The Changing Role Of FDI In The Malaysian Economy – An Assessment

Azmi Shahrin Bin Abdul Rahim

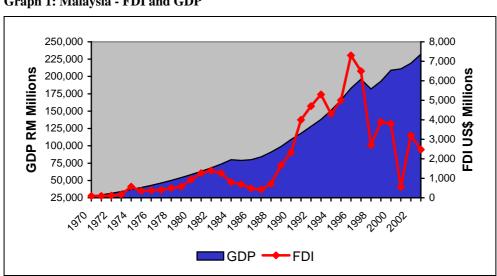
Definition of Foreign Direct Investment (FDI)

The International Monetary Fund (IMF) defines FDI as a category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in an enterprise resident in another economy (the direct investment enterprise). A direct investment relationship is established when the direct investor has acquired 10 percent or more of the ordinary shares or voting power of an enterprise abroad (IMF, 1993). This is in contrast against portfolio investment or loans, which do not acquire any controlling stake in the local enterprise. As such, FDI is more stable and longer term while portfolio investment and loans tend to be short term and volatile in its characteristics.

The Role of FDI in the Malaysian Economy

FDI plays several important roles in the Malaysian economy. Its most important role was to generate economic growth by increasing domestic capital formation. According to Krugman and Obstfeld (1994), "FDI functions as one way to bridge an inter-temporal gap of capital demand and supply, and, like other capital inflows, increases the production frontier of developing countries, which normally suffer a shortage of capital". Ishak and Rahmah (2002) too echoed this sentiment that FDI "provided an additional source of capital and expanded host country production activities. The inflows of capital in the form of FDI allow host economies to invest in production activities beyond what could be achieved by investing domestic savings alone".

It's first role is to augment domestic capital formation which leads to incremental economic growth through expansion of production capacity. Higher economic growth creates favorable investment environment which attracts investment from marketseeking firms. It can be observed that Malaysia's economy grew in tandem with the growth of FDI (Graph 1). This leads to the hypothesis of FDI-Led-Growth which was proven by empirically Kew (1999). However, this is true only up to 1998. It seems that the economy grew despite receiving less foreign capital, post 1998. This suggests that there is a break in the relationship between FDI and economic growth. It may also be that the economy is now more efficient and therefore being less dependent upon FDI for expansion.



Graph 1: Malaysia - FDI and GDP

Source: Malaysia Economic Report (Various Issues), MOF

FDI's second role is to fuel export growth. It has been observed that investing firms would naturally have ready international markets for their products. Therefore, the host economy benefits because it circumvents the need for domestic firms to spend resources and time to penetrate and acquire foreign markets. This is the case for Malaysia where exports grew along with FDI (Graph 2) which suggests a stable positive correlation up to 1998. Since thn other factors such as the depreciation of the Ringgit and global demand would have had a greater impact on the growth of exports. It is not likely that Malaysia would have experienced the tremendous growth in exports without the benefit of FDI.

450,000 8,000 400,000 7,000 **Exports RM Millions** 350,000 6,000 300,000 5,000 250,000 4,000 200.000 3,000 150,000 Ճ 2,000 100,000 1,000 50,000 [ૢ]ઌૼૺ[ૢ]ઌૼ[ૢ]ઌૼ૾ૢઌૼ૾ૢૹૺૢૹૺૢૹૺૺૢૹ૾[ૢ]ૹૹ૾૽ૢૹ૾૽ૢૹૢ૽ૢ૽ૢૹૺૢૹૺ૾ૢૹૺ૾ૢૹ૾૽ૢૹૢ૾ૢ૽ૢૹૢૺૢૹૺૺૺ ■Exports Manufactured Exports FDI

Graph 2: Malaysia - FDI and Export Growth

Source: Malaysia Economic Report (Various Issues), MOF

The third crucial role of FDI is to facilitate the transfer of new technology to the host economy. FDI provides the fastest and most effective way to deploy new technologies in developing host countries (UNCTAD 2000). However, the success of this depends on the absorptive capacity of the host economy. Certainly, Less advanced technologies are easier to be absorbed. Technology is also easier to be absorbed if the technology gap is narrower. There is no direct measure for technology transfer. However, productivity index would serve as a suitable proxy under the assumption that adoption of technology leads to higher productivity. The case for Malaysia is demonstrated below (Graph 3). However, there is insufficient data to make any inference about this relationship. It would be interesting to study this further.

