

Chapter 4

TNCs in Perplexity over How to Meet Local Suppliers:

The Case of a Philippine Export Processing Zone

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Abstract

Transnational Corporations (TNCs) have played a vital role in fostering rapid industrialisation in many developing countries. The Philippines is among the countries which have typically followed a TNC-dependent development strategy. However, the country has been far lagging behind other ASEAN members in economic performance. The present study examines this issue, mainly focusing on the linkage formation between TNCs affiliates and Philippine local suppliers. The creation of linkage is important because most of spillovers are transmitted through the industrial linkages with TNCs. This constitutes a prerequisite for access to international markets through global value chain. Three factors are proposed to determine the overall performance of linkage formation; i.e., outsourcing strategies of TNCs' local affiliates, local entrepreneurial response, and host government policies. A case study method is employed from author's fieldwork at Cavite Export Processing Zone, the Philippines. The cases of Penang, Malaysia, are referred just for a comparison. An economic enclave structure is clearly identified in the Philippines, in which only a few locally-owned suppliers have emerged. Extremely weak local entrepreneurship in the Philippines is identified to explain the poor performance of linkage formation.

Keywords

Transnational Corporations (TNCs), Local suppliers, Linkages, Outsourcing strategies, Entrepreneurship.

Introduction

East Asia has emerged as a major global manufacturing base for a number of industries, ranging from simple items like textile and garment to rather technology-intensive products such as electronics and automotives. Transnational Corporations (TNCs) have played a vital role in fostering rapid industrialisation of East Asia. The contribution of TNCs appears in various aspects: the creation of direct and indirect employment, earning foreign exchanges, and the local cluster development of related manufacturing activities. Moreover, TNCs provide local manufacturers with new opportunities to access to global markets, to become global suppliers, and to upgrade their technological and managerial capabilities. Thus, by expecting these benefits, the attraction of TNCs is one of the prime goals for the governments in developing countries. Such development strategy is particularly pertinent to the economies of Southeast Asia, since they fully enjoyed these advantages TNCs brought for their successful economic development. Based on this fact, Hobday (2001) described the pattern of ASEAN's economic development as "TNC-led industrialisation."

The Philippines is among the countries which has typically followed a TNC-dependent strategy as well as other major ASEAN economies like Singapore, Malaysia, Thailand, and Indonesia. Indeed, TNCs have been in a dominant position in terms of output, export, employment, and value-added generations of the Philippine core manufacturing industries such as electronics and autos. In this regard, the Philippine economy is deeply embedded into regional and global production networks which are under the control of major TNCs. However, despite the established status politically as an original member of ASEAN, the Philippine economy has been far lagging behind other ASEAN members in economic performance. The Philippine economy has relatively under-performed than the other ASEAN economies for these decades. There are a number of reasons to explain such unfavourable economic performance, among which can be attributed to the relatively unsuccessful results related to FDI (Foreign Direct Investment) and TNC policies.

Philippine's relative failure to take advantage of TNC-led industrialisation appears in two-phased difficulties. The first problem is its poor performance in attracting FDI inflows into the country. Among the ASEAN region, the Philippine was able to grasp a smaller share of FDI inflows, inevitably resulting in a limited contribution of TNCs to the host economy. The second difficulty is related to this, but may be more structural; the country may not enjoy sufficient externalities from the inflows of FDI. FDI inflows by itself do not necessarily guarantee positive spillover effects to the host economy. There are a number of conditions to enjoy spillovers for the host economy, among which the creation of industrial linkages between TNCs and local firms constitutes the prerequisite. This is because most of spillovers are transmitted through the industrial linkages with TNCs. A number of previous studies

report that TNCs' local affiliates operating in export processing zones tend to be disconnected with the local economy or, in other words, to form an economic enclave (Riedel 1975, UNCTAD 2001, Giroud 2003). This suggests that, without the creation of linkages, TNCs' spillovers to the host economy should be limited. The Philippines may fall into this type of difficulty.

The present study mainly examines the second issue, focusing on the linkage formation between TNCs affiliates and local suppliers in the Philippines. Malaysian cases are also referred as a comparison. The extent of width and depth to which TNCs commit to the host economy is one of the central concerns for development economists and policy makers in developing countries. This study investigates how deeply a TNC has been embedded into the Philippine economy through the linkage creation. The electronics and electrical industry is our main focus, because the industry is the largest recipient of FDI and a principal driver of industrial development in terms of the contribution of export, production, employment and value-added in the Philippine manufacturing sector.

The issue of linkage formation is closely related to global value chain (GVC) analysis (Gereffi and Korzeniewicz 1994, Henderson 1998, Gereffi 1999, Gereffi and Kaplinsky 2001, Schmitz 2004). Global value chains refer to the full range of activities from upstream to final stage of production, encompassing design, processing, manufacturing, and marketing of a product, which often spreads over a number of national boundaries. GVC analysis aims to examine the economic implication of global production and trade networks, particularly from the perspectives of economic development. One of the central questions GVC analysis addresses is whether the insertion into global production networks is beneficial or harmful to the firms in developing countries. Linkage formation is a critical issue in GVC analysis because it is important to understand the very first initiative of developing country firms which want to be linked with TNC-led global production networks.

The paper is organised as follows. The next section explains the performance and policies related to the Philippine FDI inflows. Section 3 examines the theoretical aspect of linkage formation. Three factors, i.e., TNCs' outsourcing strategy, local entrepreneurial response, and government policies, are identified and examined as principle explanations of linkage formation. Section 4 and 5 report the result of my fieldwork in the Cavite Export Processing Zone, the Philippine, and Penang, Malaysia. The final section summarises the result and discusses the implication.

1. FDI Performance of the Philippines

In the 1970s when many electronics firms started shifting assembly manufacturing overseas, the Philippines was seen as one of the ideal production locations. This was because the country was abundant with a large pool of cheap but educated, English-speaking workforces. It was in 1974 when Intel and Texas

Instruments first set up assembly plants in the Philippines. The inflow of FDI was followed by Japanese, European, and other US multinationals. During the 1970s and the early 80s, the Philippines appeared as one of the major destinations for multinational electronics companies (Grunwald and Flamm 1985).

In the 1980s, however, there was very little growth in FDI inflows into the Philippines. The country's 1980s were a decade of tremendous political and economic instability with state violence and civil unrest, including the EDSA revolution in 1986 and the series of coup-d'etat during the period of Aquino government. Such social disruption severely damaged Philippine's reputation as a manufacturing location for major international companies. Several attempts were made by the government to attract FDI to the country; however, it was substantially toothless. The US and Japanese electronics firms chose other places such as Taiwan, South Korea, Singapore, Malaysia, Thailand and often Indonesia for a manufacturing location. This loss was critical for the subsequent path of Philippine economic development. It was in the 1980s when Japanese FDI outflows grew rapidly due to the unbearable appreciation of the Japanese Yen. The Philippines missed this opportunity; the country was unsuccessful to become one of the favourable offshore manufacturing sites. As a result, the Philippines slipped behind its neighbours in FDI performance.

The situation was slightly changed in the beginning of the 1990s. President Fidel Ramos tried to recover economic and political stability, including the improvement of the attractiveness of the Philippines to international investors. This was a fundamental shift. Particularly as for FDI policies, the Foreign Investment Act (FIA) of 1991 was approved, allowing foreign equity participation of up to 100 percent principally in almost all sectors.

