invest in U.S. provides jobs with high-paying jobs – up to 30% higher paying.

2002-2012, FDI has attracted millions of workers, contributing to tackling unemployment in Vietnam (MPI, 2012).

Table 1 - The impact of FDI on employment and income of workers in Vietnam during 2002-2012

Year	Total labor	Labor in FDI	Contribution to job creation (%)	Inflation rate (%)	Average wages per year of FDI labor (million VND)
2002	39,275,900	425,900	1.1%	4.04%	18.56
2003	40,403,900	753,300	1.9%	3.01%	19.28
2004	41,578,800	914,800	2.2%	9.67%	19.69
2005	42,774,900	1,112,800	2.6%	8.71%	21.39
2006	43,980,300	1,322,000	3.0%	6.57%	24.03
2007	45,208,000	1,562,200	3.5%	12.57%	27.00
2008	46,460,800	1,694,400	3.6%	19.87%	34.66
2009	47,743,600	1,524,600	3.2%	6.52%	39.73
2010	49,048,500	1,726,500	3.5%	11.57%	44.35
2011	51,390,000	1,901,430	3.7%	18.13%	48.58
2012	52,580,000	1,735,140	3.3%	6.81%	52.27

Source: Author organize data from annual GSO

Prior to 2000, the number of direct labor in the area of foreign investment accounted for only a very low percentage of national employment structure (less than 1%) (GSO, 2012). At a later stage, thanks to reform and opening up economic reforms in the legal system, Vietnam has many policies

to attract FDI, creating favorable conditions for investors¹⁸. This leads to the rise in number of established companies, enterprises and export processing zones ... with the need to use local human resources. In the period 2002-2008, the number of direct labor in the FDI sector with a percentage of the area of labor structural country continues to grow. This demonstrated a positive role of FDI with labor issues. From 2009 to 2012, due to the impact of the economic crisis, many FDI enterprises operating in Vietnam have to close or doing business inefficient, leading to the bankruptcy and make many workers lost their jobs. The number of workers in FDI decreased or increased with instability. However, the positive signs of FDI capital recovery in Vietnam have brought positive remarks that in the future, areas where FDI will create more jobs for this market. It is expected that in the near future, the FDI businesses will create 2 million jobs directly with relatively income for people in Vietnam (MPI, 2012). According to the preliminary investigation, Vietnam now has nearly 4 million people work in the business of production, supply or distribution of materials, products and services for FDI enterprises¹⁹. This can be considered an indirect effect of capital foreign direct investment in creating jobs for workers in Vietnam. Forecast future of indirect jobs will continue to increase along with policies to encourage and increase the localization ratio of FDI enterprises operating in the field of automotive, motorcycle apparel, consumer products... FDI inflows into VN in the future will focus on the fields of electronics, food, clothing... and will be distributed to the areas of labor, land rent is low, such as Long An, Can Tho, Tien Giang in the south and Hai Duong, Nam Dinh, Hung Yen in the north, creating the high demand

¹⁸ These reforms include tax incentive and supported legal procedures (Vietnam tax incentives and policy by MPI, 2012-2013)

¹⁹ According to reports on total FDI in 25 years of the Department of Foreign Investment - Ministry of Planning and Investment

for labor at these local cities²⁰.

2.2.2.2. Increasing wages:

FDI increases the wages level, brings a better income for the workers as the compensation for higher requirement of skills and to attract quality workers (Beata Javorcik, 2013; Fredrik Heyman, Fredrik Sjöholm, Patrik Tingvall 2007; Feenstra and Hanson, 1995). Aitken et al (1997) also finds that high level of FDI often associated with higher wages when studied on the U.S., Mexico and Venezuela. In the 2002-2012 periods, the income of workers in the region with FDI is constantly improving. Especially in the two years 2007 and 2008, the wages of workers in FDI enterprises were also significantly improved. The survey also shows that salaries of employees in these firms generally higher than that in the private sector in the country. In 2012, the average salary of workers in FDI enterprises is 4.35 million VND/month, which is higher than the average salary of employees the country (3.9 million VND/month)²¹. This demonstrates that FDI has played a positive part in improving the income of the employees in Vietnam.

2.2.2.3. Training of employees:

FDI helps training workers (Beata Javorcik, 2013). Through the establishment and recruitment of FDI enterprises, workers not only have the opportunity to improve working skills, management skills, access to advanced technology, but also be able to enjoy a modern working environment, safety, industrial training style, labor discipline, creativity and adapting to the new working mechanism. On the other hand, the requirement for labor skills of FDI enterprises is usually higher than other businesses. As a result, FDI firms

²⁰ CBRE forecast (USA) on attracting FDI project into VN 2013

²¹ Summary report of the Ministry of Labour and Social Affairs

tend to spend more on training employees to achieve better production (Filer et al., O. Schneider and J. Svejnar, 1995). This can indirectly improve the quality of labor in Vietnam in general. Through the survey, when it comes to the quality of labor, domestic enterprises have different assessment than the abroad invested enterprise. Overall, domestic enterprises have felt more positive about the quality of education and training for workers in the country. When asked for the review points from 1-6, the domestic enterprises to value at 4.52 GPA for education and 4.24 for vocational training in Vietnam, while the number that FDI enterprises corresponding evaluation only 4.1 and 4.0 points. 1540 surveys on other FDI enterprises have asked these companies to assess the level of training for newly recruited employees. The results showed that about 23% of workers are evaluated for further training. On average, annual FDI spending 3.6% of business costs to train new employees and about 70% of trained employees continue working for the business for a period of 1 year²².

The presence of FDI firms, particularly those with 100% foreign investment in Vietnam has led to the emergence of the new technology. Most of these technologies are in advanced level than that in the country. The FDI enterprises will also require higher skill labor. In Vietnam, the number of high qualified workers that meet the requirements of FDI enterprises is limited. The majority of workforce in FDI sector has to be under training directly by employers before working. These people will have opportunities learning about business management, personnel training, foreign trade operations, operating high-tech equipment, or participation in research and manufacture of new products ... The movement of labor between the local economies and

²² According to research topics of Chamber of Commerce & Industry VCCI Vietnam

FDI sector create spillovers effects. In that way, the FDI enterprises have indirectly helped Vietnam train partial workers with higher qualifications, knowledge of technology and management, business administration, the ability to research new products, international market knowledge; particularly the professional way of thinking and working style.

2.2.2.4. Changing the labour structure and improving working environment:

The number of employees working in the area of foreign invested only account a small proportion of the total number of workers employed, but FDI has actually had positive impact on labor restructuring in Vietnam (Rhys Jenkins, 2006). FDI affects the structural shift in the labor sector. The foreign investors use of more than 2.3 million workers directly contribute to approximately 4 million indirect jobs for workers in the manufacturing, supply and service sectors. For example, the export processing zones with foreign investment will promote the development of traffic, transportation and warehousing services. These transportation companies again wish to purchase kind of insurance, which will promote insurance services. Through a domino effect, there will be more jobs created indirectly, contribute to promoting the restructuring of the labor sector (MPI, 2012). FDI also affects labor restructuring at the technical level, i.e. the transition from unskilled labor to skilled labor (Qing Liu and Larry D. Qiu, 2012). As we already know, capital is not only an input of the production process, but also help to upgrade technology, procurement of machinery and modern equipment, research, purchase new technologies Since then, workers in the time of working for FDI firms will have the opportunity to acquire advanced techniques, specialization and advanced skills. FDI also affects the structure of the labor

shift by institutional sector. It was the labor movement among state-owned enterprises, private enterprises and enterprises with FDI (Magnus Blomstrom and Ari Kokko, 2003). This stems as many FDI enterprises have the ability to attract workers with better working environment, dynamic and new opportunities.

Moreover, FDI will contribute to increasing the competitiveness of the labor market. With the advantages of wages, working conditions, development opportunities, FDI firms have huge appeal for workers. Therefore, in order to attract labor competition, and other economic sectors to improve the working environment, creating more income for workers or have a training plan and encourage employees in their enterprises are not stop learning, improve professional skills and professional management skills. At the same time, the diversity of economic sectors will contribute to the diversification of sources of supply and demand on the labor market; factors facilitate the formation and development of the labor market.

On the whole, FDI has a positive role in introducing new jobs, improving the quality of labor in Vietnam as well as the wages level for the workers. FDI firms offers the new opportunities and more challenges for the labour market. Looking at a long way of attracting FDI, the strong impacts of it on employment is irreplaceable. It helps creating more direct and indirect jobs for domestic market, which is very important to a young and large amount of population country like Vietnam. Hence, FDI plays a main role in increasing the income for the labors on average, which moving Vietnam into “average income group” (WTO, 2011). In the same time, FDI participates in training employees with professional skills, management and working ability

through higher requirement for the works. It also presents in the labor restructure process, reducing the proportion of agriculture worker with low skills and increase the high skills labors in other sectors. These are a vital element for Vietnam to maintain sustainable development and become modern industrial economy.

2.2.3. Negative impacts on employments:

2.2.3.1. Limited number of new jobs:

Despites many positive impacts on employment, FDI bring about a range of problems. First, the number of workers in the FDI sector remains low proportion of the labor structure, which is only 3.3% (MPI, 2012). In recent years, the number of employees working directly in the area of foreign investment increased slowly and there is no sign of stabilizing. In 2012, employment growth in this sector was only 5100 people²³. Comparing with the potential and ability of labor market, this is a undesired reality.

2.2.3.2. Working conditions:

Working environment in FDI sector is also a hot issue that the Government is trying to find a solution. FDI firms often have preferential treatment for employees in executive management positions or who have high qualifications but they do not guarantee benefits for unskilled workers, who directly involved in the production. In a number of local businesses have much FDI as Ho Chi Minh City, Hanoi, Dong Nai, Binh Duong, Ba Ria - Vung Tau, Vinh Phuc, Bac Ninh, Hai Duong, only 16.6% of workers in FDI enterprises are in relaxed mood at work and 23.3% of workers said they have good relations with the employer. About 44.4% of workers were paid at lower

²³ Data from the Statistical Yearbook 2012 - GSO

rate and 15.4% are annoying for forcing to do urgent work overtime regularly²⁴. Along with that, the breach of contract is a common phenomenon in FDI enterprises with 3.2% of workers had worked more than 10 years without officially signed contract. Though the businesses recruit more 30-35% of the workforce every year, the dismissal rate is also very high at 20 - 25%. The same above survey showed that 73% of employees leave the business on their wishes. However, in the recent period 2002-2012, strikes in many enterprises have increased significantly. According to statistics from 1995 to 2012, it is occurred about 3,913 strikes, which in FDI enterprises accounted for 78.4%, non-state enterprises accounted for 22.8% and state-owned enterprises is 2.35%²⁵. The FDI could have been brought better effects to the employment rate of Vietnam if both recipient and investors really work with each others for the sake of workers.

2.2.3.3. Labour structure and skills:

Labor advantage is one of the most attractive factors that the investors consider whether putting capital or not. However, employment rate has been a long term issue of Vietnam for its important role in economic and social stability. Since FDI comes, the new job creation has been increased in number but there is not much change in the nature. The percentage of workers in FDI is still very small but attracting of most talent people from other sectors. However, the ability of workers is not improved much because employees only have chance to participate in one chain of whole production process and majority of work are manual and assembling jobs. The employer can take advantage of abundant labor force with lack of understanding to pay an unfair

²⁴ Survey by the Institute of Workers and Trade Union - Confederation of Labour of Vietnam

²⁵ <http://www.tapchitaichinh.vn/Nghien-cuu-trao-doi/Quan-he-lao-dong-trong-doanh-nghiep-FDI-Nhung-van-de-dat-ra/18985.tctc>

wages rate to the low-quality workers. Many people still accept even knowing for they have no other choices.

It's obviously that FDI coming into Vietnam bring about more positive than negative impacts with increase in number of jobs, higher wages, changing the structure of labour market as well as improving the workers skills. It's just a pity that the reality does not match the potential. The number of new jobs is not high as expected. The increase in wages is not stable and equal in all economic sectors and depending on labour skills. Majority of jobs are in the low value added manufacture and the proportion of trained workers by FDI sectors is very little comparing with total labour force. The reason for this comes from subjective and objective factors such as quality of workers, management skills, working wages...but mainly from Vietnam side.

Human resources in Vietnam are plentiful but lack of quality requirements set out by FDI enterprises. These limitations existed many years ago, but recently, it become more urgent for FDI projects using high-tech. About 32% of foreign investors said that the lack of skilled workers is the single most important reason make they are not fully used of worker productivity²⁶. So the advantage of abundant human resources and low cost of Vietnam is gradually decreasing. Even after training, Vietnam labor is considered to be clever, intelligent, creative, quick absorption of new techniques and modern technology but lack professionalism.

²⁶ Study by the Department of Foreign Investment in collaboration with United Nations Industrial Development Organization-UNIDO; Association of Foreign Investment Enterprises
<http://vafie.org.vn/index.php?mod=article&cat=tintucdautu&article=572>

In addition, teamwork skills, ability to work together to complete the work of the labor is weak. Many foreign managers²⁷ have commented that Vietnam workers work very well when handling work themselves but much less effective in team work. This has led to situation that many companies can not achieve good performance in the business, although they have assembled a team of highly qualified workers. In addition, the education and training of Vietnam often emphasizes on theoretical knowledge but not interested in the practical skills, teamwork skills. Most graduates cannot get jobs right away but always through a training period.