22,500 8,000 Value Add RM Per Annum 7.000 22,000 6,000 5,000 4,000 21,500 3,000 2,000 🗖 21,000 .000

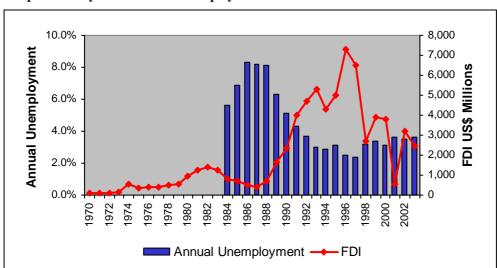
,′q₁,′q₁,′q₆′q₆′q₆′q₆′q₆,′q

Graph 3: Malaysia - FDI and Value Add Per Worker Per Annum

Source: Malaysia Economic Report (Various Issues), MOF

20,500

Additionally, FDI also tend to lead to higher employment through the expansion of the economy and job creation. As a result, Malaysia can be considered to be at full employment (Graph 4). The demand for labour exceeds supply by a very large extent that most manufacturing industries now depend on imported labour from Indonesia, Bangladesh, Pakistan, Vietnamese, Nepal, India and other countries. It was reported by the MOF (2005) that in 2004 there were 1.3 million foreign workers making up 12% of total employment. 31% of employment in the manufacturing sector were foreign labour.



Graph 4: Malaysia - FDI and Unemployment Rate

Source: Malaysia Economic Report (Various Issues), MOF

FDI was also the agent of transformation in the Malaysian economy. The massive influx of foreign investments into the manufacturing sector was pivotal in its transformation from an agricultural economy to an industrialized economy. It can be seen from Graph 5 that the dominance of the manufacturing sector in the economy coincided with the inflow of FDI. The pivotal year was 1987 when output from the manufacturing sector overtook output from the agricultural sector.

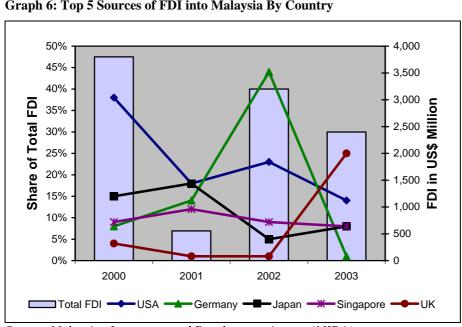
35% 8,000 30% Share of GDP 25% 20% 4.000 15% 3.000 10% 5% 1080 ,\98° 1000 1000 ,09A Manufacturing • Agriculture

Graph 5: FDI vs Agriculture and Manufacturing Share of GDP

Source: Malaysia Economic Report (Various Issues), MOF

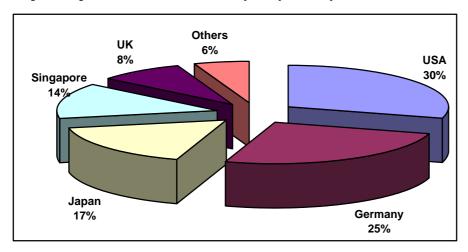
Sources of FDI

Agriculture was the dominant economic sector in the Malaysian economy in the years leading to the 1960 decade. During this period rubber, palm oil and tin were the primary export commodities. Malaysia became the world's dominant producer of these commodities as a result of British and European investments. The government began encouraging Import Substitution industries beginning from 1960 and British capital which dominated half of investments into the manufacturing sector (Junid, 1980). From the year 1970 onwards, the manufacturing sector became export oriented. Singapore, Japan, Taiwan, Korea and later USA and Germany became important sources of FDI while The United Kingdom declined in importance. By 1985, British investments contributed only 2.8% of total FDI. During this period, Japan, Singapore, Taiwan and USA had each been the top foreign investors in various years (Ismail 1995). American and German investors has been active in the recent 2000-2004 period (Graph 6 & 7).