(1) FDI policy

The FIA was introduced as a part of market-oriented reforms aiming liberalisation, privatisation, and economic deregulation policies the Philippines implemented in the late 1980s and the 1990s. One of the objectives the FIA pursued was to make it transparent what areas are open, or restricted, to foreign investment. It also aims to reduce the bureaucratic discretion when prior government approval is needed for foreign participation exceeding 40%. The FIA of 1991 was strengthened in 1996, allowing greater foreign participation in previously banned sectors.

The country's foreign policies on FDI are generally consistent with the APEC nonbinding investment principles (Austria 1998). The principles include:

- transparency
- non-discrimination between sources of economies
- national treatment
- investment incentives
- performance requirement

- expropriation and compensation
- repatriation and convertibility
- settlement of disputes
- entry and sojourn of personnel
- avoidance of double taxation
- investor behaviour
- removal of barriers to capital export

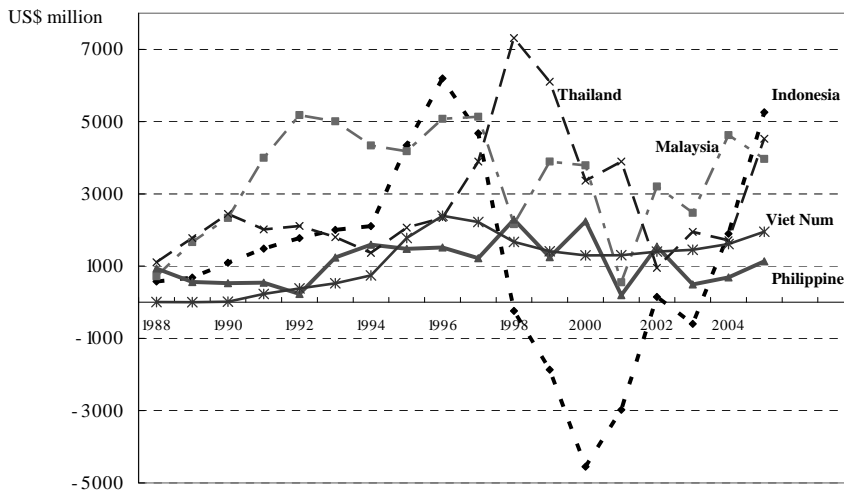
The widest freehand of operation is given to the foreign firms located in the export processing zones (EPZs). The Philippines was one of the first countries in Asia to establish EPZs to allow total automatic access to imports by firms located in the zones on the condition that they will export their entire production. In 1969, the first EPZ was approved in Bataan.

The Philippine Economic Zone Authority (PEZA) is a government body to manage and operate economic zones and administer incentives to special economic zones (ecozones). A number of incentives are given to ecozone export and free trade enterprises. These include corporate income tax exemption applicable from four to eight years, duty and tax exemptions on imported capital equipment, spare parts, materials and supplies, exemption of national and local taxes, tax credit, and other form of fiscal and economic incentives. These are not special but rather widely available around industrial estates in other ASEAN countries; however, it is unquestionable that these treatments contributed to recovering a lost reputation of the Philippines as an offshore manufacturing location.

(2) FDI Pattern

In addition to the political reform, two external factors contributed to the reappearance of the Philippines as an investment destination. First, as a result of successful economic development, wages gradually increased in Thailand, Malaysia, Singapore, i.e., Philippines' immediate competitors, and other ASEAN countries. Thus, as the relative attractiveness of the Philippines improved, there was a shift in the FDI orientation coming from developed countries. Second, during this period, the global demand for semiconductors for computer, telecommunications, and consumer products began to expand. As a result, by the mid 1990s, the Philippines re-emerged as a premier site for advanced assembly and testing. The investments that began pouring in were dominated by leading American and Japanese multinationals.

Fig. 1: Total FDI Inflows into Major ASEAN Countries (1988-2005)



Source: Asian Development Bank, Key Indicators (various issues)

Although the inflows of FDI started increasing in the early 1990s, it is apparent that the Philippines has been far lagging behind other Southeast Asian countries in an absolute value of inward investments. Fig. 1 clearly indicates this. The figure shows the inflows of FDI into major ASEAN countries over the past two decades. The Philippines' relative poor performance is undoubted as a FDI destination. FDI inflows into the country have been less fluctuated but remained at a low level, compared to other ASEAN countries. It started out with a negative figure in 1980 (—106 million US\$), but thereafter increased gradually, reaching to 530 million US\$ in 1990. After a decade, inward investment increased more than four times to 2,340 million US\$ in 2000. However, due to an economic turbulence in IT sector, the figure sharply dropped in 2001, but immediately recovered to 1,542 million US\$ next year. After a counteractive decline in 2003, FDI inflows slowly and steadily increase until 2005.

Table1. Distribution of FDI inflows by Source Economy (1990 - 2006)

	1985-90 average	1990	1991	1992	1993	1994	1995	1996	1997
USA	50.9%	26.9%	18.1%	17.1%	9.4%	8.6%	6.8%	22.9%	11.1%
JAPAN	18.6%	27.7%	45.4%	47.1%	12.2%	7.9%	30.0%	36.8%	31.4%
Netherlands	4.7%	1.7%	0.9%	1.6%	3.6%	62.1%	3.7%	4.1%	3.9%
United Kingdom	3.5%	4.4%	3.7%	0.6%	40.6%	3.9%	6.5%	4.9%	1.7%
South Korea	1.0%	3.9%	8.6%	4.0%	0.9%	0.7%	1.0%	2.3%	1.7%
Hong Kong	6.8%	7.8%	7.9%	11.5%	5.7%	5.5%	28.9%	6.0%	5.7%
Taiwan	2.6%	3.9%	1.5%	0.9%	1.1%	0.3%	0.9%	3.7%	1.9%
Singapore	N.A.	3.2%	2.1%	2.6%	2.5%	6.8%	9.3%	1.5%	6.4%
Australia	2.5%	3.9%	0.4%	1.0%	0.1%	0.6%	2.4%	0.2%	1.2%
Others	9.4%	16.6%	11.4%	13.6%	23.9%	3.6%	10.5%	17.6%	35.0%
	1998	1999	2000	2001	2002	2003	2004	2005	2006
USA	27.5%	30.2%	11.7%	27.9%	24.4%	4.9%	15.8%	23.4%	16.6%
JAPAN	17.0%	10.1%	8.1%	24.1%	45.9%	16.2%	5.8%	5.1%	3.9%
Netherlands	9.6%	14.0%	0.0%	0.0%	0.7%	-4.1%	-2.3%	-0.4%	15.7%
United Kingdom	1.4%	0.4%	38.3%	1.6%	0.1%	1.2%	0.3%	0.8%	10.0%
South Korea	1.4%	1.1%	0.0%	0.1%	0.1%	0.5%	0.0%	0.0%	0.2%
Hong Kong	2.4%	5.5%	3.4%	0.2%	0.2%	3.1%	0.2%	21.9%	-0.2%
Taiwan	3.7%	0.8%	0.3%	0.3%	0.0%	0.7%	0.1%	0.0%	0.1%
Singapore	5.8%	9.1%	3.6%	10.9%	1.3%	73.8%	15.4%	1.1%	-4.9%
Australia	0.4%	0.2%	0.0%	0.8%	0.0%	3.9%	0.2%	0.0%	-0.1%
Others	30.8%	28.6%	34.7%	34.2%	27.3%	-0.1%	64.5%	48.2%	58.8%

Source: Bangko Sentral ng Pilipinas, and Austria (1998, 2006).

