

IFN Working Paper No. 987, 2013

# **Foreign Direct Investments in Southeast Asia**

Fredrik Sjöholm

# **Foreign Direct Investments in Southeast Asia<sup>\*</sup>**

**FREDRIK SJÖHOLM**

LUND UNIVERSITY  
AND  
RESEARCH INSTITUTE OF INDUSTRIAL ECONOMICS

## **Abstract**

Foreign direct investment has been of great importance in economic growth and global economic integration over the last decades. South East Asia has been part of this development with rapidly increasing inflows of FDI. However, there are large variations over time and between countries in the region as regard to the policies towards FDI, and in actual inflows of FDI. This chapter aims at examining the size of FDI in South East Asia and the trends in it. The main determinants of FDI in Southeast Asia as well as their effect on the host countries are also discussed and examined.

JEL codes: F21; F23; O53

Keywords: Foreign direct investment; multinational firms; Southeast Asia; economic development

---

<sup>\*</sup> I am grateful for comments and suggestions by participants at the conference on Southeast Asian Economics in Bangkok in March 2013, and I gratefully acknowledge financial support from the Ragnar Söderberg's foundation.

## **Introduction**

Foreign Direct Investment (FDI) is an important aspect of global economic integration: multinational enterprises (MNEs) account for about 10 percent of world output and 30 percent of world export (UNCTAD, 2007). Moreover, around three quarters of total sales to foreign customers are done through FDI and one quarter through export (Antrás and Yeaple, 2013). FDI are generally perceived as bringing various economic benefits to the host country. It will for instance substitute for domestic savings and thereby allowing a larger consumption for a given level of investments. Moreover, MNEs control most of the world's advanced technology which will benefit a host country in terms of higher productivity and incomes. Finally, MNEs have a superior access to foreign markets, which increase the host country's exports and, again, output, and incomes.

The source of FDI remains concentrated to high-income countries, although FDI from a handful of developing countries are increasing rapidly. The destinations of FDI, however, have changed over the last decades with an increasing share going to developing countries. More specifically, the share of FDI to developing countries has increased from about 29 percent in 1970 to 47 percent in 2011 (UNCTAD, 2013).

Southeast Asia has been part of this development. Some countries in the region were the prime choice for MNEs who wanted to outlocalize labor intensive parts of the production as early as in the 1960s. The region remains a large receiver of FDI with MNEs being attracted by a growing regional market, natural resources and as a base for export oriented production.

However, the attitudes and policies towards FDI differ both between countries and over time within countries. For instance, many of the centrally planned economies nationalized existing foreign firms and closed their economies to entrance of new ones for many years. On the

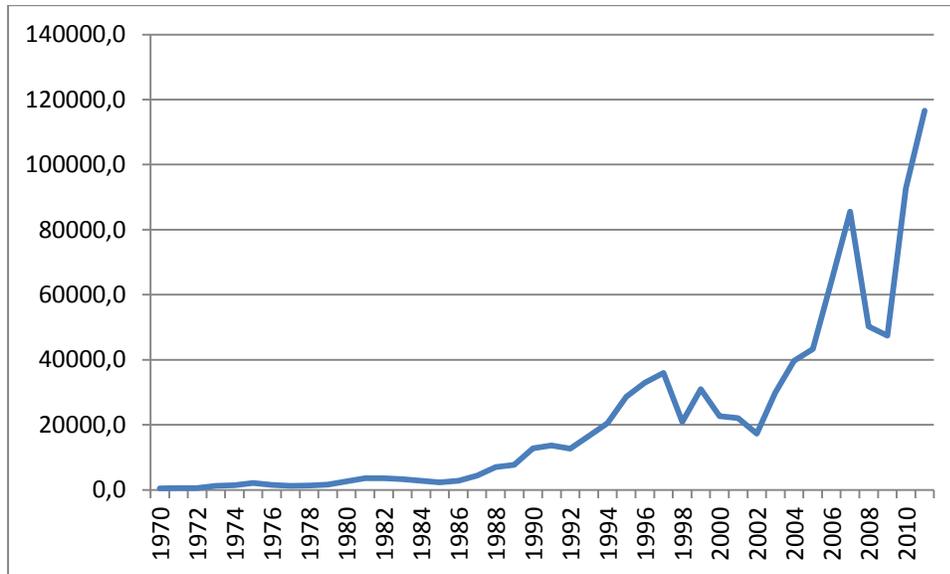
other extreme, Singapore is spending very large sums of public money on trying to attract foreign MNEs (Te Velde, 2001). Another example is Indonesia, which has typically liberalized the FDI regime when the economy is doing poorly, and been introducing more regulations when raw material prices are increasing and the economy is booming.