Graph 6: Top 5 Sources of FDI into Malaysia By Country

Source: Malaysian Investment and Development Agency (MIDA)



Graph 7: Top 5 Sources of FDI into Malaysia By Country 2000-2004

Source: Malaysian Investment and Development Agency (MIDA)

Industrial Sub Sectors

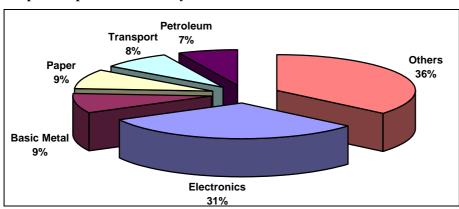
Generally, investment from different countries had different investment profiles. The Japanese have tended to invest into industries assembling electrical consumer durables such as the case by Sony, Toshiba and National. Taiwanese investors have invested into SMIs to produce parts and components as an extension of the dominant SMI sector in Taiwan's economic sector. The Koreans have an inclination for heavy engineering industries such as spearheaded by Hyundai. The bulk of American investment went into silicon wafer fabrication, semi-conductors and hi-tech equipments such as Intel and Motorola. Singaporean investments tend to represent regional investments from TNCs having head quarters in the republic. It may be worth investigating if indeed some of these investments are in fact Malaysian capital round-tripping to benefit from FDI incentives just as the case of the round-tripping capital to from China to Hong Kong and then back into China from Hong Kong (Huang 1998).

Over this recent period (2000-2004), the electronics sub sector remained as the leading beneficiary of FDI by a large extent (Graph 8 and 9). This explains the preponderance of electrical and electronics products in our exports.

45% 4,000 40% 3,500 35% 3,000 Share of Total FDI 30% 2,500 25% 2,000 🕳 20% 1,500 .⊆ 15% 1.000 10% 500 5% n 0% 2000 2001 2002 2003 Total FDI Electronic Basic Metal Transport

Graph 8: Capital Investment by Industrial Sub Sectors

Source: Malaysian Investment and Development Agency (MIDA)



Graph 9: Capital Investment by Industrial Sub Sectors 2000-2004

Source: Malaysian Investment and Development Agency (MIDA)

Factors Affecting The Role of FDI

The role of FDI in Malaysia is changing because the domestic economy need to adapt to the changing external environment. The 3 external factors of significance impact on the role of FDI are the China Effect, strong demand in technology intense products and growing importance of the services sector.

The China Effect

The main factor affecting the change in the external environment is the increasing attractiveness of China as FDI destinations (A.T. Kearney 2004). This factor will concentrate even larger shares of Global FDI into China. In 2002, China received the largest amount of FDI at US\$53 Billion which represented a third of global FDI (UNCTAD 2003). Consequently, the rest of the world will receive smaller shares of FDI. An empirical study by Chantasasawat, Fung and Iizaka (2005) confirmed this hypothesis which rang alarm bells in many economies including Malaysia who are heavily dependent on FDI.

Therefore it is pertinent to understand factors underlining China's attractiveness as an FDI destination. The main reason for China's attractiveness is its market size which is

about a third of the world population. Many foreign firms view this as the most important factor in making an offshore investment. Therefore, firms investing in China is not necessarily efficiency-seeking. In fact wages and other factor costs are not considerably cheaper than Indonesia. But the most important fact is that wages are cheaper comparative to Malaysia. Manufacturing firms investing in China tend to be labour intensive and utilize low technology. Despite the liberalization of the market and financial institutions, there are considerable risks attendant with investing in China because judicial institutions are less developed. So firms invest in China *in spite* of these risks.

Therefore, Malaysia should avoid direct competition with China and focus on the task to attract efficiency-seeking investments by increasing productivity. Higher productivity can be achieved by encouraging firms to be more capital intensive through incentives and policies. In the same thread, Miyamoto (2003) suggested policies to target FDI that would most likely benefit the economy in the long run, through increased training opportunities and technology spillovers. It is therefore, a heartening development that MIDA has started to be more selective in its approval by favoring industrial projects with these criteria. This complements the role of FDI as the agent of technology transfer. The rate of transfer can be bolstered by increasing the absorption rate through increasing the education level of the workforce. It is possible greater inflows of FDI seeking efficiency could possibly offset investment opportunities lost to China and other future competitors.

Singapore is a special case where an example can be made of its ability to attract almost half of total FDI into ASEAN (Graph 10) by having the most productive workforce in ASEAN (Table 1). The reason for their superior productivity is due to their higher absorptive capacity to assimilate technology. It may not be wrong to rest this hypothesis on the fact that Singapore places greater emphasis on R&D and that it has a higher concentration of scientists in its population (Table 2).