Table2. Distribution of FDI inflows by Industry (1990 - 2006)

	1985-90 average	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture	2.6%	3.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%
Mining	24.7%	15.4%	7.4%	3.7%	0.5%	4.6%	5.1%	0.3%	0.3%
Manufacturing	49.8%	55.7%	72.0%	55.4%	67.9%	77.2%	41.5%	37.3%	16.3%
Construction	0.1%	0.1%	0.4%	1.5%	0.2%	0.2%	0.3%	3.5%	23.0%
Banking & Finance	10.2%	12.5%	7.4%	11.1%	13.0%	3.9%	11.0%	40.1%	21.5%
Commerce	6.9%	10.0%	5.4%	5.5%	2.8%	0.8%	11.6%	6.6%	7.4%
Services	4.7%	2.5%	7.1%	21.2%	2.7%	7.6%	3.7%	2.7%	3.2%
Public Utility	1.0%	0.6%	0.3%	1.4%	12.9%	5.8%	26.8%	9.4%	28.3%
Others	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
	1998	1999	2000	2001	2002	2003	2004	2005	2006
Agriculture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mining	18.2%	2.6%	6.0%	0.0%	1.3%	-2.9%	0.0%	0.0%	1.9%
Manufacturing	27.7%	12.7%	17.8%	49.5%	46.3%	35.9%	11.2%	45.0%	28.6%
Construction	0.7%	0.4%	1.2%	2.4%	1.3%	7.8%	-2.0%	-0.2%	0.6%
Banking & Finance	21.8%	24.7%	2.9%	12.2%	4.3%	-14.4%	0.9%	16.9%	6.9%
Commerce	18.3%	0.0%	2.4%	0.3%	0.3%	0.0%	2.5%	0.3%	0.5%
Services	1.4%	1.0%	27.2%	22.9%	19.7%	-112.3%	19.5%	8.2%	-0.2%
Public Utility	7.7%	1.5%	0.0%	0.0%	0.0%	0.0%	1.1%	-0.5%	13.5%
Others	4.2%	57.0%	42.5%	12.7%	26.7%	185.9%	66.8%	30.3%	48.2%

Source: Bangko Sentral ng Pilipinas, and Austria (2006).

Despite the fact that the figures gradually increased, the Fig. 1 clearly indicates the Philippines' underperformance with other major ASEAN members, except for Indonesia during the turmoil period from 1998 to 2003. Vietnam has been comparable to the Philippines in total FDI inflows; however, it is apparent that the former finally overtakes the latter in recent years: in 2003, the Philippines had 491 million dollars in FDI, relative to Vietnam's 1,450 million dollars. In 2004, the Philippines garnered 688 million dollars FDI, while Vietnam gained 1,610 million dollars.

Table 1 shows the major FDI investors in the Philippines. Historically, the US has been the dominant source of FDI, followed by Japan and several European countries such as Netherlands and UK. Recently, Asian Tigers such as Singapore, Hong Kong, Taiwan and Korea appear as a substantial source of investment. As a result, between 1989 and 1999, the cumulative share of the US fell drastically from around 56% to 25%, respectively. The figure dropped further to around 21% in 2003. By squeezing the US dominance, the cumulative shares of Japan and Netherlands both increased from 15% to 22% and from 5% to 12%, respectively (Aldaba 2006). However, each country's share of FDI does not remain stable. It has been fluctuated considerably. This is partly because the total amount of FDI inflows to the country is small, being sensitive to lump-sum money for a large investment project.

Table 2 indicates the sectoral distribution of FDI inflows in the Philippines. The manufacturing sector has been the largest recipient of FDI inflows, accounting for nearly 50% on average in the 80s and 90s. Although the sectoral figures also fluctuate significantly, the relative importance of the manufacturing sector is declining. In place of this sector, the shares of banking and public utility sectors are noticeably increasing. This is largely due to the introduction of liberalisation policies in service sector, which started in the early 1990s, including banking, insurance, telecommunication, maritime and energy industries (Austria 2006).

2. Local Procurement in Developing Countries: A Theoretical Consideration

On initial inspection, there are several reasons for believing that inward investors in developing countries, particularly those located in the export processing or free trade zone, may be reluctant to create strong local linkages. The immediate motivations of inward FDI to developing countries are, in general, low labour costs and a combination of investment incentives such as generous export subsidies, tax holiday, and re-investment allowance. In this case, TNCs may well remain their ownership advantages at home, and take advantage in the forms of subsidies (Driffield and Noor 1999). Global companies would take advantages of low cost production with tariff-free imported materials. On the other hand, it is highly costly and

time-consuming for TNC's local affiliate to establish strong linkages with local suppliers who are unknown and unfamiliar with the TNCs. As a result, it is reasonable to assume that TNCs tend to be reluctant to create local linkages with the host economy.

A number of empirical studies regarding linkage formation have been consistent with this presumption. As for most ASEAN economies, it is reported that TNCs' local purchasing of material and component inputs are generally at a low level, particularly for foreign-owned plants located in free trade zones. In the case of Malaysia, at least 75 percent of the inputs TNCs use are imported from suppliers outside Malaysia (O'Brien 1993). Rasiah (1993) also reports a similar result; the local sourcing both of raw materials and capital equipment are below 10 percent for electronics firms located in Malaysian free trade zones, although the figure was gradually increasing. On the other hand, Driffield and Noor (1999) find a higher level (average 26.36 percent) of local purchasing in TNC-owned electrical and electronics firms in Malaysia. Even though these figures are not at a high level in an absolute term, the Malaysian cases can be interpreted as relatively better ones in local procurement. Warr (1989) compares the economic performance of four export processing zones in Indonesia, Korea, Malaysia, and the Philippines, among which Malaysian figures are the highest in local content ratio. More recently, JETRO surveyed the local operation performance of Japanese manufacturing companies in East Asian economies (JETRO 2002). Table 3, 4 and 5 summarise the results. The tables show the clear difference in local purchasing performance of Japanese electric and electronics industries among selected Asian economies. Relatively developed economies like Korea and Taiwan provide a higher level of local content. On the other hand, Japanese manufacturing companies operating in less developed economies such as China, Indonesia, and Philippines tend to depend more on imported materials and less on the local procurement, particularly purchased from local suppliers.