For example in the automation industry, cheap labor is hardly bringing competitive advantage for companies because it competes on ability to manufacture and supply of components. Meanwhile, most parts of Vietnam are imported and our industries mainly focus on assembling. This is a long term obstacle to over come because the young industries have to face with very powerful rivals in the market.

The legal understanding of workers is another problem that causes conflict between employer and employees, making ineffective investment. Majority of workers in Vietnam do not have full knowledge about their right and duty. They are often abused by the employer without awareness and on discovering that, they do not know the fight way to react or propose to the managers. Lack of knowledge makes the worker suffer from many disadvantage such as wages, treatment, working condition...The existence of

²⁷ Include Japanese manager of VJCC in Hanoi <http://toilaai.vn/bai-viet/ky-nang-lam-viec-nhom-team-work/ky-nang-lam-viec-nhom---team-work>, Director of Vietfone <http://www.baomoi.com/Ren-luyen-ky-nang-lam-viec-nhom/146/4148729.epi> ...

Associations seems not very useful because they do not always act for the sakes of workers.

Overall, the labor should improve many skills to meet the requirement of FDI firms so that they can fully utilize the benefit from the investment. Only by that ways, the investor will be interested in creating more field of business with high quality as the government wishes.

2.3. Impacts on export and GDP:

2.3.1. Positive impacts:

2.3.1.1. Increasing export turnover:

In the 1980s, only around 10% of domestic production was exported and the growth of exports was only 3.5% per annum between 1977 and 1988 (World Bank, 1990, p. 59). Moreover, prior to 1986, Viet Nam was closed to foreign investors (MPI, 2010). After “doi moi” policy, FDI has played a significant role to export. Before 2001, exports of FDI reached only 45.2% of total turnover, including crude oil. Since 2003, exports of FDI began to exceed the domestic firms and gradually becoming a dominant factor, accounting for nearly 64% of total exports in 2012²⁸. According to calculations from the data of the Statistical Office, in 2007, Vietnam's exports reach \$ 48 billion, of which exports contribution to FDI was 57.2%. This figure downs to 53.2% in 2009 due to the impact of the global economic crisis. However, since 2010, the exports of FDI continued to increase. In 2010, this figure reached \$ 39 billion, accounted for 54% of the total 72 billion export turnover of Vietnam. In 2011, the contribution of FDI continues to increase sharply to 58.7% and 63.1% in 2012. Accordingly, the trade

²⁸ Reports by the Ministry of Planning and Investment at the 25th conference of attracting foreign investment

surplus in 2012 is approximately 0.3 billion dollars. This is the first time Vietnam gain trade surplus since 1993²⁹. In quarter 1-2013, FDI surplus of 1.18 billion dollars, contribute to the trade surplus of the country at 278 million dollars³⁰. FDI plays an important role in balancing trade for Vietnam especially in the situation the country is in trouble of financial deficit and budget shortage. FDI acts positively on expanding export markets especially to the U.S., EU; significantly alter the structure of exports. The United States has become the largest export market of Vietnam, following by Japan, China...³¹. It also contributes to stabilize the domestic market, lower imports through the providing high-quality products for the domestic market by domestic manufacturing enterprises instead of importing as before.

In terms of growth rate, compared to the national export growth, export growth of FDI in Vietnam is reaching a higher speed (MPI, 2012). The total exports increased by 19.7% and the average export of FDI grew at the rate of 21.7%. Before 2009, the export growth rate of the FDI sector often slower than that of whole country. Specifically, in 2009, the total country export was decreased by 9.7% compared to 2008, the export of FDI fall by 12%. The main reason is due to the economic downturn, demand for goods exports of FDI fell sharply compared to the exports of domestic sector (GSO, 2012). The reason is that FDI mainly export of high-tech products while domestic firms export the basic essential items which the demand less elastic. In addition, many investors want to avoid the risk from economic crisis and reduced the scale of investment.

²⁹ Ministry of Planning and Investment, Foreign Investment Department, <http://fia.mpi.gov.vn/>

³⁰ Ministry of Trade

³¹ GSO

2.3.1.2. Improving competitiveness of domestic firms:

The presence of FDI has a positive impact to operation of export companies (Hans Christiansen, Charles Oman and Andrew Charlton, 2003). Competitiveness of the product depends on the quality, type, model, price and quantity...which are determined by factors such as capital, technology and labor ... Comparing with local businesses, this is a distinct advantage of FDI enterprises. Thus, FDI firms help domestic companies improve the ability of production by putting pressure on them. Local firms will definitely struggle to find out a solution to survive and compete with FDI firms and accidentally improve themselves capability.

Facing to the fierce competition of FDI enterprises, domestic firms must improve competitiveness of goods if they want to export. Along with improving the quality, style, design and functionality of the product, FDI enterprises also have to pay attention to the qualifications of workers and managers. Domestic firms must actively explore products innovation, more dynamic and responsive in searching new market. Coffee of Trung Nguyen Group and dairy products of Vinamilk Company are two groups typical for the competitiveness of Vietnamese enterprises. At the insistence of FDI enterprises in the same industry such as the Nestcafe (main competitor of Trung Nguyen); Abott, Dumex, Nestle (main opponents of Vinamilk), starting the fight in the domestic market, the two groups had grown up and succeeded in both internal as well as external market. VNM products in addition to distributing in domestic market exported to many countries in America, France, Canada, Poland, Germany, the Middle East and Southeast Asia ... with annual export revenue of hundreds of millions of dollars. Thus, FDI not only improve the quality and competitiveness of exporting goods in sectors

with foreign investment, but also indirectly affect the quality of the products in other sectors of the country.

2.3.1.3. Improving productivity:

FDI can have positive impacts on productivity growth in developing countries and Vietnam is amongst this group (Bin Xu, 2000). The FDI firms not only doing a joint venture with local investors in capital investment but also contribution of modern production line, high technology, especially their technology recipes. This form of FDI allowed Vietnam to be a direct acquisition of advanced technology from investors. The process of improving the product quality also takes place faster and in the right track because the latecomer can utilize the success of the forth going (Imad A. Moosa, 2002). A typical example of inter-enterprise Vietnam's business success today may include LS-Vina, Electric Cable Corporation. This is a joint venture with LS-Korea Cable Corporation, which is established in 1996. Later on, the LS-Vina Company quickly became the largest cable branch of Korea Electric Cable and is the leading company in the cable industry of Vietnam. Currently, LS-VINA Cable is ranked number one among cable manufacturers in Southeast Asia. More than 15 years of operations, LS-Vina has actually confirmed the quality and competitiveness of cable production in Vietnam, give items to the list of exporters with value over \$1 billion since 2007.

2.3.1.4. Changing the export structure:

According to calculations from the data of the Statistical Office, the export structure of Vietnam has made remarkable progress during the period from 2006 to 2010. For new items raw or semi-processed, exports continued to increase over the years, from 19.22 billion in 2006 to 25.19 billion in 2010

even though its share has fallen sharply, from 48.28% in 2006 to 34.87% in 2010. Meanwhile, export of processed or refined goods continues to increase, from 20.59 billion, accounting for 51.7% share in 2006 to 47.11 billion in 2010, accounting for 65% share³².

As December 2012, FDI in the manufacturing sector variables were equivalent to 50% of total FDI into Vietnam³³. The interest of investors to the processing industry in Vietnam has helped the country restructuring exports by increasing the proportion of manufactured goods. The main export items of Vietnam's FDI are industrial goods such as electronic items, shoes of all kinds, textiles and accessories, automobile parts, bicycles, bags, processing wood, stationery, processing rubber. In 2007, the export turnover of over \$1 billion in Vietnam were mostly raw commodities such as coal, crude oil, rice, seafood, textiles garments, footwear, processing wood and computer - electronic components, cables and plastics products. So far, among 12 items with export turnover of 1 billion USD there were 6 deep processing products and key areas of FDI. Thus, FDI has transited Vietnam from a mineral, petroleum and primary goods exporter to deep-processing goods, refined products exporter with great value.

FDI helps increase the technological content and the amount of capital goods in Vietnam's exports. To see more clearly the impact of FDI, we look at export of commodities require large amount of capital and high technology such as electronic-computer-parts, plastic products, wire-cables. If in 2000, the export value of the 3 were respectively 778.6 million, 95.5 million and

³² Department of Statistics

³³ Report on Foreign Direct Investment situation in 2012 - The Ministry of Planning and Investment - Investment Department

129.5 million then in 2008, the number reached 2.638 billion U.S. dollars, 921 million and 1.01 billion. List of items with turnover more than 1 billion of exports has added with electronic items-computer-parts since 2004, goods-wire cable from 2007. Products from plastics also named in the list since 2009. So far, the value of export revenues from these commodities is mainly generated by FDI enterprises namely: 96.6% in exports of electronic goods and components, 85% in machinery and equipment, 81.7% in electronic cables and 80% in plastic products³⁴.

In the next stage, global trend of FDI in the exports will concentrate on higher capital and technology products, the structure of Vietnam's exports will continue to move along with this positive trend. Impact of technology diffusion from FDI will create favorable conditions for businesses to pursue this objective.

It is obvious that FDI has created many positive impacts on export of Vietnam. Not only contributing high proportion to total export turnover. FDI also improves competitiveness of domestic firms by creating spillover effects and pressure on them. More than that, it is an active factor in shifting the structure production from just domestic producers to international sellers, from low to high-capital content products and self-provision, which is the long term strategy Vietnam wants to pursue. Many of domestic firms (LS-Vina, Viconship³⁵, FUJI-ALPHA³⁶)... have expanded market into new countries partially thanks to corporation with FDI enterprises. In fact, the

³⁴ Report the situation of foreign direct investment in 2000, 2006, 2007, 2008, 2009, 2012 – Ministry of Planning and Investment - Foreign Investment Agency

³⁵ http://www.viconship.com/index.php?option=com_content&task=view&id=59&Itemid=137&lang=vietnam

³⁶ http://www.alphanam.com.vn/index.php?option=com_content&task=view&id=837

foreign investment is an effective instrument to balance trade as well as exchange rate because it lowers the trade deficit, especially with the case of Vietnam.

2.3.2. Negative impacts on exports:

Though FDI has contributed to the restructuring of the export oriented increased processing group; technology has a higher capital levels, most export goods of Vietnam is still processed goods with low value due to weak support industries and a low rate of localization³⁷ (Kyshiro Ichikawa, 2013)³⁸. Typically, the key export commodities are textiles, footwear, electronics goods, computers and mine. Moreover, the inputs of these industries are mainly imported; the ratio of domestic parts is very low and causes a low added value. Specifically, the textile industry depends on imported resources 60-70%. Particularly in 2009, Vietnam has imported 0.4 billion dollar of textile materials, leather and footwear; 4.2 billion of machinery and equipment, tools and spare parts and 1.6 billion of fabrics from Chinese³⁹... Even with the fishery products, which Vietnam is the leading country in exporting tra and basa, shrimp, but the input of industry is dominant by foreign firms. Not only the food fishery, foreign investors control the provision of seeds, drugs for aquaculture. Currently, most of the food market for seafood has fallen into the hands of foreign companies. Only four FDI has accounted for more than 80 fish feed market. Only in 2012, fishery food prices have raised six-times, about 25%⁴⁰. Vietnam's fisheries market is now in the hands of FDI; prices are higher than other countries and reduced

³⁷ According to statistics from the Japan Business Association in Vietnam, the localization rate in Vietnam was only 22.4 percent, much lower than other nations in the region.

³⁸ Kyshiro Ichikawa is leader of the Support Industry Task Force under the Japan-Vietnam Joint Initiative,

³⁹ Wenhui FAN (2005), "The Relationship between Foreign Direct Investment and Trade: China as an Example", Proposal of Summer Paper

⁴⁰ <http://cafef.vn/nong-thuy-san/thuy-san-mac-nghen-vi-thuc-an-fdi-20130218084646143ca52.chn>

competitiveness. So the effect on export is not as good as looking at the number.

FDI do not improve the competitiveness of domestic enterprises as analysis of some economists. As the end of December 2012, export turnover reached 114.6 billion, up 18.3% comparing with 2011 but mainly from the FDI sector. For example, turnover of exports in 11 months was 16.2 billion, in which the FDI exports were \$ 14.8 billion, accounted for 91.3%. Meanwhile, exports of domestic enterprises suffer from the trade deficit of near \$10 billion⁴¹. In the first quarter of 2013, Vietnam's export turnover reached US\$29.76 billion, in which FDI enterprises earned US\$17.25 billion, accounting for 58.5 percent of the country's total exports (GSO, 2013). It is clearly that Vietnam export increases because the FDI export but not from the reason that quality of domestic goods is better or the competitive ability of domestic firms is improved. More seriously, the internal markets of many sectors are gradually in the hand of FDI firm and the domestic enterprises have to sell or processed goods for foreigners. We not only lost our brands but also opportunities to survive and develop independently.

For the export sector, effects of FDI seem over-inflated with huge range of marvelous number. The fact shows that there is a complete-advantage for the FDI enterprises in exporting. The domestic firms are rarely able to compete with foreign investors if in the same industry and have to choose either processing goods or selling the brand for them. Overall, FDI just bring positive impacts to short-term export figure but it is harmful to long-term industry because of disappear of domestic firms. The export spill

⁴¹ Report on export situation of Vietnam in 2012 - GSO

over effect is still under expectation because the investors mainly utilize the labors and resources in Vietnam, other machineries and intermediate inputs are from imports. The phenomena of FDI firms dominate and abuse the domestic enterprises are still there and the Government has not yet found a solution.