The differences in policies toward, and in actual inflows of, FDI makes Southeast Asia an interesting testing ground for examining the determinants of FDI policies and the effect of FDI inflows, which is the aim of this chapter. More precisely, this chapter aims at examining the size of FDI in South East Asia and the trends in it. The main determinants of FDI in Southeast Asia as well as their effect on the host countries are also discussed and examined.

### **FDI in Southeast Asia**

Figure 1 shows that inflows of FDI to Southeast Asia did not take off until the late 1980's but then the inflows increased rapidly. More precisely, annual inflows of FDI increased between 1986 and 1997 by more than 1100 percent in current prices. The Asian crisis in the late 1990's and the crisis in the information and technology industry in the early 2000s, the so-called "dotcom bust", led to a temporary decline in FDI inflows before they started to increase again in 2003. The global financial crisis led to a new fall in FDI inflows in 2008 and 2009 but the last years have seen a strong recovery and the inflow of close to 120 billion US dollars in 2011 is five times the inflows in 2000. Southeast Asia accounts today for roughly 8 percent of total world inflows of FDI (up from 3 percent in 1970) which can be compared to around 2 percent of total world GDP.

**Figure 1. FDI inflows to Southeast Asia (1970-2011, Millions US Dollars)**



Source: UNCTAD

The distribution of FDI to Southeast Asia is seen in Table 1. Indonesia received more than one third of total FDI inflows in the 1970's but its share declined substantially in later decades. Malaysia and Singapore have received relatively large shares, although the share for the former country has declined in the last decade. Singapore is, by far, the largest receiver of FDI; 58 percent of FDI in the 2000s have gone to Singapore. However, Singapore is a regional hub for both international trade and FDI, and much of the FDI to Singapore ends up in other countries. In other words, FDI flows to Singapore might not contribute to production in Singapore but instead in other countries, often in other Southeast Asian countries.<sup>1</sup> To complicate matters further, some of the FDI to Singapore is roundtripping, meaning that they flow back to the country of origin.

Thailand has been the second largest receiver of FDI in the 2000s whereas FDI flows to Philippines have been relatively small throughout the period. Vietnam, Cambodia and Laos all

<sup>1</sup> For a description of the entrepôt role of Singapore, see Low, Ramstetter, and Yeung (1998).

liberalized their economies in the late 1980s and early 1990s but only Vietnam has any more substantial inflows of FDI.

**Table 1. Shares of total FDI inflows to Southeast Asia 1970-2011 (%)**

	1970-1979	1980-1989	1990-1999	2000-2011
Brunei	1	0	1	2
Cambodia	0	0	0	1
Indonesia	36	8	10	6
Laos	0	0	0	0
Malaysia	25	26	23	11
Myanmar	0	0	2	1
Philippines	6	7	6	4
Singapore	24	48	38	58
Thailand	7	11	15	17
Timor-Leste	--	--	--	0
Viet Nam	0	0	6	9

Source: UNCTAD

The relative importance of FDI does also depend on the size of the countries. An alternative measure of the role of inward FDI is the ratio of the inward stock of FDI to GDP, shown for selected Southeast Asian countries in table 2.<sup>2</sup> It is seen that Asia became a major destination for FDI well before other developing regions did. The inward stock of FDI in 1980, for example, was about 42% of GDP in Northeast Asia and 9% in Southeast Asia, but only 8% in Africa and 7% in Latin America. By 1995, Southeast Asia had surpassed Northeast Asia, and the ratios to GDP were 22% in Southeast Asia, 21% in Northeast Asia, 16% in Africa and 9% in Latin America. The relative importance of FDI in Southeast Asia has continued to increase and the share of GDP was 46% in 2011, substantially higher than in the other regions where the shares varied between 25 and 30%.