Table3. Local Purchasing Ratio in Japanese Electric & Electronics Industries in 2001

		No. of Firms Surveyed	0%	0~20%	21~50%	51~70%	71~100%
China	Manufacturing Total	584	5.7	22.9	21.7	16.4	33.2
	Assembler Total	65	0.0	23.1	24.6	16.9	35.4
	Supplier Total	101	9.9	34.7	28.7	16.8	9.9
Thailand	Manufacturing Total	293	4.1	18.8	25.9	19.5	31.7
	Assembler Total	23	0.0	17.4	30.4	30.4	21.7
	Supplier Total	40	10.0	32.5	42.5	2.5	12.5
Indonesia	Manufacturing Total	167	7.2	24.6	30.5	17.4	20.4
	Assembler Total	5	0.0	0.0	40.0	40.0	20.0
	Supplier Total	20	0.0	60.0	5.0	20.0	15.0
Singapore	Manufacturing Total	117	10.3	26.5	26.5	15.4	21.4
	Assembler Total	9	0.0	22.2	11.1	33.3	33.3
	Supplier Total	29	3.4	48.3	20.7	13.8	13.8
Malaysia	Manufacturing Total	245	7.3	26.9	24.5	17.1	24.1
	Assembler Total	18	0.0	27.8	61.1	5.6	5.6
	Supplier Total	64	4.7	32.8	32.8	18.8	10.9
The Philippines	Manufacturing Total	124	14.5	41.9	22.6	8.9	12.1
	Assembler Total	10	0.0	30.0	50.0	20.0	0.0
	Supplier Total	23	8.7	56.5	21.7	4.3	8.7
Vietnam	Manufacturing Total	117	17.9	51.3	13.7	4.3	12.8
	Assembler Total	5	20.0	60.0	20.0	0.0	0.0
	Supplier Total	11	27.3	54.5	18.2	0.0	0.0
South Korea	Manufacturing Total	42	14.3	11.9	19.0	19.0	35.7
	Assembler Total	3	33.3	0.0	0.0	33.3	33.3
	Supplier Total	6	16.7	33.3	0.0	16.7	33.3
Taiwan	Manufacturing Total	125	8.0	12.8	25.6	16.8	36.8
	Assembler Total	5	0.0	0.0	20.0	40.0	40.0
	Supplier Total	25	4.0	20.0	28.0	8.0	40.0

Source: JETRO (2002).

**Table4. Local Purchasing Ratio in Japanese Electric & Electronics Industries in 2001
(Electronics Machineries)**

		No. of Firms Surveyed	0%	0~20%	21~50%	51~70%	71~100%
China	from Local-Owned Suppliers	64	1.6	23.4	29.7	10.9	34.4
	from Japanese-Owned Local Suppliers		21.9	23.4	25.0	14.1	15.6
Thailand	from Local-Owned Suppliers	23	4.3	34.8	30.4	13.0	17.4
	from Japanese-Owned Local Suppliers		4.3	8.7	21.7	39.1	26.1
Indonesia	from Local-Owned Suppliers	5	0.0	40.0	40.0	0.0	20.0
	from Japanese-Owned Local Suppliers		0.0	20.0	20.0	20.0	40.0
Singapore	from Local-Owned Suppliers	10	10.0	40.0	40.0	0.0	10.0
	from Japanese-Owned Local Suppliers		10.0	20.0	20.0	20.0	30.0
Malaysia	from Local-Owned Suppliers	17	5.9	47.1	29.4	11.8	5.9
	from Japanese-Owned Local Suppliers		0.0	17.6	35.3	17.6	29.4
The Philippines	from Local-Owned Suppliers	10	10.0	40.0	10.0	20.0	20.0
	from Japanese-Owned Local Suppliers		10.0	20.0	40.0	20.0	10.0
Vietnam	from Local-Owned Suppliers	4	0.0	50.0	0.0	0.0	50.0
	from Japanese-Owned Local Suppliers		50.0	25.0	0.0	25.0	0.0
South Korea	from Local-Owned Suppliers	2	0.0	0.0	0.0	0.0	100.0
	from Japanese-Owned Local Suppliers		0.0	100.0	0.0	0.0	0.0
Taiwan	from Local-Owned Suppliers	5	0.0	0.0	0.0	20.0	80.0
	from Japanese-Owned Local Suppliers		40.0	40.0	20.0	0.0	0.0

Source: JETRO (2002).

Table5. Local Purchasing Ratio in Japanese Electric & Electronics Industries in 2001 (Electronics Components)

		No. of Firms Surveyed	0%	0~20%	21~50%	51~70%	71~100%
China	from Local-Owned Suppliers	93	17.2	30.1	25.8	8.6	18.3
	from Japanese-Owned Local Suppliers		19.6	6.5	27.2	19.6	27.2
Thailand	from Local-Owned Suppliers	35	20.0	31.4	25.7	8.6	14.3
	from Japanese-Owned Local Suppliers		8.6	11.4	20.0	11.4	48.6
Indonesia	from Local-Owned Suppliers	20	25.0	40.0	30.0	0.0	5.0
	from Japanese-Owned Local Suppliers		10.0	0.0	20.0	20.0	50.0
Singapore	from Local-Owned Suppliers	27	14.8	33.3	22.2	11.1	18.5
	from Japanese-Owned Local Suppliers		7.4	14.8	22.2	18.5	37.0
Malaysia	from Local-Owned Suppliers	60	11.7	33.3	23.3	10.0	21.7
	from Japanese-Owned Local Suppliers		10.0	15.0	18.3	25.0	31.7
The Philippines	from Local-Owned Suppliers	22	13.6	63.6	4.5	0.0	18.2
	from Japanese-Owned Local Suppliers		18.2	0.0	0.0	4.5	77.3
Vietnam	from Local-Owned Suppliers	8	50.0	25.0	0.0	0.0	25.0
	from Japanese-Owned Local Suppliers		25.0	12.5	37.5	0.0	25.0
South Korea	from Local-Owned Suppliers	4	0.0	0.0	25.0	0.0	75.0
	from Japanese-Owned Local Suppliers		25.0	50.0	25.0	0.0	0.0
Taiwan	from Local-Owned Suppliers	25	4.0	12.0	16.0	4.0	64.0
	from Japanese-Owned Local Suppliers		36.0	28.0	8.0	12.0	16.0

Source: JETRO (2002).

Both in the studies of Warr (1989) and JETRO (2002), the Philippine case is the poorest performance in local sourcing. Other studies also indicate a very low level of Philippines' local purchasing performance (Hill 1982, Rondinelli 1987, Warr 1987, Meyanathan 1994). On the other hand, in the recent survey of the sourcing activity of Japanese home appliance assemblers in Philippines, Morisawa (2000) reports a larger percentage of local content ratio by most individual components. Even in this study, however, the core components are exclusively supplied by foreign-owned local suppliers. Morisawa's finding is consistent with the result of JETRO survey, in which as for electronics component sectors, only 18.2% is purchased from locally-owned suppliers, while 77.3% was provided by Japanese-owned local suppliers. Those studies

lead us to believe firmly that the Philippines creates very weak industrial linkages with TNCs.

If the presumption that industrial linkages in the Philippines are exceptionally weak is correct, it is important to identify the factors behind this phenomenon. The existing empirical literature tends to emphasises the difficulty to nurture industrial linkages in developing countries; however, by experience, weak linkage formation is not often an inevitable but gradually overcome. There are valid reasons to assume that, with the passage of the time, economic linkages would be gradually enhanced, strengthened, and deepened between TNCs and local suppliers. In theory, the formation of linkages is generally influenced by the following three factors; (1) TNC local affiliates' outsourcing strategy, (2) entrepreneurial response by local suppliers, and (3) the government policies, including education, SME and FDI policies (UNCTAD 2001).

(1) TNCs' purchasing strategy

A number of studies has pointed out that TNCs, particularly export-oriented firms, tend to depend on imported materials for the local operation (Riedel 1975, UNCTAD 2001, Giroud 2003). Indeed, upon entry into the host developing countries, a TNC does not normally expect the full availability of competent local suppliers who can meet the conditions of quality, scale and cost a TNC requires for each input. Moreover, a TNC's local operation is normally supported by its international supply chains. It is very often economical for TNC's local affiliates to import necessary items from home or overseas suppliers than to purchase locally. Thus, it is often unconditionally assumed that foreign-owned assembly plants prefer to use imported to locally-produced items.