It is easy to understand that FDI firms are normally the famous TNCs in the world; only their name is a guarantee for the products that they are manufacturing. Their prestige has a long history of operating and successful is the worthiest assets. Meanwhile, domestic firms are normally the new and immature agencies with limits in capital as well as in management and competitive experience. In this issue, domestic company is totally can not compete with them even though the products quality may not be different.

Moreover, trading and management experience, language, professionalism and long-term relation with partners are not something that a business firm can achieve in a short period. Even in Vietnam, it is very challenge for a new company to access the market, not mention to the choosy international market. As a result, the FDI firms will completely dominate the export market as well as the domestic market. The short in demand plus fierce competition in the market make domestic firm have no choice except joint venture or processing for foreign firms. Especially in marketing field and public relation, most company in Vietnam are not aware of its important and usually ignore it.

In the integration era, business strategy becomes a vital element for the development of any entity. Domestic firm in Vietnam normally do not have

experience and ability to deal with unexpected problems that may happen in actual business activities. Reality in Vietnam shows that many domestic brand were gradually come to the hand of FDI firms by many skillful tricks such as corporation, cumulative losses, pricing transfer...This is partially blame for the weakness of internal companies but mainly for the appearance of FDI firms with absolute advantage in business.

2.4. Impacts on technology upgrading:

2.4.1. Positive impacts on technology upgrading:

FDI plays a prominent role in innovation and technology transfer through the presence of TNCs (Jože P. Damijan, 2003). FDI firms can demonstrate new technologies, providing technological assistance to the local suppliers and customers in order to operate effectively (Emma Xiaoqin Fan, 2002). In Vietnam, 838 technology transfer contracts were granted certificates or approved throughout the country from 1999 to June 2012 (GSO, 2012). Of these, the technology transfer contracts of FDI projects accounted for over 50 percent. The technology transfer contracts were mostly in technology transfer processes (accounting for 82 percent), technology secrets (80 percent), technical assistance (87 percent), training (78 percent) and transfer of industrial property rights (21 percent)⁴². Vietnam has absorbed many new and advanced technologies and is able to produce what was previously impossible before (Nguyen Van Lang, Deputy Minister of Science and Technology). In those developing countries like Vietnam, this is a very important impact because technology transfer can encourage the economy develop with real capacity. It is also an effective tool to help the country escape from the middle- income trap. With effort in learning advance technology skill,

⁴² Reports from the Department of Science and Technology and assessment units under the Ministry of Science and Technology

Vietnam can steeply become self-control of production and manufacture, which is the key factor in economic independence.

2.4.2. Negative impacts on technology transfer:

Technology transfer is one of the most beneficial impacts that hosting country like Vietnam expect from receiving FDI. However, FDI firms or TNCs are not always positive about technology transfer. First, it costs a lot to invent new technology, and thus technology is not free. Second, FDI companies feel a threat of the “boomerang effect”, that is engineer of the host countries could manufacture of exact copies of products with lower cost with improved quality (Ishida, M, 2012). Vietnam is not received a “package” of capital, management, and new technology (Hymer, 1976) but only separate parts which makes the impacts of technology incomplete. It is a pity that this effect is not effective as the investors promising before entering the market. In Vietnam, 80% FDI firms use the average technology, 14% use low and outdated, and only 6% use high technology (MPI, 2012). The FDI flows tend to move to the trend of consuming energy resources, human resources, and unfriendly environment to Vietnam. Some large projects occupy land without deploying resources⁴³. Low technology business led to a reality that the domestic firm mostly done processing works. A number of businesses are considered as high-tech, but the use of high-tech stage does not perform in Vietnam. Therefore, Vietnam businesses can only produce low value-added goods and hard to participate in global production networks. The real situation shows that Vietnam is suffering from negative rather than positive impacts. Especially in the long term, when the temporary advantage is over, it will be a huge challenge for the country to develop.

⁴³ Report by Ministry of plan and investment

Vietnam is a developing countries lacking of capital and modern technology, which are the basic element for development. The objective of attracting FDI is not only aim to foreign currency but also to advanced technology that we cannot possess. The benefit from FDI on technology transfer is not as the country expected. There is technology transfer when the FDI firms come but most of that is normal-tech, which we already had or can manage ourselves. Vietnam is importing majority of out-dated technology and possibly become a “technology landfill” (Yen Thanh, 2013). The national strategy is to attract advanced technology to really improve the capacity of domestic industry but the investors are trying to use all chances to import low quality technology with inflated high cost. Many investors explain that the workers in Vietnam can not adapt with new one but that is not the main reason. Thinking of Vietnam as a lag behind countries, investors tend to use the old technology and machinery to minimize their cost of production. The costs of these assets are low due to depreciation after long time of using elsewhere and they are second-hand. Reusing of these machinery and technology help them saving lot of money in production, leading to low cost and attractive price to be easily compete with other firms. Of course, the old one will cause lot of unwanted effect such as wastes, polluted, energy consuming...but with a country that the law has many flaws like Vietnam, it is not a serious issue. The bad externality by them is easily forgotten after some little compensatory or apologies (the case Vedan and of polluted Thi Vai river for 14 years⁴⁴, Kingmo New Materials for over smoke⁴⁵, Saehan Vina for causing polluted water⁴⁶).

⁴⁴ Xung quanh vụ kiện Vedan: “Công lý đã chiến thắng”,
<http://www.xaluan.com/modules.php?name=News&file=article&sid=202709>;

An emerging market with easy choice of consumers is also a wonderful condition for FDI firms to sell any products without requirement of using specialized production line. Most FDI firms just want to utilize the cheap labor market and exploiting of natural resources in Vietnam so they do not have to use either technology or advanced ones. The previous policy of attracting FDI has opened the door to all investor but not caring to the quality of investment and controlling measures. This is the most serious problem that the country has to deal with, otherwise the whole economy, particularly the industry can not move up and always in the backward position. The target of attracting FDI with high tech to maximize its spillover effect seems not yet achieve. Vietnam still has a long way ahead to realize this plan and for sure it will be a hard path for fierce competition from outside and the obstacles from inside of the economy.

2.5. Other positive impacts

Besides above positive impacts, FDI in Vietnam also brings about many good results:

First, FDI contributed to economic restructuring and improving industrial production capacity. The economic structure changes strongly in a positive direction. The share of agriculture was 80% in 1988; by 2011 it was only 22%. Industry – services is accounting for 78% in the same year. The growth rate of the FDI industrial sector is always higher than the industrial

⁴⁵ Một doanh nghiệp FDI bị phạt 62,5 triệu đồng vì gây ô nhiễm, <http://doanhnhnan.vneconomy.vn/2012120603090578P0C5/mot-doanh-nghiep-fdi-bi-phat-625-trieu-dong-vi-gay-o-nhiem.htm> (Hoai Ngan)

⁴⁶ Saehan Vina ngang nhiên gây ô nhiễm môi trường, <http://www.baomoi.com/Saehan-Vina-ngang-nhien-gay-o-nhiem-moi-truong/45/11062534.epi> (Tran Tinh)

growth of the country. In 1996, growth rate of FDI industrial sector was 21.7% while the growth rate of whole industrial sector in the country was 14.2%. In 2000 this rate was respectively 21.8% and 17.5%. In 2010 it was 17.2% and 14.7%⁴⁷. In 2012, most FDI projects focus on the manufacturing sector (accounting for over 70%), consistent with the orientation of industrialization and modernization.

Second, FDI is significant additional funds for capital development, meeting the needs of economic growth. In the period 1991 - 2000, it was approximately 20.67 billion U.S. dollars; accounting for 24.32% of total social investment capital, and from 2001 to 2011 it was 69.47 billion U.S. dollars, accounting for 22.75%⁴⁸ of total investment. It is clearly that FDI proportion in the development of Vietnam is quite huge comparing with other sources of capital.

Third, FDI contributed significantly to revenues and macroeconomic balances. In the 5 years from 2006 to 2010, revenue in the FDI sector was more than \$ 10.5 billion, an average increase of 20%/ year. In 2011, remittances FDI sector budget (excluding crude oil) reached \$ 3.5 billion. Budget of FDI in 2012 (excluding crude oil) was 3.76 billion, up 7.4% compared to 2011 (\$ 3.5 billion) and increase of 23% compared with 2010 (\$ 3.04 billion), accounting for 18.7% of total domestic revenue⁴⁹. This helps Vietnam balance trade and avoids a deep level of trade deficit, which may lead to unstable financial situation.

⁴⁷ Hiệp hội doanh nghiệp đầu tư nước ngoài (Vietnam's association of foreign invested enterprises)

⁴⁸ Báo điện tử Đảng cộng sản Việt Nam (Communist party of Vietnam online newspaper), http://www.cpv.org.vn/cpv/Modules/Preview/PrintPreview.aspx?co_id=10004&cn_id=577544

⁴⁹ GSO

Four, according to some researchers, FDI is one of the most effective tools in the fight against poverty (Klein et al., 2001; UN, 2002), others say that the role of FDI in poverty reduction is highly overestimated (Nunnenkamp, 2004). In Vietnam, The poverty headcount in Vietnam fell from nearly 60 percent in the early 1990s to a revised figure of 20.7 percent in 2010⁵⁰. It is more than a proof that FDI can affect strongly on the labor market and level of income in the host country. Vietnam has escaped from low-income group to be in the middle-income group in 2010 (U.N report). It is obviously that there is effect of new policies and effort of people but we can not ignore the role of FDI in those achievements.

2.6. Some negative impacts:

Besides many positive impacts, FDI also cause many negatives impacts on the society and economy if the host countries do not manage well the investment. There is the dispersion of productivity is smaller in sectors with more foreign firms and foreign investors may be attracted to protected domestic markets which cause downward bias in estimating technology spillovers (Mona Haddad and Ann Harrison, 1993). The degree of ownership in the FDI does not very affect to the productivity in the foreign establishment as well as to the domestic sector. Technology spillovers are more a result of the increased competition that follows FDI than ownership sharing of the multinational affiliates (Magnus Blomström and Fredrik Sjöholm, 1999). Even the employment effects also very limited because of the high labour productivity and low ratio of value added to output of this investment (Rhys Jenkins, 2006). Vietnam and other developing countries have to face many challenges in both attracting and utilizing FDI resources.

⁵⁰ World Bank, <http://www.worldbank.org/en/news/feature/2013/01/24/poverty-reduction-in-vietnam-remarkable-progress-emerging-challenges>

In addition, there is a huge difference between the registered capital and implemented capital. The disbursement is just 47% though years (Deputy minister Dao Quang Thu)⁵¹. FDI structure also shows unsymmetrical. In the area of industry and construction, the FDI projects mainly focus on the assembly with low value. There are few projects in infrastructure; the share of investment in agriculture, forestry and fisheries are declining. The quality of investment projects is not high. There are cases that foreign investors commit to invest and establish factories in Vietnam to take advantage of incentives tax holiday but not really active. Furthermore, many FDI enterprises report losses through consecutive years (the case of Coca-Cola, Adidas...)⁵². There are signs of pricing transfer as raising the inputs value (either mechanically, equipment, copyright...) and decrease the value of sale so that the FDI companies always suffer from losses and do not have to pay income tax. This method can make the Vietnam firms withdraw from the joint venture because of continuous loss, selling shares to the partner and lost whole enterprise at the end (the case of P/S and Unilever; Da Lan and Colgate and Palmolive; Diana and Unicharm; Coca-Cola and Vinafime...)⁵³.

Since the economic reform in 1986, FDI inflows have remarkably contributed to the economic growth in Vietnam though limitation is still there. In employment field, FDI has created a number of new jobs but the majority is low skilled requirement and low value added jobs. The wages in FDI sector though are higher than private but lower than that of public sector. FDI with

⁵¹ Report of the Ministry of Planning and Investment at the 25th conference

⁵² Coca-Cola, Adidas "làm xấu mặt" 14.500 doanh nghiệp FDI ở Việt Nam, <http://dantri.com.vn/kinh-doanh/cocacola-adidas-lam-xau-mat-14500-doanh-nghiep-fdi-o-viet-nam-727078.htm>

⁵³ Unilever, Colgate 'nuốt' kem đánh răng Việt thế nào? <http://vtc.vn/1-360993/kinh-te/unilever-colgate-nuot-kem-danh-rang-viet-the-nao.htm>; Ly kì Coca Cola thâu tóm đối tác Việt, <http://vtc.vn/1-360923/kinh-te/ly-ki-coca-cola-thau-tom-doi-tac-viet.htm>

presence of MNCs participates in training domestic labour but the numbers of trained employees are very few among the total labour forces. The foreign investors helps improve working conditions but fails to create a harmony working environment, which deciding the quality of working life. The employment structure is shifted a little bit from unskilled to skilled labour but the nature does not change much because the workers only participate in one chain of the production process. In export sector, FDI increases the volum of goods export but mainly because of increase in FDI firms' exports. FDI also improve competitiveness and quality of products but it is applicable for only survival enterprises. Those firms are weak and inexperienced easily aquisited by foreign coroporation after a short time of joint venture or competition. The export goods are changing in positive trends with higher added value and quality but most inputs for production are imported, which again decreased the added value. At the end, Vietnam is still a processing factory with advantage of cheap and abundant labour forces. FDI helps in improving productivity by bringing in new machinery and technology but in fact, they are out of date technology and equipments causing slow innovation pollution to hosting country. Particulaly with technology transfer: FDI has brought new technology to Vietnam but there have been few spillovers and often firms have not brought leading edge technology, preferring to rely on cheap labour and medium-level technology. In other sectors, the benefits from FDI go together with threats. It boosts economic restructuring but cause the imbalance development among regions and sectors. The investors tend to choose economic rather than social benefit. FDI is an important additional capital for Vietnam but the ratio of disbursement is often very low. It also contributes to the national budget and reduce the trade deficit for Vietnam but simultaneously brings the dependence. As the results, the role of Government

and behavior of domestic firms is two most important things that decide the effects of FDI.