A faster rate of technology transfer would also hasten our progress to become a developed nation. It would be beneficial to Malaysia to become a developed nation because it acts as a magnet to attract FDI. It is was reported that in 2000, more than 76% of global FDI was invested in developed countries, while the rest of the world fought for the remaining scraps (UNCTAD 2003). Hence, Malaysia should first emulate Singapore and in due course become a developed nation. It would attract more FDI by being as efficient as Singapore and even greater FDI when it becomes a developed nation.

Thus the most important role of FDI today is to be an agent of technology transfer because Malaysia now needs quality high technology, capital intensive and productivity based industries to become the seed for the new virtuous cycle of foreign investments.

Graph 10: FDI Inflows to ASEAN by Host Country, 1995-2003

Source: ASEANSEC (2004)

Table 1: Labour Costs And Value Added Per Worker In Manufacturing (US\$ P.A.)

	Lai	Labour costs (wage)			Value added			
Countries	1980-1984	1995-1999	Percentage Increase	1980-1984	1995-1999	Percentage Increase		
Malaysia	2 519	3 429	36.1	8 454	12 661	49.8		
Thailand	2 305	2 705	17.4	11 072	19 946	80.1		
Indonesia	898	1 008	12.2	3 807	5 139	35.0		
Philippines	1 240	2 450	97.6	5 266	10 781	104.7		
Singapore	5 576	21 534	286.2	16 442	40 674	147.4		
Republic of Korea	3 153	10 743	240.7	11 617	40 916	252.2		
China	472	729	54.4	3 061	2 885	-5.7		

Singapore 48.9%

Sources: UNCTAD (2000)

Table 2: Public Sector R And D Expenditure And Number Of Scientists / Engineers

Country/area	R and D expenditure (percentage of GDP) 1998	Scientists and engineers (per million population) 1985-1995
Malaysia	0.4	500
Thailand	0.2	173 ^a
Indonesia	-	-
Philippines	-	-
Singapore	1.8	2 728
Taiwan Province of China	1.7	1 669
Republic of Korea	2.7	2 636
China	0.7	350

Sources: UNCTAD (2000)

The Shift To Technology Products

There is a growing demand for technology products, according to UNCTAD (2000). Growth for technology intense products are significantly higher than products requiring low manufacturing technology (Graph 11). Commensurate with this growth will be the growth in the supply of FDI from innovation-seeking firms. To attract innovation-seeking FDI, Malaysia would need to develop R&D capabilities on a strategic scale. To this effect, Malaysia has set off in the right direction with the

setting up of the Multimedia Super Corridor (MSC) with the accompanying policies and incentives to attract such investments.

However, developing R&D capabilities requires more than world class facilities, equipment and laws governing Intellectual Property. It requires more importantly human capital in the form of scientists and engineers. As shown in the earlier Table 2, Malaysia lacks the critical mass for a takeoff in technology intense manufacturing. It is of concern that China spends a bigger portion of its considerably bigger GDP on R&D. This is a race to the top and the country that spends more in R&D will reach the top faster. Both efficiency-seeking and innovation-seeking firms require a highly educated workforce, therefore the government should go beyond investing in basic education and encourage post tertiary education. A wage policy that attaches premium for science graduates would encourage more of such graduates.

There is a role for FDI to assist Malaysia to reach the critical takeoff point in this new sector. Therefore, the government should select and attract firms that invests in research and innovation. The government should encourage foreign firms that are already in Malaysia such Siemens and Intel to invest in domestic R&D facilities. Similar to Malaysia's past experience with manufacturing, FDI will be the critical catalyst for this sector.

25% 20% **Annual Growth Rate** 15% 10% 5% 0% Primary Resource Based Medium High Technology Information And Low Tecnology Technology Communication Manufactures Technologies ■ Developed Countries ■ Developing Countries

Graph 11: Average Annual Growth Rate of World Exports by Technology Intensity

Source: UNCTAD (2002)

The Services Sector

In Malaysia, FDI was restricted to the extractive and manufacturing sectors mainly through policy. However, at the Doha WTO Ministerial Meeting, member countries including Malaysia have agreed to liberalize their services sector. This is a welcome development because according to UNCTAD (2000), about half the total stock of FDI in developing countries was in services. This trend of investing into the services sector is captured in Table 3. Studies have also shown that the services sector of developed countries contributed as much as 70% of GDP. The Malaysian Services sector currently accounts for about half of GDP. Thus there is clearly a potential for foreign investment into the Malaysian services sector.