However, this does not necessarily imply that TNCs have a permanent intention not to expand local outsourcing. Although TNC's local affiliates may enjoy some amount of profits with minimum local procurement, they may gradually expect more profits to be generated with more items purchased locally. This is due to the fact that the price of an item offered by local suppliers are generally cheaper than those of imported. Also, logistic costs are added on this. Proximity is also an important consideration in order to shorten lead time, to maintain flexibility, to exchange information with suppliers, and to reduce risk or disruptions. These factors motivate TNCs to search for local suppliers nearby. It is natural that active purchasing managers in foreign-owned local affiliate are always looking for cheaper sources of materials and services to reduce the overall cost and to shorten lead time. Thus, searching for prospective and nearby local suppliers is a general principle for all TNCs' local affiliates, even though they are operating in free trade zones.

However, establishing linkages with local suppliers is an extremely difficult process for TNC's local affiliates, particularly those in developing countries. In this regard, two remarks should be noted.

First, initiatives related to seeking prospective local suppliers largely depend on the degree of autonomy privileged to the local affiliate of TNCs. A TNC headquarter often assigns specific strategic roles to their foreign affiliate such as a low-cost production base, sales representative and a global R&D centre. Thus, every local affiliate of TNCs is more or less incorporated into TNCs' global production networks. Purchasing policies executed by local affiliate, including both local and international sourcing, tend to be under the control of TNC headquarter's global strategy, in which an IPO (international procurement office) often plays a central role. TNCs' inclination to the local purchasing is also related to the initial investment motivations and strategies. Export-oriented TNCs generally purchase more imported materials and items than domestic-market oriented ones as export markets require more stringent requirements in quality, some of which may be difficult for local suppliers to meet. The greater the autonomy exercised by the affiliate, the more likely it is to try and identify local suppliers and to create relationships with them (UNCTAD 2001).

The second issue is more fundamental: a distinct lack of efficient local suppliers which is widely observed in many developing countries. Obviously, unavailability of competent local suppliers is the main obstacle for TNC's local affiliates to expand local purchasing. While the costs and proximity are important matters for TNCs' supplier selection, the most important consideration is normally placed on quality over others. It is normally difficult for TNCs to find competent suppliers who can meet the efficiency and quality standards the TNCs require. Theoretically, in the case where competent local suppliers are not available, TNCs may have three options. The first is the continuous dependence on imported items. The second is the invitation of foreign suppliers to come together and to establish their local facilities nearby TNCs production site. The last option is to make efforts to find *potentially* competent local suppliers and assist them in upgrading technological and managerial capabilities the TNC is satisfied with. Obviously, there is a trade-off between costs and benefits among these three options; the first is most immediate and unflinching, but may be most costly, while the last option is most time-consuming and risky, but the expected cost advantage is dominant, if successful.

It is clear that TNCs' local outsourcing decision is, thus, principally made on the cost-benefit principle either in the short or long terms. Whether an item is imported, in-house produced, or sourced locally is principally determined by a delicate balance among relative costs and quality, expected risk, and government policy. The choice will depend on costs of production at home and abroad, transport costs, information-communication costs and the relative technical competence of the two sets

of producers. The point to be emphasised is that, regardless the issues related to TNC's general global procurement strategies and any government interventions, TNCs' local affiliates are *always looking for low-cost suppliers*. Thus, the creation of linkages ultimately depends on the amount of the availability of competent local suppliers. This leads us to consider the issue on the mechanism of how such competent suppliers emerged and developed in the host economy.

(2) Local suppliers' response

The general objective to accept FDI inflows is not only to provide employment and income but also to cultivate an economic environment in which local supplying and other spin-off companies will be able to contact with TNCs and among themselves. In this respect, TNC's local affiliates are regarded as a "starter" or "trigger" for the emergence and development of indigenous entrepreneurial firms. This may generate even greater employment and income effects in the long run.

For this to occur, there are at least two conditions that should be satisfied. First, the TNCs must be structurally open to the approach by local firms. As is explained above, some of TNC's local affiliates are heavily vertically integrated into the global procurement and distribution networks involving transfers and sales of inputs, semi-processed goods, and final products among far-flung subsidiaries of the TNC itself. In this case, the role assigned to the local affiliates is largely characterised as an export platform, or a screwdriver factory, just taking advantage of local low-cost labour. This would remain an enclave disarticulated from the other economic sectors of the local economy. It is quite difficult for local firms, particularly if they are new and unknown with limited business experience in dealing with local TNCs, to penetrate the TNC's established production networks.

The second condition is more fundamental: there must be abundant local entrepreneurs who should be highly alert and competent *in advance of* TNCs' inclination to local outsourcing. Such entrepreneurs must be technologically competent, either noticeably or potentially, enough to meet the requirements in cost, quality, and delivery TNCs may demand. Only entrepreneurial firms will try to find and grasp profit opportunities which the entry and operation of TNCs cause in the host economy. Otherwise, TNCs' outsourcing-orientation will end in failure.

It is worth emphasising that the second condition may be largely inconsistent with the view of many mainstream economics. The mainstream economist sees that entrepreneurs are potentially abundant evenly in all countries and regions, and, as a result, the emergence of entrepreneurs is highly elastic to the emerging expectation of profit opportunities. Therefore, their sleeping can be mainly explained by 'market failure' due to, for example, the interrupted flow of relevant information, inappropriate education and vocational policies and so on. Naturally, in this theoretical context, the roles of government, as well as TNC strategies, are exclusively emphasised in making

up the failure and in supporting local firms. Thus, mainstream economists tend to consider the role of entrepreneurship unimportant in linkage formation.

However, we see this view is too narrow to explain the mechanism of linkage creation. It is difficult to believe that the creation of linkages can be explained exclusively by the government policies and TNCs' outsourcing strategies. Obviously, these factors importantly affect the performance of linkage formation; however, local entrepreneurial response should be executed by virtue of pursuing self-actualised and emotional motivations. Thus, it is suggested that entrepreneurship does matter in linkage formation. In conclusion, the present study regards entrepreneurship as an independent variable to explain the performance of local linkage formation.

(3) Government policies

Arguably, government policies on import restriction is believed as the single most important determinant of local purchasing and linkage formation with by transnational corporations in developing countries. Normally, many governments in countries with local assembly activity and a low initial level of local purchasing seek to increase local content over time. The economic rationale for this is clear and plausible. As experience and technical learning are increasing, local suppliers will gradually become more competitive with foreign-owned overseas and local suppliers. Import-restriction policies may foster this process. However, the danger of such an import-substitution policy is obvious, if the economy is too small to sustain efficient production. Non-market pressure to use local materials and items throughout the whole value chain often results in the use of inefficient method and low-quality components. Thus, government direct intervention to force backward linkages is obviously counterproductive.

Import-restriction policies are normally associated with import-substitution strategy; however, the policies are often employed even under the strategy of export-oriented industrialisation. The key to success with export-oriented industrialisation lies in the country's capability to produce what is demanded in international markets. This requires constant changes in the export structure in line with the changing patterns of internationalised production. If local suppliers are uncompetitive, forcing backward linkages through, for example, "local content requirements", may result only in high cost production with low-quality intermediate products. In a worse case, which is widely observed in many developing countries, local suppliers by themselves may not exist who can meet the requirements of international market. In this case government direct intervention may not be effective, as such a supplier does not exist.