3. FDI impacts in other countries

In 2012, FDI flows to developing economies, for the first time ever, exceeded those to developed countries, by some US\$130 billion. Especially, Asia is at the second highest level recorded, accounting for 59% of FDI flows to developing countries (UNCTAD, 2013, pp3). Look at South East Asia region, there are some spots such as Singapore, Indonesia, Malaysia, Thailand...

Table 2 - FDI inflows, 2010-2012

(Billions of dollars)

Country \ Year	2010	2011	2012
Singapore	48.6	64.0	54.4
Indonesia	13.8	19.2	19.2
Malaysia	9.1	12.0	10.0
Vietnam	8.0	7.4	8.4
Thailand	9.1	7.8	8.1

Source: UNCTAD

Vietnam is a late coming developing country and FDI is an irreplaceable capital source for development. In fact, the amount of inflow FDI into Vietnam is increasing though years but its impact on the overall country is not very impressive. Particularly for the field of technology upgrading and employment, FDI in Vietnam seems not yet shown its role.

Taking into account some successful neighboring countries in the region may help finding out some good lessons to follow.

This chapter would study how Singapore and Malaysia have gained success in attracting and utilizing FDI. Although there are a wide range of elements leading to their success, two main factors, including technology upgrade and employments are concerned.

Singapore and Malaysia are studied in this research because they are two successful stories in ASEAN in attracting and taking advantages of FDI in developing their economies. On the one hand, there are many similarities between Vietnam and these two countries in economical, social and geographical conditions. On the other hand, Vietnam has faced a wide range of challenges in attracting and using FDI which have been successfully solved by both Singapore and Malaysia governments. In fact, these two countries has launched a number of incentives policies for foreign investors in order to attract FDI in high value added sectors, upgrade their technology and enhance employment quality and consequently accelerate the economic growth. More interesting, both Singapore and Malaysia create and exploit their competitive advantages like high quality labour and upgraded technology and in stead of comparative advantages to attract their investors and create the breakthroughs for their economies. Singapore has experienced from attracting FDI with labour intensive to high-tech intensive and innovation intensive while Malasysia chose the same path but moving less rapidly. Both countries carry on a number of policies and programs encouraging FDI attraction and utilization. They also use the institution advantage in a very wise manner, which support the government strategy and promote development.

3.1. Technology upgrade:

The most important means of transferring technology to developing countries remains FDI by MNCs which produce, control, and own most of the world's technology; and they are responsible for almost 80 percent of all private R&D expenditures worldwide (Dunning, 1992). Technology transfer through FDI generates benefits that are unavailable when using other modes of transfer. First of all, an investment not only comprises the technology itself but also includes 'the entire package' (Hymer, S. H., 1976). Many technologies and other know-how used by MNE affiliates are not always available in the market. Especially newer or higher-tech knowledge is often only available through the MNE itself (OECD, 2001 pp 15-17). Some technologies and know-how, even if available in the market may be more valuable or less costly when applied by the MNE that developed them, rather than by outsiders (WTO, 1998). This is especially the case when the technology is developed for the specific purposes of the MNE, or when the MNE's workers have specific skills in using the technology. Another benefit of FDI in transferring technology versus other modes of transfer is that the typical features of a MNE, for example, scale economics, capital reserves, or marketing and sales experience, can contribute significantly to exploiting the technology in a profitable manner. MNEs also offer brand names and access to regional and global markets (UNCTAD, 1999). Singapore and Malaysia, by receiving huge amount of FDI inflow together with technology transfer can easily learn and make it become national property.

3.1.1. Singapore technology upgrade:

3.1.1.1. Technology achievements:

Attracting lot of FDI capital may bring about abundant positive impacts on the overall economy if the country has a suitable plan and strategy. Technology upgrade is an important objective for every country on attracting FDI because it helps innovation and improve the structure of the economy. Singapore with skill creation, advanced infrastructure, strategic policy-making and efficient administration has become the miracle of Asia (UNCTAD, 2003).

Curently, Singapore has become one of the most powerful economies in South East Asia even though the country does not possess the condition favorable to the economic development such as rich natural resource, great population and land area among others. The key for the country's economic achievement is the suitable development strategy in which technology upgrade and improves production value chain with primary reliance on FDI is the main factor. (Penelop B.Prime, 2012). During the period 1970 - 1994 the share of investment spending on high technology industries in Singapore rose from 11.1 per cent in 1970 to 27.6 per cent in 1980, and to around one half of total manufacturing investment by 1994 (Thee Kian Wie, 2003). Starting out with emphasizing on low-tech and labor-intensive export, by 1990s high-tech trade was dominant. In the period 1999-2000, total export of 60% and import of 48% were high tech. In 2007-2008, although it fell to 48% and 38% respectively, it is a goal for many Asia countries to achieve (United Nations, 2010). The manufacturing share of total GDP was highest of 30% in 1980 and decreased to 20.9% in 2011 but this is still an impressive figure (World Bank, 2012). Alone electronics contributes 25% of the total manufacturing value-add. Of S\$16 billion in fixed asset investments in 2012, electronics accounted for almost 38.8% of the total investments. Singapore is also a major hard disk

media manufacturing location accounting for about 40 per cent of the world's hard disk media volume. Especially, Singapore accounts for 10% of the world's wafer starts in the same year (EDB, 2012). Having such success in upgrading technology, the economy must thank to great improvement in technology efforts; human resource base and institutions and incentives (applying knowledge to production process).

Singapore is a late developed economy but being one of four successful technology stories together with Japan, South Korea, Taiwan and Hong Kong (UNCTAD, 2003). Late developed countries have both advantage and disadvantage in adopting new technology. They can use technology of developed one without spending resources on risky and uncertain researches. They can adapt existing one and can choose the best one suitable for them. But in fact, difficulties is more because they have to spend much time and skill to get use to new technologies, do not know which is the one they need or having trouble with patents... Technology is mainly transfer by TNCs but they tend to *transfer the results of R&D rather than the process itself* (Barry Naughton, 2006; Lall, 2000; Lall, 2003). Even though all countries have equal access to the technology but depending on the “technology capacities”, the adaptation results are different. They can either forcing domestic firms or depending on FDI to upgrading technology (Lall, 2000). Observing Singapore success as the U.S.S.R in 1950s (Krugman, 1994), the role of technology diffusion is inevitable. For Singapore, it has picked a right path with right strategies to overcome obstacle and become a good example of success of innovation.

3.1.1.2. Measures to success:

a. Government policies:

Since its previous Trade Policy Review in 1996, Singapore has continued to pursue liberal trade and investment policies, while deepening internal reforms, especially in key services sectors such as IT, Telecommunication, Education... (WTO, 2000). Firms that are part of a global competitive network, which forces them to remain competitive, appear to have more incentives to invest in training and education and will employ more skilled workers, and are also more likely to introduce the latest technology and to use more skilled workers (Dirk Willem te Velde, 2001). Hence, the key issue is that whether the host countries are capable of adopting it or not. The five key strengths that the country includes a government committed to R&D; an integrated and well-connected public sector; public-sector research institutes that engage in both basic and mission-oriented R&D to develop a spectrum of capabilities; an educated and skilled workforce and a supportive business and regulatory environment (Poh, L. C. 2010) which can be easily seen that the Government pay most attention in improve science and technology skills.

Since Singapore concentrated on high-tech production and capital intensive development, it has applied many policies to make effective foreign investment. The government has played an active role in encouraging the development of technology by establishment of supporting organizations, issuing new regulation or implementing tax incentive. There are abundant of programs and institutes to be established to facilitate technology upgrade: *“In 1968, the Ministry of Science and Technology was established to promote the role of science and technology in the education system and the economy. In the late 1980s and 1990s a number of high technology research oriented institutes were set up including the Institute of Systems Science, the Institute*

of Molecular and Cell Biology, the Industrial Collaboration Centre of the National University of Singapore's Science Faculty, the Innovation Centre of the National University of Singapore's Engineering Faculty”⁵⁴.

Among the most effective may be listed as below:

The Committee on National Computerization (CNC) was form in March, 1980 with the objective of developing Singapore to a software center development. It actively participated in the process of training staff for both public and private sectors (Pek Hooi Soh and James Ang, 1993).

The establishment of Economic Development Board (EDB) in 1961 is a huge remark in the technology development of Singapore. It assisted private industry in expansion the market and at the same time can grant incentives, set up industrial estates, and invest directly in new and expanding enterprises. EDB acts like the backbone for the whole economy and being the main factors boosting the technology upgrades. To operate effectively, there are some main divisions under it. The Board's Investment Promotion Division (IPD) encouraged the private sector to establish new industries or to expand existing plants (EDB, 1963, p.11); the Singapore Institute of Standards and Industrial Research (SISIR), which is responsible for disseminating technologies; the National Productivity Board, which provides management advice; and the Technology Development Centre (TDC), which helps local firms identify their technology requirements and procurement. To support business firms, EDB has launched a series of initiatives to encourage the development of local enterprises. One of the key programmes initiated is the

⁵⁴ The information is drawn from Human Resource Development for Continued Economic Growth – The Singapore Experience, Paper presented at the ILO Workshop on Employers' Organizations in Asia-Pacific in the Twenty-First Century Turin, Italy, 5-13 May 1997

Local Industry Upgrading Programme (LIUP), which encourages ties between local firms and foreign MNCs by long term supply contracts of TNCs to domestic enterprises. From 1968, EDB just concentrated on FDI activities and transfer other functions to different bodies such as financing to the Development Bank of Singapore, technical consultancy services and projects to the Productivity and Standards Board (PSB), industry to Jurong Town Company (JTC).

In 1994, EDB has started a Cluster Development Program worth S\$1 billion, focusing on companies in the semiconductor electronics, petrochemical and processing industries. Cluster approach as a tool of industrial policy to attract FDI and increase linkages and spillover effects. Cluster approach in order to determine the value system dominant and detection distance and potential. Since then the government can help avoid the policy reasons underlying causes of market failure and can support the service or infrastructure to prepare for general purpose (Dirk Willem Te Vedle, 2003). The achievement later on in the biomedical an industrial sector has proved this is the suitable trend for development.

Consequently, in 1982 the Civil Service Computerization Programme (CSCP) was launch to expand the IT application in the country. The CSCP helped reduce cost of administration in government bodies and practice people to work with computers. In the same time, it encouraged firms to study new and costly technology without having to commit their own investment (Pearleen Chan, 1990). This program started with 10 larger Ministry and covers most of the remaining later on. To facilitate the program, the Computer Information Systems Departments is set up in each Ministry. CSCP become

an effective tool in diffusion of IT to all corner of the society, turning it into a popular service in normal lives.

In 1985, through National Computer Board (NCB), the government introduced the National IT Plan (NITP) to develop more IT expert, promote IT application, and concentrate on R&D...for the future. Together with it are Small Enterprises Computerization Programme (SECP) and Small Enterprises Computerized Accounting Programme (SECAP), which was aimed at creating opportunities for firms to meet and work with IT to improve production quality. Firms are provided with techniques, finances, market development assistant so that they can utilize the best capability (Jamus Jerome Lim, 2003).

The former National Science and Technology Board (NSTB), A*STAR (Agency for Science, Technology and Research) was established with the primary mission to raise the level of science and technology in Singapore. It covers 14 biomedical sciences and physical sciences and engineering research institutes, and six consortia & centres, located in Biopolis and Fusionopolis as well as their immediate vicinity (National survey of Singapore R&D 2011, 2012). A*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also promotes research in the universities, hospitals, research centres, and with other local and international partners.

The IT2000 Plan was released in 1992 to shape Singapore as a “intelligent Island” based on an advanced National Information Infrastructure (NII). IT2000 was designed to improve IT skills, living standard of the

people. In 1999, another plan named Technopreneurship (T21) focused on innovating education system, investment and revamping the legal framework to support technology development was started. The Infocomm21 Masterplan marks the moment Singapore transform to a global ITC hub with presence of IT in all level of the economy. This is the era of free communication market with competitive price and abundant choices. Even the existing regulation was also revised to fit with international standards (Chia Siow Yue, Jamus Jerome Lim, 2003).

Another very important agency in the development of Singapore is Temasek which was incorporated under the Singapore Companies Act in 1974 to hold and manage investments and assets previously held by the Singapore Government⁵⁵. It centers on Transforming Economies, Growing Middle Income Populations, Deepening Comparative Advantages and Emerging Champions (Temasek Review 2012). The establishment of it reduces the burden on other organization of the government and facilitates an independent operation with effectiveness. Till now, it is a very successful investment corporation not only in Singapore but also all over the world⁵⁶. Together with many programs are those functional organizations to ensure the effective operation such as:

- Data Storage Institute
- Environmental Technology Institute
- Gintic Institute of Manufacturing Technology
- Kent Ridge Digital Labs

⁵⁵ They are Government linked company such as Singapore airlines, National shipping line, Neptune orient lines, etc...