<sup>2</sup> See also Lipsey and Sjöholm (2011).

**Table 2. The Stock of Inward FDI as Percent of GDP**

		1980	1985	1990	1995	2000	2005	2011
Brunei		0.33	0.54	0.94	13.46	63.47	96.76	76.15
Cambodia		5.30	3.58	2.22	10.76	43.09	39.27	53.35
Indonesia		5.73	5.98	6.95	9.32	15.20	14.41	20.45
Laos		0.68	0.09	1.45	12.47	35.58	24.85	32.23
Malaysia		20.33	22.80	22.57	31.15	56.24	32.23	41.11
Myanmar		0.09	0.08	5.44	15.60	44.14	39.52	16.87
Philippines		2.82	5.98	10.22	13.69	23.92	15.16	12.26
Singapore	gross	45.66	60.03	82.57	78.21	119.26	160.87	203.78
	net	39.07	53.97	61.41	36.45	58.04	60.51	70.54
Thailand		3.03	5.14	9.66	10.53	24.38	34.25	40.43
Timor Leste		--	--	--	--	--	5.50	16.20
Viet Nam <sup>a</sup>		59.10	30.25	25.49	34.48	66.07	58.84	60.31
Southeast Asia		9.39	12.51	18.09	22.47	44.48	44.74	46.30
Northeast Asia		41.60	38.59	25.59	20.69	31.80	25.63	25.45
Africa		9.57	10.23	12.12	16.89	25.90	27.71	29.75
Latin America <sup>b</sup>		5.01	8.71	9.11	10.05	20.88	26.62	28.29

Note: Net is inward FDI stock minus outward FDI stock. GDP is as used in UNCTAD calculations.

<sup>a</sup> 1950-2000 stock estimated by UNCTAD by cumulating inflows from 1970.

<sup>b</sup> Central America and South America

Source: UNCTAD STAT online database: <http://www.unctad.org/Templates/Page.asp?intItemID=1584&lang=1>

Looking at individual countries, the highest ratio is to Singapore. We show for Singapore, not only total inward stocks, as for the other countries, but also net inward FDI stocks, which might come closer to representing the FDI remaining in the country.<sup>3</sup> Even the net measure suggests that Singapore, together with Brunei, has the largest relative presence of FDI. The high FDI stock in Brunei is surprising in view of the very low level of FDI as late as 1990. Among the other

<sup>3</sup> Net stock of FDI is defined as gross inward stock minus outward stock.

countries, we note that the relative stocks of FDI are low in Myanmar, Philippines, and Timor Leste, and suspiciously high in Vietnam.<sup>4</sup>

The main source of FDI in Southeast Asia is from within the region. More specifically, about 18 percent of FDI flows are intra-region flows, as seen in Table 3. FDI from European Union is a close second with around 17 percent of total inflows, followed by Japan with 12 percent and the U.S. with 10 percent.

**Table 3. The main sources of FDI in Southeast Asia**

Country/region	value	Share of total inflows
	2009-2011	2009-2011
ASEAN	46 893,6	18.5
European Union (EU)	43 315,7	17.1
Japan	29 561,4	11.7
USA	24 258,5	9.6
China	10 671,6	4.2
Hong Kong	10 106,9	4.0
Cayman Islands	9 429,3	3.7
Republic of Korea	7 696,5	3.0
Taiwan, Province of China	3 938,2	1.6
United Arab Emirates	1 882,0	0.7
Total top ten sources	187 753,7	74.1
Others	65 532,2	25.9
Total FDI inflow to ASEAN	253 286,0	100

Source: ASEAN Foreign Direct Investment Statistics Database

Note: Values in million US dollars and share in percent.