Table 3: Share of Inward FDI Stock by Sector in Developing Countries

	Asia		ı	LAC		Africa		Total	
	1988	1997	1988	1997	1988	1997	1988	1997	
Primary	8.4	3.5	8.8	5.7	51.8	53.4	10.3	3.9	
Manufacturing	62.1	62.9	67.4	38.8	20.8	26.8	62.3	60.7	
Services	29.4	33.6	23.8	55.5	27.4	19.8	27.4	35.4	
Total	100	100	100	100	100	100	100	100	

Source: UNCTAD (1999)

The government was quick to recognize this and has directed MIDA to promote Malaysia as the preferred services hub in the region (MOF 2005). In this sector Malaysia has had some early success, such the Dell regional call center in Penang, Shell regional IT services in Cyberjaya and Maersk in Port of Tanjung Pelepas. To succeed, the services sector would need to quickly adopt superior management practices in order to provide world class service products. Additionally, the service sector need to shed developing world mentality and improve service quality. A paradigm shift is required because quality certifications does not assure good quality when policies reinforce bad practices.

Similar to other sectors, the services sector could benefit from foreign investments. Investors would certainly enforce a high standard of practice and discipline which is the necessary precondition for success in the service industry. This initial injection of FDI would set off positive changes in this sector which would in turn attract even more FDI. However, MIDA would need to select and target the right FDI to ensure that the services sector could derive the greatest benefit.

Conclusion

There has been a break in the relationship between FDI and economic growth which can be observed since the 1998 Asian Financial Crisis. Malaysia has gone past the phase where economic growth is a simple arithmetic of adding ever greater quantities of FDI. Possibly the role of FDI as stimulant for economic growth has diminished considerably. Today more than ever before, quality is more important than quantities of FDI. The future role of FDI will be as an important agent of change in the economy.

Therefore, the government should quickly come to this realization and implement new policies to benefit from this new treatment for FDI. Immediately, MIDA should select and target FDI that have the highest potential to fulfill this new role. FDI should increase productivity through the transfer of technology, develop innovation through the encouragement of research and enhance service standards through the adoption of world class management practices. This should put the economy on an even keel towards achieving economic growth and prosperity.

Reference

ASEANSEC (2004). ASEAN Statistical Yearbook 2004.

A.T. Kearney Inc. (2004) 2004 FDI Confidence Index. USA.

Chantasasawat B., Iizaka H. and Fung K.C. (2005). The Giant Sucking Sound: Is China Diverting Foreign Direct Investments from Other Asian Economies? Paper 594 Department of Economics, University of California, Santa Cruz. USA

Huang Y. (1998). FDI In China: An Asian Perspective: The Chinese University Press. Hong Kong.

International Monetary Fund (IMF) (1993). Balance of Payments Manual, 5th edition (BPM5) Washington.

Ishak Y. and Rahmah I. (2002). Human Resource Competitiveness And Inflow Of Foreign Direct Investment To The Asean Region. Asia-Pacific Development Journal Vol. 9, No. 1, June 2002.

Ismail M.S. (1995). Foreign Direct Investment And Technology Transfer In The Malaysian Electronics Industry In The New Wave Of Foreign Direcy Investment In Asia. Nomura Research Institute. Singapore.

Junid S. (1980). British Industrial Investment In Malaysia 1963-1971. Oxford University Press. Kuala Lumpur.

Kew W.C. (1999). FDI, Exports and Macroeconomics Performance in Malaysia. A Causality Analysis, Masters Thesis Submitted to FEA, University Malaya, Kuala Lumpur.

Krugman, P. and Obstfeld M. (1994). International Economics 3rd Edition. Harper Collins. New York.

Ministry Of Finance (MOF) (2005). Malaysian Economic Report 2004/2005. Kuala Lumpur.

Miyamoto K. (2003). Human Capital Formation And Foreign Direct Investment In Developing Countries. Working Paper No. 211. OECD Development Centre.

UNCTAD (1999). World Investment Report 1999. UNCTAD. Geneva.

UNCTAD (2000). The Competitiveness Challenge: Transnational Corporations and Industrial Restructuring in Developing Countries. UNCTAD. Geneva.

UNCTAD (2002). World Investment Report 2002. UNCTAD. Geneva.

UNCTAD (2003). World Investment Report 2003. UNCTAD. Geneva.

World Bank (2000). World Development Indicators 2000.