⁵⁶ According to the Temasek review, in 2012 the share of investment was 42% in Asia, 30% in Singapore, 14% in Australia & New Zealand, 11% in North America & Europe. The investment spread over many sector like Financial Services, Telecommunications, Media & Technology, Transportation & Industrials, etc...

- Institute of Molecular Agro-biology
- Institute of Molecular and Cell Biology
- Institute of Microelectronics
- Institute of Materials Research and Engineering
- Bio-process Technology Centre
- Centre for Remote Imaging, Sensing and Processing
- Centre for Wireless Communications
- National Supercomputing Research Centre
- Centre for Signal Processing (National Science and Technology Board (Singapore))

The government policy is the key factor for Singapore successful innovation today that no country ever achieved.

b. Tax incentives:

Taxing, one of the most threatening issues to investors is also strongly supported by the Government particularly in high-tech sectors. Excise taxes are levied on a number of products, including motor vehicles, alcohol products, motor spirits, and motor oil, a large percentage of which are not produced domestically (WTO, 2000). Singapore nearly has no barrier to any kind of businesses, even more attractive than domestic market of some other countries with high restriction on special products.

The government has used taxation policies to encourage firm investment in R&D field effectively. Having such a low corporate tax at 17% but Singapore still has many policies on tax incentives to attract investors to priority sectors. Since 2003, companies have been able to claim a 100% deduction for R&D expenses if they were in the manufacturing or services

sectors (Simon Poh,). Especially, from 2011 to 2015, the tax deduction is further raised to an unprecedented 250% (for Singapore based R&D) or 300% (for non Singapore based R&D) of expenses on the first S\$400,000 of expenditure on six categories of activity which includes: R&D, training employees... Additional 50% deduction for certain R&D expenses incurred in Singapore; and 200% super deduction for certain expenses approved by government. Any other R&D expenditure, including money spent on R&D done overseas, will enjoy 100% tax deduction (Nexia International Report, 2010; Global Survey of R&D Tax Incentives, 2011). Thus, generous tax breaks offered by the Singapore government, which translates to a government subsidy of up to 68 cents for every \$1 of qualifying R&D expenditure spent (Simon Poh; Productivity and Innovation Credit Scheme for R&D, 2011). This is such a marvelous choice for any investors in Singapore: concentrating on R&D that benefits both investing firms and the economy. The policy turns Singapore into first destination of not only top TNCs but also all leading firms with desire of new invention because they have the utmost condition to develop in this country.

b. Human resources:

Singapore pays much attention to improve the human capital by all possible means. In the 1960s, Singapore's education was fragmented basically by race, language and habitat lines (Wilson, 1978). The Government planned to launch a series of education projects were with the hope of helping Singapore to obtain industrialization. For example, in 1970, the Vocational and Industrial Training Board (VITB) was launched to provide technical education for workers who dropped out of secondary school (Sung, 2006).

The National University of Singapore (NUS) and Nanyang Technology University (NTU) are very dynamic in educational activities by setting up joint research committees with the Ministry of Trade and the Ministry of National Development. To improve the quality of the work force, the NUS expanded its Master and Doctoral programmes. The number of research scientists and engineers (RSEs) grew by 4.2% from 28,296 in 2010 to 29,482 in 2011 in which Ph.D. degree accounts for 55.5% in 2010 (National Survey of R&D, 2010). In the private sector, the number of PhD RSEs grew by 6.2% from 1,375 in 2010 to 1,460 in 2011 (National survey of R&D in Singapore 2011, 2012). This is a positive signal for the whole economy for showing that Singapore labors are qualified and capable of doing high quality jobs. It ensures the goal of national development strategy towards a “Sustainable Development”⁵⁷.

Singapore has national policies to attract foreign talent all over the world due to limit in population and low rate of birth (Linda Low, 2001; Chew Soon Beng & Chew, Rosalind, 1995). The former Prime Minister Lee Kuan Yew has clearly defined that talent is the key factor deciding the competitiveness and economic development. Therefore, throughout the years, attracting talent, especially foreign talent has become a top priority strategy of Singapore. Since 1968, Singapore has been free to receive even unskilled/semi-skilled foreign workers for the lack of labor force. Later on, there is control over foreign workers. Unskilled or semi-skilled workers were allowed to stay and work because they can lower the costs for labour-intensive businesses as well as supply workers for dirty, dangerous and demeaning jobs (3D jobs) that most Singaporeans shun (Chia Siow Yue,

⁵⁷ According to Inter-Ministerial Committee for Sustainable Development Unveils Blueprint 2013

2011). However, the Government restricts the number by specific regulation such as low wages; no family dependent, no pregnant.... Meanwhile, skilled and talent worker are always enjoyed the best condition. In addition to being paid with high salary, they are also allowed to bring family members to live together. They are permitted to live permanently in Singapore with citizenship in just few days, which is the fastest pace of immigrants in the world (Chia Siow Yue, 2011). After the Asian financial crisis, Singapore established the Singapore Talent Recruitment (STAR) Committee in 1998 to attract foreign talents. By 2010, foreigners formed 36.4% of the population and accounted for 34.7% of the labour force Singapore has attracted an impressive list of eminent scientists of the world (MOM, 2013). Foreign talents in Singapore are neurological surgery, the software developer, the banker, the super world-class experts and professors in the field of research and development.

Singapore also identifies education as an effective channel to attract foreign students (Brenda S.A. Yeoh and Weiqiang Lin, 2012). Therefore, in addition to improving the education system, Singapore has adequate remuneration for the doctoral professor. Currently, students in Singapore are studying in one of the most reputed training centers of the world such as Nanyang Technology (NTU), Management Development Institute of Singapore (MDIS), and National University of Singapore (NUS)...

The Singapore government is ready to provide the best condition for talent people. They are willing to lend money to foreign students studying in Singapore to pay for the necessary costs of living and learning with the condition that after graduating with high academic results, the bachelor is committed to working for a Singapore company at least 3 years to repay.

The policies in Singapore aim to limit corruption, encourage government transparency, and create momentum for the employees to devote for the development of the country (Jon S.T.Quah, 2003). Singapore Ministers have higher wages than all the ministers in the richest nation on the planet. Actual situation of Singapore shows that the leaders now are all very excellent. Lee Kuan Yew, the first Prime Minister of the island nation was graduated in prestigious Cambridge University. Former Prime Minister Goh Chok Tong also graduated from Williams College, the U.S. The current Prime Minister Lee Hsien Loong also graduated from the University of Cambridge. Singapore Ministers are also graduates of famous global universities. The government has made a very clear view that strong leadership is the driven motive for developing countries, should not be based on relationship or by material factors (Ha Minh, 2008). With all the properly policies, Singapore deserve the name of "attracting talent center" of the world.

d. Business environment:

Singapore offers the best condition for investors to come and doing business. Since independence in 1965, Singapore Government has built the reputation of uncorrupted, efficient and welcome competition economy, even beating Hong Kong for the choice of many investors (Kevin Brown and Sundeep Tucker, 2010). In both 2012 and 2013, Singapore is at the first place out of 185 economies in the "Ease of Doing Business" rank while Hong Kong was at the 2nd position (Doing Business 2013, 2013). It also placed in number 1 in "Trading Across Borders", which relating to transaction time, procedures and trading cost. In addition, Singapore is number 2 in "Protecting Investors" category which facilitates investors in transparency of related-party transactions, liability for self-dealing and shareholders' ability to sue officers

and directors for misconduct (Doing Business 2013, p62). In 2013, Singapore ranks at 5th out of 185 economies and 1st in the region. The business doors are always open to all investor at any time.

Singapore government aims to attract FDI by all means: good business environment, clear legal regulation, tax incentive, government supports through agencies and policies... It is always at the top of FDI inflow in the region and stands out as a country with extraordinary success in attracting FDI (Park Donghyun, 2006). Moreover, Singapore leads the world as the most globally connected economy with far-reaching tentacles of trade (Dickson Li, 2010). International trade is equivalent to 300% of GDP (WTO, 2000). On the meeting of Prime Minister Lee Hsien Loong with President Barack Obama on April, 2013, he again promised that Singapore will continue to welcome foreign talent and investments to its shores.

e. R&D spending:

Acknowledgement the importance of the innovation, Singapore spends quite lot of money in R&D activities because it understand that without it, the economy can not maintain the sustainable development (Su-Ann Mae Phillips & Henry Wai-chung Yeung, 2003). A Science Park was established to facilitate R&D activities. The R&D expenditures were from \$6.5 billion in 2010 to \$7.4 billion that is 2.1% of GDP in 2010 and increased to 2.2% in 2011. Compared to other economies, the figure is only under some advanced economies like Israel (4.4%), Korea (3.7%), Japan (3.3%), Denmark (3.1%), Switzerland (3.0%), Taiwan (2.9%), United States (2.9%) and Germany (2.8%)⁵⁸. Especially, the spending in the private sector is always higher than

⁵⁸ Economic survey of Singapore, 2012

in the public sectors. For every \$1 spent in research from public sources, \$1.64 was spent by businesses in 2011 (National survey of R&D in Singapore 2011, 2012). High percent of spending for R&D helps the economy improve the quality of the existing technology and invent new ones. It also facilitates the human capacity development of the labors forces. With low starting point and shortage in natural resources as well as fundamental factors for development, this is a great achievement of Singapore.

On the diagram below, Singapore spending for R&D places at a very high level in the world, which is quite impressive.

Figure 3 – World of R&D 2011

Source: Battelle, R&D Magazine, International Monetary Fund, World Bank, CIA World Factbook, OECD

The patenting activity of R&D performers in Singapore shows a positive trend. The number of patent applications has increased by 8.6% from 1,762 in 2010 to 1,913 in 2011. In the private sector, 1,305 patents were filed in 2011, representing a 3.3% increase comparing to 2010. In the public sector, patent applications continued to grow, increasing from 499 in 2010 to 608 in 2011 (Economic Survey of Singapore 2012). It provides a platform for applying high tech innovation because technology upgrading depend lot on the ability of host countries. One of the most successful achievements of Singapore government is that they work very well in encouraging private sector to participate in the innovation process. Their shares are even higher than that from the public sector, which is really surprised. Singapore has prepared very well not only for receiving but also self-inventing new technology in all fields. Singapore government has successful in directing IT diffusion overall the country. In other words, the policies of the government in forming and pushing up activities of IT sectors are the key factors for today's achievement in technology.

f. Singapore institution:

It is clear that the institution of Singapore contributes a major part for success today. Since independence, Singapore has changed from production oriented city state to a developmental city state in less than half a century (Kwon, 2005). The People's Action Party (PAP) has adopted the developmental state strategy for Singapore's best interest. Singapore has only one labor union that is directed by the PAP government. As a result, many MNCs invested in Singapore and Singapore soon became a solid manufacturing base (Sung, 2006). The strategy of a strong state development

helps Singapore guarantee the best national benefit which includes promoting FDI resources to back up the growth.

3.1.2. Malaysia technology upgrade:

3.1.2.1. Overview:

In the Southeast Asia region, Malaysia is the second country behind Singapore succeeded in attracting and utilizing FDI sources. It is one of Asian tiger that gain great results in technology-intensive exports (Lall, 2003). Malaysia also has many similarities with Vietnam in the development element and it can be a good example for Vietnam to follow. In economics, Malaysia is an upper-middle income that is a closer distance for Vietnam to achieve. Taking into account the impacts of FDI from independence (1957), we can see thoroughly the long process to the present victory.

3.1.2.2. Measures for success:

a. Government policies:

Since early 1970s, Malaysia government has recognized the importance of FDI particularly in the process of technology transfer and started with Income Tax Act 1967, Investment Incentives Act in 1968 to promote manufacturing exports and facilitate investment (Mida.gov.my, 2013)⁵⁹. The country pursues the target of increasing level of technology by attracting more FDI because TNCs are the main source of technology in the world (Magnus Blomström & Fredrik Sjöholm, 1999). As the results, abundant of programs and institutes were formed to facilitate attracting and utilizing FDI. Such activities may be named: The New Economic Policy (NEP) in 1970 focused on manufacturing sector as the growth sector to spearhead economic

⁵⁹ Official website of Malaysian Industrial Development Authority (MIDA)

restructuring and employment generation. Free Trade Zones (FTZs), where enterprises enjoyed lots of tax and tariff incentives was a key element of the policy (Premachandra Athukorala, Jayant Menon, 1996). Right after that, Free Trade Zones Act was established in 1990 to facilitate operations and attract foreign investment in these areas.

At the same time, the Government was also very active in adapting and attracting high-tech projects. To boost the R&D activities, the National Council for Scientific Research and Development was established in 1975 to provide policy advice and to co-ordinate allocation of public S&T resources. The creation of the Ministry of Science, Technology, and Environment (MOSTE) followed in 1976 was partially completed the management machine of Malaysia Government and provided favorable condition for FDI firms. In early 1986, the government issued the Industrial Master Plan, 1986-1995 (IMP), which identified the vital role of technological base for future growth. The Intensification of Research in Priority Areas (IRPA) programme in 1986 gathered all public R&D funding under a single allocation and review process. It provides a strategic policy instrument with which to harness public research investments to industrial development goals. In 1990, Action Plan for Industrial Technology Development (APITD), was found to diagnose five basic structural weaknesses in Malaysian technology development such as Heavy reliance on a few manufactured products, Low local content, MNCs perform few high value-added....⁶⁰. Malaysian Technology Development Corporation (MTDC), a joint public-private technology venture capital company was established in 1992 to facilitate the commercialization of public research findings. In 1997, the new laws elaborating IT-related intellectual

⁶⁰ According to presentation of Mr Toh Kin Woon, Former State Minister of Planning, Education and Human Resource Development in Penang, Malaysia

property rights, and beginning to enforce existing intellectual property rights laws with a newfound zeal also participate actively in encouraging firm investing on R&D (Greg Felker with Jomo K.S., 2008).