Balance of payment data on FDI are problematic since the flows often do not originate in the countries to which they are attributed, do not enter the countries that are their supposed destinations, and if they do enter the declared destinations, do not remain in those destinations.

<sup>4</sup> One reason to high Vietnamese FDI stocks could be that Vietnam is not following international standards in defining FDI. They use, for instance, approved rather than realized FDI. For a further discussion see Ramstetter (2011, p. 24).

They often represent bookkeeping entries in corporate accounts, but no economic activity such as the employment of labor, the production of goods and services, or the installation of capital assets (Lipsev and Sjöholm, 2011a).

Another problem is that FDI flows and stocks, as defined by the International Monetary Fund, include FDI by sovereign wealth funds (SWFs). SWFs have increased rapidly in importance over the last years and there are currently more than 50 of them originating from more than 40 countries (UNCTAD 2009, p. 29). They are always state controlled and typically invest means received from large current account surpluses, often but not always from exports of oil and gas. The Government of Singapore Investment Corporation and the Temasek Holdings are two important SWFs from Southeast Asia. While purchases of ownership shares of 10% or more meet the IMF definition of FDI in terms of the extent of ownership (10%), SWFs are more akin to portfolio investment than to private FDI with respect to the characteristics ascribed to FDI in the literature. These include the parent firm's exploitation of its firm-specific advantages, acquired by experience in the industry, by production in the home country, and by R&D or advertising. The SWFs typically have no firm-specific advantages except large amounts of capital, they do not generally seek control of firms they invest in, and move in and out of industries in pursuit of higher returns (or smaller losses), much as private equity firms do.

Finally, the reliance on balance of payments measures makes the role of financial centres important in measurement, since they are important in financial flows despite their lack of connection to productive activity. As was pointed out in UNCTAD (2006), the top recipients of FDI from Singapore included the British Virgin Islands and Bermuda. These flows would almost completely disappear from any measure based on the amount of economic activity involved. Accordingly, a large amount of FDI to Southeast Asia comes from through tax havens, which

makes it difficult to know the country of origin. For instance, the Cayman Islands is the seventh largest source of FDI to Southeast Asia as seen in Table 3.

Hence, the figures in Tables 1-3 have to be treated cautiously. An alternative approach is instead to look at the share of production accounted for by multinational firms in various Southeast Asian countries. Such figures are presumably better capturing the real presence of FDI. One major drawback, however, is that they are only available for some countries and only for the manufacturing sector. Eric Ramstetter has in a large number of studies analyzed FDI using firm level information. Some of his findings are summarized in Ramstetter (2009) which provides FDI shares in Indonesia, Malaysia, Thailand, Vietnam and Singapore. The foreign share of employment and output, based on Ramstetter's work, is seen in Figure 2.

The figures are not directly comparable across countries since the coverage of surveys and censuses differ. A few conclusions can still be drawn from Figure 2. Firstly, the foreign share of output is always higher than the share of employees, which is a reflection of that foreign firms tend to be relatively large, capital intensive, and with high productivity.