As the potentially-high cost and inefficiency caused by import-restrictive policies are increasingly recognised by governments of developing countries, liberalised trade and investment policies are, in turn, introduced with the expectation to

create local linkages and enhance technology transfer through them. In stead of direct intervention, it is often argued that governments are required to create a favourable investment climate that is conducive for formation of linkages via liberalised and market-friendly policies.

The Philippines is notorious for its poor performance in linkage formation. Among others, what factor is critical to hinder from creating linkages between TNCs and local suppliers. My fieldwork aims to examine this issue.

3. Research Method

In this study, the evidence is drawn from author's one-week fieldwork conducted in Manila, the Philippine, in January 2008, and in Penang, Malaysia, in February-March 2008. This study is principally based on the findings in Manila, while the Penang cases are referred as a comparison. Due to a time constraint, the survey in Manila was not sufficient in the number of observed samples. Fieldwork covered one large Japanese TNC and seven suppliers subcontracted to this.

The concerned TNC (named as Company A, hereafter), a 100% Japanese-owned car-audio assembler, stands at a central position in the present study. Company A came to the Philippines in 1990, prior to the introduction of liberalised FDI policies, and has been operating in Cavite Export Processing Zone (EPZ), one hour driving distance from Manila. The company is a large-scale firm, comprising more than 400 employees with 32,000 square meters plant area, all of which figures are among the largest in the EPZ.

The evidence was collected through semi-structured interviews with general managers, purchasing officers, and technicians including both Japanese and Filipino staff in Company A and its suppliers. Attention in this study is the purchasing behaviour of each firm.

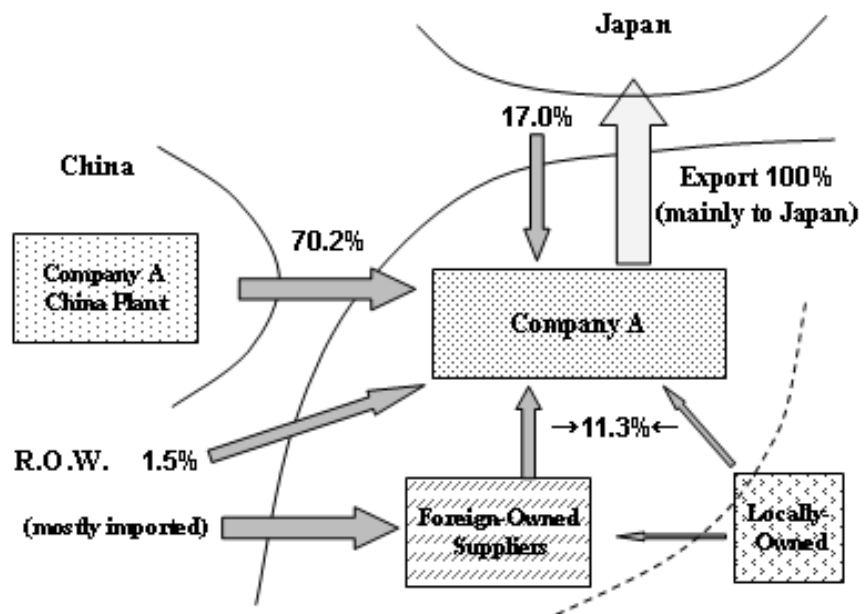
The local supply linkages of the TNC plant were examined in the following three steps. The first investigation is to depict a general picture of large TNC's purchasing structure. The percentage of material and component inputs procured from suppliers in the local region was measured in a local currency term. For this, TNC's purchasing managers were asked to provide purchasing records. Second, general managers and purchasing officers of the TNC were asked to identify the sources of individual key components. Third, if the item was locally purchased, I visited the concerned suppliers to ask the following questions; whether they are Filipino or Japanese-own, when the suppliers started local operation, and how their purchasing behaviour is. By continuing this process, it was possible to identify the Company A's local subcontracting structure, representing how the TNC is embedded into the local production network.

4. Case Study

The Company A, located in Cavite Export Processing Zone, sourced around 10 per cent of their material and component inputs locally. Specifically, the company's linkage structure is simply drawn by Fig. 2. There are four noticeable features in the structure.

First, the local operation of the company can be categorised as a form of an economic enclave. The company is primarily an exporting firm, while it obtains inputs mainly from overseas suppliers including Japanese and Chinese. Only a few percentage of total procurement is local. Thus, as the company is substantially disconnected with local economy in procurement, this can be interpreted as a typical enclave operation.

Fig 2. The Linkage Structure of the Company A in Philippine (2001)



Source: Author's Interview

Second, the contribution of foreign-owned local suppliers is indispensable. A substantial proportion of local purchases are provided by large local suppliers. Those first-tier suppliers are mostly foreign-owned which include manufacturers but also trading companies and local sales representatives. They do not produce locally but just relay imports for domestic sales. Some of the foreign-owned suppliers were encouraged to come and locate nearby in the EPZ to supply items to the company. A large proportion of their intermediate items are imported from overseas suppliers.

Third, there are only a few Filipino-owned companies as a supplier. They produce only simple items, such as carton boxes, sticker and silica gel. They are basically located in the same EPZ; however, their economic linkages with the company have been remained weak and meagre. Their business tends to be squeezed by the competitive pressure of foreign-owned large suppliers in the same industrial segment; as a result, transaction value and volume is tiny or negligible for their assemblers.

Finally, China is the largest supply base for the company, particularly as for mechanical components. This is due to the company's global procurement strategy the headquarter mandates. The purchasing activity is centralized in the purchasing department in Japan. Thus, decisions made by local affiliates have been limited, as it is a rule that most of the outsourced items are specified, tested, and approved in Japanese offices at the early stage of R&D and design processes. The company owns a much larger manufacturing subsidiary in Dongguan, China. It is simply believed in the company that China's cost advantage would be unbeatable; therefore, the full use of this advantage is profitable. The company's IPO (international procurement office), located in Hong Kong, controls the distribution of materials and items all the overseas affiliates need to purchase. Purchased items from China are produced mainly by foreign-owned (namely Japanese, Korean, and Taiwanese) local suppliers in Southern China.

Table6. List of Local Suppliers of the Company (by component and by nationality)

	Locally Purchased				
	Filipino	Japanese	Korean	Others	Total
Electric Parts	0	13	1	0	14
Metal Parts	0	1(JV) 6	3	0	10
Rubber, Plastic	1	4	0	0	5
Electric Mechanical	1	4	1	0	6
Mechanical Parts	0	0	0	0	0
Semi Assembled	0	0	0	0	0
Packaging & Non-core	9	5	2	0	16
Total	11	32	7	0	51

Source: Author's Interview.

Although the number may fluctuate on occasion, the company usually maintains around fifty external suppliers in the Philippines. A summarised list is shown in Table 6. Among them, thirty-two are Japanese owned; they provide inputs such as electrical items, semiconductors, metal parts, electronic mechanical parts,

plastic injection goods, and other relatively precision components. In addition to this, there are seven Korean firms which provide electronic and metal parts. Filipino-owned firms are only eleven; moreover, as is mentioned above, their supplying items are rather technologically simple and standardised products such as carton boxes, packaging materials, stickers, and silica gel. A variety of locally supplied products is severely limited; seven suppliers out of eleven are concentrated only in package-related items. Obviously, these items are low value-added, implying that locally-owned suppliers are confined only to the least valuable segments in outsourcing.