The expenditures for science and technology from the late 1980s to early 1990s increased rapidly. It rose from RM540.5 million (approximately US\$216 million) under the Fifth Malaysia Plan 1986-90 to RM1,160 million in the Sixth Plan 1991-95, with the share of capital investments in S&T infrastructure (as opposed to current expenditure on R&D) rising from 23 per cent to 48 per cent of the total (Greg Felker with Jomo K.S., 2008). Some of effective SEZs may be named as follow: Kulim High-Tech Park (KHTP), focus on high-tech manufacturing; Technology Park Malaysia (TPM), focus on R&D; Multimedia Super Corridor (MSC), focus on software and IT services...(Mun-Chow Lai and Su-Fei Yap, 2004).

b. Tax incentives:

Taxing is one of the most effective instruments in trade which can limit or boost investment on the purpose (Michael J. New, 2001). In Malaysia, the Government applies three methods of tax incentives to encourage the investors: Investment Tax Allowance (ITA); Super Deductions; and Enhanced benefits for Pioneer Status (PS). For the first category, companies performing in-house R&D to further its business may claim for allowances of 50% on the qualifying capital expenditure incurred within 10 years (MIDA, 2012). R&D service providers may claim for an allowance of 100% on the qualifying capital expenditure incurred within 10 years⁶¹. For the second category, a deduction of 200% may provide to either companies performing in-house

⁶¹ Applied to companies that are certified by the Malaysian Industrial Development Authority (MIDA).

R&D to further its business of non-capital expenditures or donations to approved research institutes; payments for the use of the services of approved research institutes, approved research companies, R&D companies, contract R&D companies; expenditures on R&D activities undertaken outside of Malaysia, including the training of Malaysian staff⁶². The "pioneer status" is provided by the Minister of Finance to companies deriving income from certain activities and products that benefit the Malaysian economy such as R&D companies, high tech companies, software development companies, and manufacturing companies capable of producing global products. Pioneer Status company statutory income is exempt from tax for a period of 5 years and with government approval, it can be extended for another 5 years (Global Survey of R&D Tax Incentives, 2011). Such encouragement will boost investment in R&D field and gradually strengthen the economy.

The first R&D specific incentive was introduced in 1982 with 133% deduction allowed for research expenditure approved by the Minister of Finance (MIDA, 2012). This incentive has been up heaved to a double deduction in 1986. Realize the important role of technology and R&D activities, the Government encouraged the investors by issuing priority conditions that: if a company invested in venture companies, it can be exempted from gains from the disposal of shares in venture companies provided that 100% of the funds are invested in venture companies involved in high-risk venture or new technology approved by the Minister of Finance (ITA 1967, section 60D⁶³). After section 60D was deleted in 2000, the new tax incentives were issued: a venture capital company is given a full tax

⁶² Company must be approved by the Minister of Finance and claims are submitted and reviewed by the Inland Revenue Board (IRB).

⁶³ Section 60D deleted by Act A 600 of 2000 s8, shall have effect for the year of assessment 2000 in respect of the basis period ending in the year 2000 (current year basis) and subsequent years of assessment.

exemption on all sources of income at the statutory income level for up to 10 years or the life of the fund established for purposes of investing in a venture company, whichever is the lesser (pwc report: Tax Incentives to Promote Innovation, 2011). Obviously, those taxation policies had positive impacts on Malaysia technology development by attracting more and more investment in this priority sector. The participation of the Ministries in approving the companies, projects helped improving quality of technologies invented as well as workers capability.

c. R&D spendings:

The Government of Malaysia acknowledges the importance of R&D and tries to increase the spending on this category year by year. By 1987, after a decade of changing in policy and development path, Malaysia was the world's largest semiconductor exporter (UNCTAD, 1995). It recorded a huge effort of Malaysia in the transition from labor-intensive assembly to a deeper and higher value-added industrial structure ((Mun-Chow Lai and Su-Fei Yap, 2004). With a gross expenditure on R&D (GERD)/GDP of less than 0.5 per cent during the period 1990-2000, Malaysia's GERD/GDP was 0.72% in 2008; 0.84% in 2009 and about 0.7% in 2011 and 2012 (Martin Grueber, 2011). However, the Government aims to increase this ratio to 1% of total GDP by 2015 to maintain a sustainable development with independence of new technology.

Moreover, Malaysia was very successful in generating the participation of private sectors in R&D activities. The private sector accounts for 70.5% in 2008 and 69.9% in 2009 of total Malaysia's GERD, which is much higher than that in the Government institutes (9.9% and 6.4% in 2008 and 2009

respectively). This share has been quite constant, averaging at about 69.9% of the GERD since 1996 (National Survey of Research and Development, 2012). The policy of depending on private sectors to develop was a very judicious decision because the government alone cannot afford both administration and investment at the same time effectively. Besides internal efforts from business enterprises, the Government is always ready to support them in funds and other procedures⁶⁴. Thus, the private sectors in Malaysia are very strong and active in R&D activities but they are also completely encouraged by the Government anytime and by any means such as tax incentives, financial supports...Hence, the spending in R&D of both sectors can boost the technology upgrade and build a solid foundation for Malaysia to grow and development.

d. Human resource:

Human capital is also plays a significant position in the development strategy of Malaysia. With many efforts of improving the quality and quantity of skilled labour, Malaysia has achieved some remarkable results. The graduates in sciences and engineering, who are the key factor for absorption of technology in Malaysia accounted for 36.7% of total labor forces (Labour force survey report, 2012). Not only impressive in the region but Malaysia is overpass many other developed countries with the rank of 4 in the world in 2012. These abundant high-skill workers allow Malaysia to perform high level of production and researches. With that, it can also come to the new stage of possessing and exporting technology instead of importing from developed countries as before.

⁶⁴ In 2008, the Government provided 6.15% of R&D expenditures to the private sectors, according to MASTIC, 2012

Another highlight of the economy is that the osmosis of new technology. The rate of high tech export after deducting re-import products is 29.2%, which stands at 2nd position out of 142 countries. The high-tech export alone accounted for 43% of total manufactured export products in 2011 (World Development Indicators, 2013). The high-tech import is also very high with 27.8%. Malaysia economy seems to be successful in concentrating on high-tech products and export-orientation. The high percentage of high-tech import and export shows that their personnel are capable of using, understanding and producing modern technology. The market capitalization percentage of GDP is 137.2% - number 4 in the world to prove that the investment is highly effective (Soumitra Dutta and Bruno Lanvin, the Global Innovation Index 2013). Such indicators show a very attractive environment for MNCs and global profit seeking corporations with the purpose of sustainable and long term investment.

In terms of the number of researchers (headcount), the highest estimated number of researchers (53,304) is recorded in 2009. In 2008, the number of researchers per 10,000 labors is estimated at 28.5 (National Survey of Research and Development 2008, 2012). These talented employees are ready for challenging jobs which requires special skills. The country has been transited marvelously from the advantage of cheap labors to the strength of qualified employees. It also targets at higher goal in the near future with 50 researchers per 10,000 by 2015. With clear and specified policy, Malaysia will soon reach this goal. Once over come this difficult stage, Malaysia can be confident to grow and develop much further to have a solid position not only in the region but also in the international stage.

In the Global Innovation Index 2013, Malaysia's ranking is 32 out of 142 countries (Soumitra Dutta and Bruno Lanvin, the Global Innovation Index 2013). The pattern applications of resident investors in 2010 were 1,231 and in 2011 were 1,076, which placed Malaysia in the top group of the world. More impressively, this figure for non-resident investors was nearly 5 times higher than that with 5,152 in 2010 and 5,376 in 2011 (World Development Indicators, 2013). Obviously, Malaysia has been so successful in attracting FDI and generating these precious sources to the desired path of high-tech development and boosting employees' capacity. It is the evidences that this developing country is transforming into a perfect destination for all investors in global scale with advantage of labors, technology as well as government supports.

e. Malaysia institution:

In Malaysia, The government follows the developmental state model, particularly during more than two decade long premiership of Mahathir Mohamad, from 1981 till 2003 has contributed to the fairly rapid economic development. The government actively encouraged the aggressive participation of foreign companies in its economy, which was one of the key drivers for industrial growth. (Edmund Terence Gomez, 2006). Malaysia successful industrial transformation, growth since the 1960s is partially thanks for globalized economies with market-oriented solutions based on foreign investment (Su-ming Khoo, 2007). Hence, institution plays as a decisive role in development of the country.

In summary, Singapore and Malaysia have achieved a number of technology upgrade through the mean of FDI. The main factors for the

success are the Government policies, human capital supports, R&D activities, tax incentives and institution.

3.2. Impacts of FDI on employment:

3.2.1. The case of Singapore:

3.2.1.1. Creating new jobs:

Inward FDI in the form of MNCs brings about many benefits to the host countries by creating high-quality jobs and introducing modern production and management practices (OECD, 2008). Parallel with technology upgrading, employment is the key factor affecting the development of not only Singapore but also every country over the world. High rate of employment reduces the burden for the economy, improves output and enforces market circulation and reduce poverty (OECD, 2009). It also increases income level of labor by competing in attracting talent workers among enterprises. In 1965, Singapore was a new independent country with fast population growth, small market and just trying to attract FDI to create jobs (Alexius A. Pereira, 2006). Starting with the policies of attracting FDI by low cost labors or labor-intensive projects, Singapore has struggled hard to draw attention from the investors. However, FDI/GDP ratio increased to 26.7% in 2011⁶⁵, the role of FDI in the development seemed to be cleared than anytime. FDI and MNCs gradually become an indispensable part of the economy and contribute lot to the spectacular development of Singapore today. At independence, the unemployment rate was about 10% per year and two third of the population lived in the poor condition (Belinda Yuen, 2008). The situation of Singapore was worse than many other neighbor countries. Since the manufacture sector was weak and accounted for a small proportion

⁶⁵ Data may be seen from <http://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS>

(12 per cent of gross domestic production in 1960), the employee skills were low and mainly worked processing fields such as assembling, light engineering...Singapore labors forces were abundant due to post-war baby boom in the early 1950s and the free immigration policy (Goh Chor Boon, S. Gopinathan, 2006) but the quality was poor and did not meet the requirement of the foreign investors. The share of FDI in total GDP in 1970s was very low, about 5% (Mete Feridun and Yaya Sissoko, 2011). FDI did not have chance to place have much role in the development of Singapore at the beginning of independence though the Government was aware of its importance.

3.2.1.2. Improving the labours quality:

FDI is an effective tool in changing the quality of Singapore human capital. Together with the positive change in FDI quantity and quality, employment is one of leading effect that FDI brings about to Singapore. Presently, FDI in Singapore mainly focus on high tech, qualified workers and high salary rate. The unemployment rate stands at 2.8% in 2010 and decreased to 2% in 2012⁶⁶, which is among the lowest rate in the world⁶⁷. Literacy rate is 96% in 2011 and 2012, and the quality of workers has been improved significantly. In 2012, the lower primary qualification and primary accounted for 7% and 5.2% of total labor force seperately. Meanwhile, the contributions of Diploma & Professional Qualification as well as Degree are 18.7% and 29.4% (Comprehensive Labour Force Survey, MOM, 2013). The workers with high skills dominate the labor market increase the wages and make Singapore become a lodestone with the investors. The FDI resources

⁶⁶ Data may be seen from <http://www.mom.gov.sg/statistics-publications/national-labour-market-information/statistics/Pages/unemployment.aspx>

⁶⁷ When comparing with other top developed countries in the world in 2010 such as Australia: 2.9%; Canada: 1.8%; Hong Kong: 2.4%; Japan: 0.7% Korea: 3%; Taiwan: 1%; New Zealand: 2.3% United Kingdom: 3.3%; United States: 1.6% (Singapore in Figures 2013)

help the country creating new jobs and put pressure to meliorate the skills of labors effectively.

3.2.2. Malaysia:

3.2.2.1. Creating new jobs:

According to some researchers⁶⁸, FDI inwards Malaysia does have positive impacts on employment but it is not very clear or nearly no co-integration in the long term. An increase of 1% in FDI can cause a decrease of 0.009% in unemployment and lead to increase of 1.219% in GDP (Mohd Shahidan Shaari, Nor Ermawati Hussain, Mohd Suberi bin Ab. Halim, 2012). FDI approved in 2012 are expected to create new employment opportunities for 182,841 people out of about total 12,651,070 labor forces, which is nearly 1.5% (MIDA, 2012). This is not a very high rate but still FDI brings new employment opportunities to the Malaysian.

The unemployment rate in Malaysia decreases continuously through years to 3% for 2011 and 2012 (World Economic Outlook Database, 2013). This is a really impressive signal in the context of post global financial crisis, which many countries includes big part of European⁶⁹ are in debt and unemployment period. This must thank to lot of FDI inwards to Malaysia because FDI does not only creating direct jobs but also abundant of indirect job and brings about diffusion effects that may profit domestic firms and the

⁶⁸ Stan Lee Shun Pinn, Kok Sook Ching, Mori Kogid, Dullah Mulok, Kasim Mansur and Nanthakumar Loganathan in the research *Empirical Analysis of Employment and Foreign Direct Investment in Malaysia: An ARDL BoundsTesting Approach to Cointegration* and Mohd Shahidan Shaari, Nor Ermawati Hussain, Mohd Suberi bin Ab. Halim in the research *The Impact of Foreign Direct investment on the Unemployment Rate and EconomicGrowth in Malaysia* have used some mathematic method and formula to find out the relation between FDI and employment in Malaysia.