In a response to my inquiry on whether levels of local sourcing changed over past three years, the purchasing manager of the company indicated that there had been only slight changes. The result is shown in Table 7. Several important features may be drawn from the table.

Table7. The Sourcing Structure of the Company A (by component and by country)

		Local	Japan	China	Others	Total	Value Share to Total Cost
Dec 2007	Electric Parts	14.3%	25.5%	59.7%	0.5%	100%	41.1%
	Metal Parts	42.8%	6.3%	48.5%	2.4%	100%	7.3%
	Rubber, Plastic	4.3%	40.2%	55.2%	0.2%	100%	9.8%
	Electric Mechanical	12.7%	22.3%	64.4%	0.6%	100%	4.6%
	Mechanical Parts	0.0%	0.0%	99.9%	0.1%	100%	29.9%
	Semi Assembled	4.3%	16.9%	61.5%	17.2%	100%	6.0%
	Packaging & Non-core	86.6%	1.4%	11.9%	0.0%	100%	1.2%
Share to Total Cost		11.3%	17.0%	70.2%	1.5%		100.0%
Dec 2006	Electric Parts	7.8%	32.4%	59.6%	0.2%	100%	31.1%
	Metal Parts	59.1%	21.3%	11.8%	7.8%	100%	5.1%
	Rubber, Plastic	13.4%	79.6%	5.6%	1.4%	100%	6.2%
	Electric Mechanical	11.0%	21.0%	67.3%	0.7%	100%	2.9%
	Mechanical Parts	0.0%	0.0%	100.0%	0.0%	100%	49.2%
	Semi Assembled	0.0%	10.6%	84.3%	5.1%	100%	4.9%
	Packaging & Non-core	83.6%	14.4%	1.8%	0.2%	100%	0.5%
Share to Total Cost		7.0%	17.3%	74.9%	0.8%		100.0%
Dec 2005	Electric Parts	5.1%	42.7%	51.9%	0.4%	100%	34.3%
	Metal Parts	29.0%	36.1%	30.3%	4.6%	100%	5.1%
	Rubber, Plastic	10.8%	68.3%	19.0%	1.9%	100%	6.8%
	Electric Mechanical	9.9%	14.8%	75.2%	0.1%	100%	2.8%
	Mechanical Parts	0.0%	0.2%	99.7%	0.0%	100%	47.3%
	Semi Assembled	0.0%	20.2%	67.6%	12.2%	100%	3.1%
	Packaging & Non-core	78.0%	9.8%	11.9%	0.3%	100%	0.6%
Share to Total Cost		4.7%	22.3%	72.1%	0.9%		100.0%

Source: Author's Interview.

First, during the observed three years, imports constitute a significant proportion of parts and components to purchase for the company. Major components, such as electric parts, tuners, mechanics, and other high precision items, are being imported directly or through local sales representatives of major component manufacturers. China remains the largest supply-base for the company, followed by Japan. On the other hand, locally sourced items are very limited, only to standardised, bulky, heavy and technologically marginal items such as carton boxes and stickers.

Secondly, even though the absolute value is still small, the share of local purchasing has been gradually increasing. This is trivial at present but an important achievement made by the purchasing team of the company. As far as the heavy dependence on import items from China to use continues, the Philippine affiliate can never be at a cost advantage to that in China. The Philippine affiliate pays more for identical items than that in China due to adding logistic and administrative costs. Thus, the team has made a tremendous effort to find cheaper sources of local supply for possibly all items. They found that some of imported items are locally available with cheaper prices, and shifted to local purchasing. The gradual increase in the relative share of local purchase is an outcome of this effort. However, with regard to local linkage creation, the figure may be partly overestimated. The bulk of items, particularly electronic parts, are purchased from local representatives of multinational electronics manufacturers. Indeed, they do not produce the items locally, but import them from Japan and other overseas production sites. This is a kind of 'extended' enclave in which local suppliers are not deeply embedded.

These findings let us to suppose that, among others, one of the critical factors to explain linkage formation is local attributions. It has been proved that the TNC local-affiliate has a firm and strong motivation to expand the magnitude of local purchasing; however, the finding clearly shows that only foreign-owned local suppliers could respond and satisfy with the standard the TNC requires. Filipino-owned suppliers largely missed this opportunity. This leads us to believe that local entrepreneurship does matter. The next section examines this issue.

5. Does Entrepreneurship Matter?

It is intuitively obvious that availability of vigorous and technologically competent local supplier is the prerequisite for successful linkage formation with TNCs. Only entrepreneurial firms will try to find and grasp profit opportunities which the entry and operation of TNCs bring to the host economy. Typical prospects are TNCs' propensity to local outsourcing in various activities including local procurement. A vigorous entrepreneurial firm should be alert to this and will try to discover and seize such opportunities. Local small firms with weak entrepreneurial motivation may be inert and inattentive and, therefore, not respond swiftly to the TNCs' local activities. Therefore, at a regional level, it is expected that a strong linkage is supported by a

relatively large number of intense entrepreneurs successfully entering into the vertical supply chain. A successful region in linkage formation would have enjoyed more availability of such intense entrepreneurs than an unsuccessful region. Thus, it is expected that entrepreneurship does matter critically in the performance of the linkage creation.

If the above perception is correct, my visit of locally-owned factory is particularly important. The interview with local entrepreneurs is intended to understand the nature, type, and intensity of local entrepreneurship. It is widely acknowledged that entrepreneurship is highly cultural and ethnic burden in the local context (McClelland 1961, Hagen 1962). If local entrepreneurship is aggressive, it is expected that the more local suppliers emerge and, as a result, the deeper and more extensive local linkage would be created with TNCs' local affiliates. The present study expects that, if Filipino entrepreneurs show any particular features in common in their entrepreneurship, it would be an important indication to understand the performance of linkage creation.

Table8. Profiles of Representative Entrepreneurs in Philippines and Malaysia

	Philippines	Malaysia
No. of Observation	2	14
Main Products (example)	Carton Box and Garment	Metal, Plastic, Simple Electronics Parts
Ethnicity	Filipino	Chinese Malaysian
Number of Employees	30 and 115	150 ~ 300
Year of Establishment	after 2001	1974 ~ 1989
Age of Founder when started	34 and 51	between 30 ~ 45
Educational Background	Vocational School	Junior-high, diploma, university
Founder's Previous Career	unrelated to the present business	engineers in the same business
How to Finance Start-up	borrowing or support by partners	mainly self-finance
Reason to Start-up	Displacement	Life-long Dream
How to Upgrade Capability	Internet sources, Self-learning	Engineering Specialist
How to Meet TNCs	Occasional	Initial Start with Local Business
Future Goals	Nothing in Particular	Making the Company Bigger

Source: Author's Interview.

The result is shown in Table 8. The table also shows characteristics of

Malaysian entrepreneurs, aiming to compare the features of Filipino entrepreneurs. Several interesting points are noted.