⁶⁹ This may include Greece, Italy, Spain...

labor market. Many subsidy industries profit from the operation of FDI firms in some ways such as providing materials, support workers, facilities....

3.2.2.2. Improve labor skills:

FDI in Malaysia has helped the country increase the labour quality, which is a fundamental factor for sustainable development (OECD, 2009). In 2012, the jobs created by FDI in Malaysia are mainly in high skills nature with 76,631 employments in the manufacturing sector, in which 56,353 or 73.5% will be in the managerial, technical, supervisory and skilled manpower categories (Dato Sri Mustapa bin Mohamed, 2013; World Development Indicators, 2013). This is the popular trend recently as the Government wants to focus on high-quality and high-added value productions. Hence, FDI in Malaysia generates a numbers of new jobs and more important, it improves the quality of labors by higher requirement and pressures. For example, competition forces companies to invest more effectively upgrade technologies and improve employees' quality or utilization of new technologies and qualified workers from the FDI enterprises. FDI in Malaysia is used in a wise way to help the Government restructure the economy and meliorate the labor forces.

For those positive impacts, especially the causal relation between employment and FDI, it is shown that this is the significant factor contributing to the employment growth in Malaysia. The Government should concentrate on attracting and utilizing the resources in the optimum way. The facts have proved that Malaysia was quite successful in doing this and will continue to maintain those effective policies together with many updated strategies.

3.3. Achievement of Singapore and Malaysia

3.3.1. Policy consistency:

Malaysia and Singapore do have a throughout strategy for FDI. They soon recognized the importance of FDI for the development of the economy and the Government uses all possible channels to attract this sources. They have used the policy of liberal investment and support domestic or preferential firms by special subsidies but not protection mechanism. The policies issued were also very suitable for each period of development. At first stage, both countries were awarded of actual condition and focus on attracting FDI to deal with job creation and the FDI in this period were mainly labour intensive. After being successful in attracting FDI for a while, they have improved the quality of the investment with target on high tech and high value added. The policy must go gradually from low point to higher point and must be suitable with the specific condition of each country.

Singapore was moving from attracting FDI with labors intensive to skills intensive, capital intensive, technology and service intensive and now is knowledge and innovation intensive. In the 50-60s, Malaysia encouraged foreign direct investment into the export by reducing the income tax up to 3 years for businesses invest in selected sectors. From the 90s, Malaysia encourages FDI in high-tech industries; fewer emissions are clearly categorized by the industry investment incentives. They were seeking out a justifiable policy for each period together with support developing plan. Both countries have gone through the stage of attracting FDI in labour intensive and moved up to capital intensive, high-tech intensive partially by improving quality of workers and domestic firms' capability.

Tax incentive is one of the most effective tools that Singapore and Malaysia have used to attract and control the FDI as their purpose. The privileges are up to 300% or 200% tax for projects related to high-tech or R&D. The national policy helps encouraging business, particularly private firms to focus on R&D activities, which will benefit themselves as well as the national development. As a result, the share of private investments on R&D is always larger than that of the public sector. They do really successful in utilizing a very important and enormous resources of the country in boosting the economies. Spendings on R&D of Singapore is among the highest in the world and Malaysia is in the second position in South East Asia just below Singapore. The government acknowledged that only by capacity, they can maintain sustainable development.

3.3.2. Human capital:

Singapore is the most attractive place for talent people and Malaysia is also having many effective policies on immigrants, jobs condition, and wages to attract quality workers. As the results, FDI inflow to Singapore and Malaysia is always in the top though they do not have advantage of low cost labour. They are now going to the stage of exporting experts to other countries around the world. Labours in two countries are high skilled, qualified and high paid. The ratio of unemployment is also very low due to the demand for workers are always high.

Singapore and Malaysia concentrated lot on education to improve human capabilities to adapt with FDI requirement. They have a national policy and a parallel program to change the quality of workers. Many specific universities and training centers are established with huge investment in

facilities, professors, scholarship etc. The best conditions are provided to the people in all sectors of the economy from technology to pharmacy. Two countries have a public strategy on development of human capital and are willing to spend money on that. Singapore has abundant of programs on level up worker quality like national computer programs...Malaysia has numbers of programs like the skill development fund (companies are taxed 1% of payroll, but they can be refunded when workers are trained) which was very effective in increasing worker capability (Hafiz Mirza and Axèle Giroud, 2003). More than just improving internal forces, Singapore has special policy on attracting talents by offering them the best living and working conditions that no country in the world can follow. Malaysia is applying some policy from Singapore in attracting talented people and it also brings about some positive achievement.

3.3.3. Business environment:

Singapore has a clear and consistent policy in attracting FDI. The indicator of the investment, transparency of Sing is always in the highest group of countries together with lowest of corruption rate in the world and in the region. Malaysia is steeply improve the business environment and has also become one of the most attractive destinations in South East Asia region. These two countries possess a wonderful condition for all foreigner investors in both objective and subjective aspects. The Government always attempts at creating the most favorable business environment for all enterprises in the countries because they are the main factors contribute to the economy. For

example, Singapore policy was trying to give the highest possible wages to the top leaders⁷⁰ of the country so that they never think about corruption.

Internal environment includes competition condition and other facilities that boosting investment such as regulation, supplier, market... export-processing zones (EPZs) in Singapore and Malaysia are very important parts of the development and the Government also pays lot attention to firms in that zones such as tax incentives and high priority in order to attract FDI. They are two most successful stories in South East Asia in planning, designing, and successful implementation of EPZs. Experts from Singapore and Malaysia are now helping other countries in Africa⁷¹ to develop such kinds of investment (Ganesh Rasagam, 2012).

Other supported and subsidiary industries are available in both quantity and quality to make the best provision to FDI firms, which reduce the cost of importing inputs for productions and saving time. Since 80s, the government in Singapore has many programs to facilitate small- and medium-scale enterprises (SMEs) and bosted clusters of supporting (ancillary) industries to upgrade technology transfer to local managers and workers (Thee Kian Wie, 2003). These activities help improving the technological capabilities of local SMEs to serve as efficient supplier firms to the TNCs and encouraging them to use of local subcontractors. Malaysia was also one the two most successful countries in promoting the development of SME to attract TNCs. Another positive factor affects to mobilize FDI is the inflation rate. The inflation rate

⁷⁰ According to articles The 7 Highest Paid Political Leaders in the World (2013), P.M Lee Hsien Loong is the highest paid politician in the world.

⁷¹ The program starst with ten countries in Sub-Saharan African countries named Gambia, Ghana, Lesotho, Liberia, Mauritius, Mozambique, Nigeria, Senegal, Uganda, and Zambia within both the public and private sectors.

of Singapore and Malaysia are only 4.4% and 1.9% in 2012 respectively (IndexMundi, 2013). The low rate of inflation ensures investors a stable economy and convenient operation with unchanged input costs. The good infrastructure and easy administration are also advantage of attracting FDI and maximize the benefit from the foreigner firms, ensuring that foreign have the best working conditions.

3.3.4. Institution:

Being late industrialized economy; both Singapore and Malaysia choose the way of developmental state. Practice shows that the choice is a smart decision and suitable for the national conditions. Institution of Singapore and Malaysia is an active factor in promoting FDI, trade and openness of the economies, which resulted in growth and development.

3.3.5. Weakness of Singapore and Malaysia in FDI aspects:

Even though Singapore and Malaysia have been very succesful in attarcting and using the FDI source but there are some limits that Vietnam or any other countries can avoid having a better effect. The share of FDI on total GDP in Singapore is nearly 27%, which is quite heavily (IndexMundi, 2013). The larger share of FDI is a proof of success in control the source but it is also a risk of dependence on outside capital source, which is not always good in the case of crisis. The more connected with global chain, the more vulnerable the county is.

FDI share in Malaysia is not very large, only about 4% of total GDP (IndexMundi, 2013) to show that the country is not too much dependent on foreign investors but the manufacture was primarily in the low value-added.

The attempt to increase the value chain to high-tech and R&D, marketing and logistics has not been that successful, as the country has been constrained by its limited capabilities. There is the lack of the requisite supply of skilled engineers and research scientists.

To conclude, Singapore and Malaysia are two typical examples in successfully attracting FDI and using it effectively in upgrading technology and enhancing the quality of human resources. Singapore is a late developed economy but being one of four successful technology stories together with Japan, South Korea, Taiwan and Hong Kong. In order to gain this success, the government has pursued high-tech production and capital intensive development through a number of incentive policies for foreign investors and establishing some effective technology development agencies such as the Committee on National Computerization and Economic Development Board and so forth. Open policy helps Singapore becomes an attractive trading area. The establishment of interlectual institutes and programs is an effective tool in tranining and improving human capability, which is a vital element to development. The talents attraction policy is also one of the most successful measures of the government to raise the labour force quality. Morover, tax incentives, business environment and human resources in Singapore are also highgly appreciated by foreign investors. It is the high rate of tax holiday and refunds turns Singapore into the most attractive destination of R&D and it founds the basis for innovations. The policies to create a perfect investment conditions make Singapore become the hubs of all biggest MNCs in the world. In the case of Malaysia, this economy is the second country behind Singapore succeeded in attracting and utilizing FDI sources in the Southeast Asia region. Like Singapore, Malaysia also have offered a lot of incentives

for investors, concentrated on R&D and enhanced human resources. Vice versa, FDI has helped both Singapore and Malaysia in upgrading these above factors. Institutions and other supports are also significant elements of the success.

4. Lesson for Vietnam

Based on successful experiences of Singapore and Malaysia are considered as good lessons for Vietnam, this chapter would propose how should Vietnam overcome challenges in attracting and utilizing FDI posed by internal and external factors as mentioned in Chapter II.

In comparison with Singapore and Malaysia, Vietnam has many similarities in history and development conditions. Singapore and Malaysia also started at a very low point of development⁷². In terms of human resource and natural resources, Vietnam are even more outstanding than these two countries. However, after 50 years of development, the growth of Singapore, Malaysia and Vietnam are totally different in which Singapore is the most developed country in the region, Malaysia is an upper middle income while Vietnam has just escaped from low-income group. For both Singapore and Malaysia, primary conditions are not the key for the development but policy and strategy together with fiscal incentives, targeted infrastructure, available supply of semi-skilled and later skilled workforce, a free trade regime, consistent, predictable and transparent investment policies and political stability are the core. These are greatly valuable lessons that Vietnam should apply in order to gain the sustainable development like Singapore and Malaysia.

⁷² Per capita income of Singapore at the time of independence in 1965 was \$516 and that of Malaysia in 1970 was \$380 comparing with Vietnam when implemented “doi moi” policy in 1986 was \$437.

4.1. Strengthening the positive impacts:

Base on practical conditions, Vietnam should keep on attracting FDI in larger quantity and from traditional partner such as Japan, Taiwan, South Korea...The long term objective of attracting FDI is to create high quality jobs but in the mean time, Vietnam need to utilize the cheap and abundant labour force to reduce the unemployment rate and increase the domestic savings. Vietnam should learn from them in the development of a policy to attract FDI and to use these funds in the most effective way: There is a long-term strategy and transparency in attracting FDI. This is seen as a positive signal for foreign investors, enabling them to invest and seek profits. However, the Government must focus on dealing with the negative impacts from FDI in order to get optimum effect from the investment.

We should continue focusing on four specific main lines of investment, including investments related to the high-tech; information technology and biotechnology to take advantage of agriculture in Vietnam; attracting investment in industry to move from processing to manufacturing. In particular, the policy must focus on attracting investment into supporting industries; infrastructure construction sector for the development and restructuring of the economy. In particular, there is a need of special promoting to public private partnerships (PPPs) to utilize the resources from the private sectors. Investment in financial sector, including the restructuring of the banking system is also a priority as it helps restructuring the economy.

4.2. Issue of low-technology transfer:

Singapore and Malaysia have dealt quite well with improving technology transfer quality by policies, tax incentives, human capital improving and R&D spending.

The policies are very important in guiding and orienting not only domestic but also foreign investors in deciding the field and sectors of investment. Vietnam can definitely learn from them to issue more completed policy on attracting high-tech FDI. The singular Party institution is an advantage in issuing new policies. We are now in stage 1, i.e. attracting FDI based on advantage of cheap labour with main objective of creating jobs. However, the government aims at moving up to stage 2 of attracting FDI with high-tech and high quality of jobs. It will be the best way to combine both targets at the same time by giving priority to high quality projects and continuing on labour intensive projects with strict control over wages, output quality or employees working condition...

Tax incentive is has a high priority in the strategy of Vietnam. The Government has issued a number of tax holidays on high tech activities and projects. However, Vietnam should use this tool more effectively such as having a better control over FDI firms in actual operations. We can learn from Singapore and Malaysia to have a transparent tax system and approved agency for tax registration in order to limits the fake loss of FDI firm. Vietnam has been relatively successful in attracting FDI projects and low technology leverage cheap labor, but does not have specific preferential tax incentive for the priority areas, which the investors are still afraid of putting a huge capital into a risky area. Therefore, the government should be more

actively in the release of the FDI policy to promote high quality and gradually limit the FDI projects that bring low value, use of natural resources and pollution environment. Vietnam should have more tax incentives for businesses to invest in priority areas, not only tax breaks but also financial support and administrative procedures. The government should also strengthen the confidence of investors through the creation of the most favorable conditions for the pioneers in the new fields of investment.

So as to adapt with technology transfer, Government needs new policies on improving labours skills to shorten the technology gap. Vietnam has done quite well in primary and secondary schools but it is less effective at higher level, particularly in professional and vocational fields. The limits may come from the weakness in control and impractical education system. The problems can not be fixed in short term but a long term strategy together with critical changes. This is a very important issue for the sustainable development. The government must improve the human capital to server for the requirement of the enterprise to support for FDI in high tech fields. High skills labour can attract more high tech investment because any firms want to locate in a place with availability of employees and inputs. High skills labours themselves are important factors for development by their own ability.. The training system can change to higher level of knowledge. Vietnam does have advantage of abundant, clever and quick adapted labour but the qualified workers are limited. The Govt can held more training program to educate potential employees, may be abroad if needed so that the cheap labour forces are not only reason of investment but also the level of internal worker or establish special universities on technology like Singapore and Malaysia have done to have a stable and quality human capital resource..

Increasing R&D expenditures are not applicable for Vietnam at the moment though it is a significant contribution to innovation. Singapore and Malaysia have a very generous policy on R&D activities such as refund of R&D expenses. Vietnam is a developing country and always in the position of budget deficit, R&D is not among the top priority for this period. Moreover, R&D is not only investment in capital but also human and other resources that the country is not affordable. When the economy reaches a higher stage of development, the government will surely consider this field of investment.

4.3. Issue of employment:

The rate of unemployment in Singapore and Malaysia is quite low and the jobs created by FDI firms are mainly high-wages. They have a consistent and suitable policy of training, long term programs and institutes to assist the labours force. R&D for human capital and talent attraction strategy are also two effective contributors.

First, to deal with creating new jobs, Vietnam must attract more FDI, particularly with branded MNCs such as Samsung, Intel... Though the jobs are in low skilled but it is suitable for a majority part of labour force in provinces. Vietnam has advantage of human resource base with highly educated population and about 78% of the workforce in foreign firms has been educated to at least a secondary school level. However, the percentage of high-skills workers is limited. Literacy rate of Vietnam is about 97% but only 15.6% of total labor forces were under train (Hai Yen, General Statistics Office, Survey of Labour and Employment Vietnam 2011). Most of investors complain about the supply of labour quality in Vietnam. The number of senior

human resources and skilled workers, experts in business management, programmers, technicians, managers that understand basic requirements of English is still limited. The ability to work in team and adapt to practical jobs of most labours is weak and this reduce the value of workers a lot in the judge of the investors.

Vietnam government does have policy on education and it has worked quite effectively but only at low level and often emphasizes theoretical knowledge training. So, in the short run, the Government should organize short-term training for the employees to possess and improve practical knowledge and professional skills. The Government can have more specific program on training high-skills workers with tighten condition after the course or endowment for those firms pay attention for this issues. Vietnam must care for the laborers life and make them aware of the importance of learning, improving knowledge and skills for themselves. This will help workers find employment opportunities that benefit themselves first and gradually overcome the weaknesses in the quality of country's workforce.

Second, to deal with improving human capability, the Government needs to have suitable long-term strategy of developing stable and quality work forces. The education system should focus more on quality than the quantity by adjusting theory and practice ratio in the time of studying. The Government can control the labour supply by orienting students to the demanding fields of study with priority on finance, jobs after graduation...Moreover, Vietnam should learn from Singapore and Malaysia in attracting talent people. We have advantage comparing to them on amount of work force, which goes parallel with talents. The mission is that keeping

them and attracting Vietnamese abroad to contribute money and efforts. Vietnam has lost many talents as studying abroad and not returning.

The Government must have a long-term policy on talent treatment on financial, working... conditions. They are deserved of the most favorable environment to live and work that is the benefit for the country. No one can invent or discover new thing if he has to worry about how to live by tomorrow. We do not have a particular national policy for talent attracting yet and that discourages them going back to devote for the homeland. The brain drain phenomenon is very dangerous because it decreases the internal forces of development. The example of Japan and Singapore shows that they develop the country by human capital but nothing else. Vietnam must utilize the availability of human capital in the best way to move up ward. The Government has to issue new policies on attracting and managing of talent, the scare national resources. It is possible for Vietnam to learn from Malaysia and Singapore in improving human capital because of similar the foundations.

4.4. Issue of improving business environment:

It is quite hard for Vietnam to improve the business condition in short time. The investment law of Vietnam is still in completed after many times of amendment. Even though Vietnam has about 50 SEZs includes coastal SEZs and gate SEZs but only few places are effective, the remaining are lumbering, land area was empty with non-operate project. They do not bring about real impacts on the development as planned. Vietnam should concentrate more on improve the quality of SEZs by tax incentives, infrastructure, sub-industries supports. The Government must issue special regulation on controlling the activities of SEZs and Industries Zones so that they become a perfect place

for business and all firms in these areas really work effectively. The development of SEZs will be in-depth, enhancing links, content structure and technology to attract investment and maintain sustainable development, social and environmental safety.

For coastal and gate SEZs, the policy of development should be careful planning on space allocation, orientation and distribution in accordance with the conditions and potential of the region. The local authorities have to mobilize investment capital from the regional resources, strength local autonomy to be independent from the central budget. The investment should be selective and driven by industry in accordance with development conditions of each locality. Priority attracts on ancillary industries, advanced technology, environmental friendly and potential partners. The Government also pays attention to improve construction quality of infrastructure and technical infrastructure facilities in SEZs to create the best conditions for the investors. For the policy, decentralized authorization from the central to local levels is required to tie responsibility for the coordination and ensure that sufficient authority and resources to manage as well as enough measures are taken to develop SEZs.

The role of SMEs should be more emphasized because they are the main subsidiary industries for development. If this sector works effectively, they can boost the overall investment by creating a favourable business environment and vice versa. In case the country owns a weak SMEs, it will gradually loses the primary advantage of labour cost, natural resources...and domestic firms are steeply replaced by FDI firms (Elizabeth Thurbon and Linda Weiss, 2006). The policy and actual condition must go together to

ensure that the TNCs supported in capital rather than displaced local investments in industrial and technological activities. Vietnam should also encourage local firms to improve capacity of products, technology and expertise to be able corporate with foreign enterprises. Investors interviewed in Vietnam rank the improvement of local suppliers at only 2.4 compared to 3.6 in Malaysia and the transfer of product specifications to local firms is 3.1/5 and 1 to 2 out of 5 in terms of other types of knowledge. (Hafiz Mirza and Axèle Giroud, 2003).

Moreover, the industry is to be upgraded to provide a larger amount of goods and services to foreign companies as well as increase the quantity and quality of goods supply. The purchase of local inputs in Vietnam is at a low rate of about 32% inputs are from locally based companies and 50% are bought from non-affiliated suppliers. Hence, the majority of inputs are from import which benefits foreign firms. In addition, Vietnam imports a large amount of intermediate inputs through TNCs from other countries.

Most FDI in Vietnam are pure manufacturing or assembly activities and create low-value added. The country has to diversify kinds of investments by TNCs, increase the value chain. Vietnam definitely should give priority to the supplier base, the quality of suppliers and the relationships between local suppliers and foreign investors to create convenience for business. These methods not only increase the worker quality which leads to higher wages but also the number of jobs as more TNCs will use subcontractors of local country. Private firms need to concentrate on investing and manufacturing, not just retailing foreign imports like before because it can not bring the sustainable development. The government can create orientation by favorable

policy and special support in tax, finance for business firms so that they are willing to take the risk.

In macro level, the Government must have some entire policy to control of inflation rate to build the trust from investors. Infrastructure system needs to be upgrade and amendments in administrative procedures are important to save time and reduce cost for business. This is a difficult task for the Government since issuing policies is easier than implementing and controlling it effectively.

In Summary, we can learn a lot from the experience of Singapore and Malaysia in using and managing FDI resource. First, The Government needs a clear policy on attracting FDI by purpose to drive investment into capital intensive and high-tech development. Manufactures should switch to high-value products and services to exploit the full potential of geographic location, to overcome the scarcity of natural resources like the case of Singapore. These goods even though use less labor forces but skilled one so it is forced to raise the level of technology and labor quality in Vietnam. It is needed to create a transparency, equality business environment plus reducing corruption and unnecessary process to interest investors. Tax incentive can be used as an effective tool to direct the investment into the right tract. FDI policy must be harmonized, consistent and pay attention to R&D. Vietnam is a latecomer with low level of science and technology, so this is very significant element for development. Singapore has investment policies evolved mainly in attracting high-value added industries as well as targeted at cluster activities, including biomedical sciences, logistics and research and development (R&D) (Inward FDI and its policy context in Singapore-p1)

Second, the country must focus on improve the human capital quality and attracting talent by adjust some existed education programs or established new ones. The role of private sector is very important and the Government only succeeds if being able to generate them. These provide the foundation for sustainable development and also a key factor in the choice of many investors, particularly for high quality investment. Another effective measure is attracting MNCs with capital; experience will participate in training and improving labour quality in Vietnam. In Singapore, there are more than 7,000 foreign TNCs and it has been benefit a large number of greenfield investments by these entities. More than half of the top greenfield projects were in manufacturing, and two thirds of them were by MNEs from developed countries. At the same time, the presence of large number of TNCs will increase the rate of employment as well as wages. The more FDI coming, the more jobs are created and the more incomes are improved. Third, the Government has to improve the business environment to provide the best condition for investors. The quality and quantity of infrastructure systems, subsidiary industries and other facilities should be upgraded to work with FDI firms' requirements. The more availability they are, the more attractive Vietnam is.

Vietnam should take advantage of FDI from ASEAN countries. Singapore was very successful in using this strategy. In 2010, Singapore accounted for half of ASEAN's total IFDI flows of U.S. \$79 billion (The shares were 20% in 1970 and 43% in 1990)⁷³. Though FDI from this region is not very large but it is characterized by same industry line with Vietnam and easy to be adapted. Moreover, Vietnam is in AFTA, there is lots of merit

⁷³ Data is taken from Inward FDI and its policy context in Singapore 2011

in working with member of the same association. Meanwhile, we have to attract FDI from developed countries, because of they own a large capital, high-tech production which help Vietnam improve the domestic industries. Such developed economies like the Netherlands, the United States, Japan, and the United Kingdom have been the top sources of FDI in Singapore in recent years to show that it is a master in combining many policies at the same time.

Third, Vietnam must utilize the internal advantage of geography position, abundant human capital, and political stability to attract and use the FDI suitably. Meanwhile, we should not be too dependent on it because it can lead to vulnerable situation.. Vietnam has to improve the investment environment and create favorable conditions to attract, effective use of FDI. The weaknesses in infrastructure are to be fixed to attract FDI. In particular, in the context of fierce competition, localities should strive for administrative reform; improve the legal laws, policies and mechanisms to facilitate investment direction to compete with other countries in the region. A transparent legal system do not only benefit investors but also increase budget for host country as preventing fake losses and pricing transfer...

Conclusion

In this paper, the author has asserted that FDI plays a great role for Vietnam development for significant contribution in many areas.

For labor sector, FDI has created more jobs, increase incomes, improve skills, and raise awareness, behavior and industrial disciplined working style of employees. For exports, FDI has created the staples, enriching the export structure as well as increased quality of goods exports, which improve product competitiveness in the international market. As the result of higher export, Vietnam has additional source of foreign exchange, which play a very important role in balancing trade and budget. For the technology sector, FDI is still the main channel of techonology transfer in Vietnam. Thanks to FDI, some sectors of the Vietnam was equivalent to the region and global technology level such as shipping construction, cable industry...The transfer of advanced technology not only bring about pure technical impact but also positive impact on human capital. For instance, employees have to study more to be able to use of new machinery and equipment bringing in with FDI.

Besides, FDI impacts in Vietnam also have limitations. Employees in Vietnam are underpaid and treated unfairly. The number of new jobs creation is still low in the FDI sector. Quality of FDI job is not equal among various sectors in the economy. For export, FDI casues resource extraction and exporting primary products of low value added. There is crowding out effects which terminate or destroy domestic firms and dominate the internal market. In term of technology transfer, the high ratio of low technology imported to Vietnam turn the country into the waste dump of the world.

Singapore and Malaysia are two leading economies in the region partially thanks to FDI. Vietnam in accordance with maintaining achievements after more than two decades of innovation can draw lesson by looking at experience of them to attract more FDI, boosting the positive impacts and eliminating negative impacts. In employment fields, Vietnam can totally learn from their policy in training labours by establishment of specified universities or vocational programs. The policy of attracting talents is a possible way that Vietnam can apply without much abstacle, as the Vietnamese around the world is numerous. The country is able to orient FDI into high tech sectors by tax incetives and favorable policies. R&D spending in employment and technology innovation and business environment improving seem to be more difficult task for Vietnam to achieve in the short term due to internal conditions. Presently, low national saving ratio and short of skilled labours prevent Vietnam from investing in a high quality and long term benefit like R&D. Traditional business culture is also can not be changed immediately but require a long time. Despite negative impacts of FDI esist parallel with positive impacts, it is a chance for Vietnam to struggle and overcome challenges. The singular party institution with suitable policy and developmental strategy are the key factors for economic growth.

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