First, all of my interviewed Filipinos are 'displaced' or 'occasional' entrepreneurs. They had not maintained any intention to start their own business. They were forced to start their business because they were merely discontent with, or displaced at, the previous position by company closure or by a similar incident. On the other hand, most Malaysian entrepreneurs continued to have a dream becoming an entrepreneur.

Second, Filipino entrepreneurs often started their business in the field unrelated to their previous careers. This is utterly far from the case of Malaysian entrepreneurs. One of my interviewed Filipino entrepreneurs engages in carton box business; however, his previous career was a line manager of a Japanese electronics company. Another Filipino entrepreneur runs a garment factory as a designer as well as a technician; however, his background is accountant and used to work as a sales manager.

The third point is related to the above points. It seems that technological capability of Filipino entrepreneurs is smaller and weaker than that of Malaysians. This is because Malaysian entrepreneurs prepared a lot prior to their start-up, and remained at the same business. However, my surveyed Filipino entrepreneurs prepared almost nothing in, for example, learning necessary technology and saving money before the business to start because starting business was unexpected. As a result, because of the relative lack of technological capabilities, it is more difficult for Filipino entrepreneurs to become an established supplier to TNCs than for Malaysians. As the number of my surveyed sample was extremely small both in the Philippine and Malaysia, it may be dangerous to generalise my findings and interpretation. Even so, however, there is a sharp contrast between Filipino and Malaysian entrepreneurs in their behavioural attitude. We believe that such differences surely relates to the different performance in local outsourcing between the two countries. These facts provide circumstance evidences that local entrepreneurship does matter on the performance of linkage formation.

6. Conclusion and Discussion

It has been long believed that FDI represent a relatively fast road to development for those countries which tend to lack ability to mobilise domestic resources effectively. As a result, more and more developing countries passed legislation to permit foreign firms to establish business in their host economy, providing bigger and better incentives to attract international investment as much as they can. Export Processing Zone like Cavite in the Philippines was introduced for this objective. A simple and brittle belief is that EPZ should be as open as possible, then, domestic firms would also enter to share in the zone infrastructure and to encourage

close relations between foreign and indigenous firms themselves. This clearly happened in some countries. Zones in South Korea and Taiwan have built up a substantial level of local sub-contracting on this basis, and backward and forward linkages between TNCs and domestically-owned industries promoted the upgrading of the local economies. Malaysian case is, more or less, comparable to these experiences.

This study examines the Philippine case in line with this argument. Our study clearly shows that Philippines' liberalised FDI policy did not necessarily lead to successful formation of industrial linkages between TNCs and local firms. Three factors are proposed and examined individually, i.e., TNC local affiliates' outsourcing strategy, local entrepreneurial response, and the host government policies. As is particularly relevant to the case of the Philippines, weak local entrepreneurial initiative is distinctively identified to explain the poor performance in linkage formation.

The findings may have an implication for global value chain analysis. The analysis tends to emphasises the role of 'lead firms' through their governance structure to control subcontracting firms; however, this study focuses on the indigenous side, emphasising the active role of local entrepreneurship in creating and developing industrial linkages with TNCs. As the insufficient number of observations is a crucial drawback of this study, further evidences with more number of samples are needed to generalise and develop this argument.

References

- Aldaba, R.M. [2006] "FDI Investment Incentive System and FDI Inflows: The Philippine Experience," Discussion Paper Series No.2006-20, Philippine Institute for Development Studies.
- Austria, M. [1998] "The Emerging Philippine Investment Environment," *Journal of Philippine Development*, 45 (1), pp.79-126.
- _____. [2006] "FDI and Economic Development: The Case of the Philippines," in Urata, Yue and Kimura [2006], Ch.10.
- Driffield, N., and A-H-M, Noor [1999] "Foreign Direct Investment and Local Input Linkages in Malaysia," *Transnational Corporation*, 8(3), pp.1-24.
- Gereffi, G. [1999] "International Trade and Industrial Upgrading in the Apparel Commodity Chain," *Journal of International Economics*, 48(1) 37-70.
- Gereffi, G. and R. Kaplinsky [2001] "The Value of Value Chains: Spreading the Gains from Globalisation," *IDS Bulletin*.
- Gereffi, G. and M. Korzeniewicz eds. [1994] *Commodity Chains and Global Capitalism*, Westport, CT; Praeger.
- Giroud, A. [2003] *Transnational Corporations, Technology and Economic Development: Backward Linkages and Knowledge Transfer in South-East Asia*, Edward Elgar.
- Grunwald, J. and K. Flamm [1985] *The Global Factory: Foreign Assembly in International Trade*, Brookings Institution, Washington, D.C.
- Hagen, E. E. [1962] *On The Theory Of Social Change: How Economic Growth Begins*, Homewood, Ill., Dorsey Press.
- Henderson, J. [1998] Danger and Opportunity in the Asia-Pacific" in G. Thompson ed., *Economic Dynamism in the Asia-Pacific*, Routledge.
- Hill, H. [1982] "Vertical Inter-Firm Linkages in LDCs: A Note on the Philippines," *Oxford Bulletin of Economics and Statistics*, 44(3): 261-71.
- Hobday, M. [2001] "The Electronics Industries of the Asia-Pacific: Exploiting International Production Networks for Economic Development," *Asia-Pacific Economic Literature*, 15(1): 13-29.
- JETRO [2002] A Comparison of Investment Environment in Asia, (in Japanese) JETRO.
- McClelland, D.C. [1961] *The Achieving Society*, Princeton, N.J, London, Van Nostrand.
- Meyanathan, S. D. ed. [1994] *Industrial Structures and The Development of Small and Medium Enterprise Linkages: Examples from East Asia*. Washington D.C., Economic Development Institute of the World Bank.
- Morisawa, K. [2000] "The Philippine Electronics Industry and Local Suppliers: Developing Supporting Industries through Foreign Capital-led Industrialization," Discussion Paper No.0011, University of Philippine,

School of Economics.

- O'Brien, L., [1993] "Malaysian Manufacturing Sector Linkages." in Jomo, K.S. ed., *Industrialising Malaysia*, Routledge, London and New York.
- Rasiah, R., [1993] "Free Trade Zones and Industrial Development in Malaysia," in Jomo, K.S. ed., *Industrialising Malaysia*. Routledge, London and New York.
- Riedel, J., [1975] "The Nature and Determinants of Export-Oriented Direct Foreign Investment in a Developing Country: a Case Study of Taiwan," *Weltwirtschaftliches Archiv*, 111(3), pp.505-529.
- Rondinelli, D.A. [1987] "Export Processing Zones and Economic Development in Asia: A Review and Reassessment of a Means of Promoting Growth and Jobs," *American Journal of Economics and Sociology*, 46(1), pp.89-106.
- Schmitz, H. ed. [2004] *Local Enterprises in The Global Economy: Issues of Governance and Upgrading*, Edward Elgar.
- UNCTAD [2001] World Investment Report 2001: Promoting Linkages.
- Urata, S., Yue, C-S., and F. Kimura [2006] *Multinational and Economic Growth in East Asia: Foreign Direct Investment, Corporate Strategies and National Economic Development*, Routledge.
- Warr, P.G. [1987] "Export Promotion via Industrial Enclaves: The Philippines' Bataan Export Processing Zone," *Journal of Development Studies*, 23, pp.220-41.
- _____[1989] "Export Processing Zones: The Economics of Enclave Manufacturing" *World Bank Research Observer*, 4(1) pp.65-88.