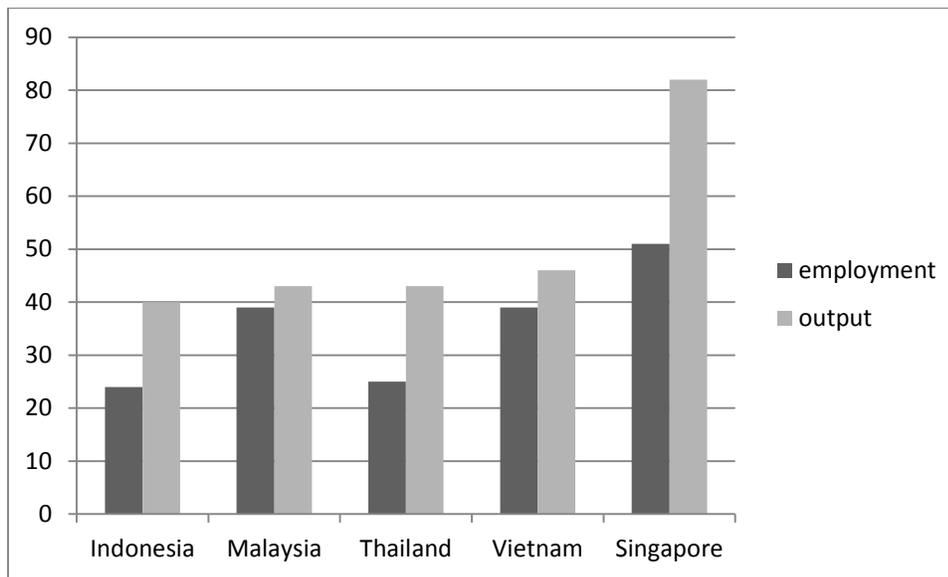
Secondly, the foreign share of output is around 40 percent in four out of five countries. It should be noted however, that the trends in FDI shares differ between the countries (not shown): the shares have increased from previous years in Indonesia and Vietnam, been relatively stable in Malaysia, and declined in Thailand (see Ramstetter, 2009).

Output is defined differently in the included countries and foreign shares of employment might be a better measure on the relative importance of FDI. The foreign share of employment is around 25 percent in Indonesia and Thailand and almost 40 percent in Malaysia and Vietnam. Finally, the foreign share in Singapore is substantially larger than in other countries, despite a downward trend (not shown): the foreign share is about 50 percent of employment and more than 80 percent of output.

It would be of large interest to compare the share of FDI in Southeast Asia with the corresponding shares in other countries. Unfortunately, this information is not available for many developing countries, and when it is available it is often based on different types of censuses and surveys which makes comparisons difficult. For instance, Sjöholm and Lundin (2012) report that the foreign share of Chinese manufacturing in 2004 amounted to 34 percent of employment, 40 percent of value added, and 76 percent of exports. However, these figures are based on firms with more than 300 employees which presumably bias the numbers upward in comparison with the figures in Figure 2.

A reasonable good comparison can be made with six European countries seen in Table A1 in the appendix. The foreign share of industrial activities varies substantially between European countries, just as it varies between Southeast Asian countries. For instance, the foreign share in Ireland is 48 percent of employment and 81 percent of sales which compares quite closely with the situation in Singapore. On the other end, the foreign share of employment and sales is only around 17 percent in Finland which is lower than in any Southeast Asian country. Overall, it seems that the share of FDI in Southeast Asia is slightly higher but not very different from what we see in other countries.

**Figure 2. The share of foreign MNEs in Southeast Asian manufacturing (% , 2006).**



Source: Ramstetter (2009)

Notes: Figures for Malaysia are from 2004. A firm is defined as foreign if the foreign ownership is 10 percent or higher except in Singapore (1%) and perhaps in Malaysia (definition unclear). Output is defined as value added except in Thailand (gross output) and Vietnam (sales).

### **Determinants of FDI in Southeast Asia**

The previous section showed that the amount of FDI is relatively high in Southeast Asia. It also showed that FDI flows to Southeast Asia have increased over time. The increase rests on two necessary developments. The first is technological changes that have made increased global economic integration possible. The second is an ideological shift among governments and policymakers with a more positive attitude towards globalization and multinational enterprises. This change in ideology has in turn triggered various institutional changes that tend to increase inflows of FDI.

### *Technological change*

FDI requires complicated operations over long distances. Parts, components, and services need to be shipped between different branches of the multinational firm. Coordination and supervision requires visits by staff and a steady flow of information. Declining transport costs and improvements in communication technologies during the last decades have made all these exchanges easier.

All transport costs have declined. For instance, the World Bank (2009) reports that total freight costs have about halved since the mid-1970s but that different types of transport costs have declined at different rates. Sea Freight costs fell dramatically in the first half of the 20<sup>th</sup> century, the main reason being the development of greater vessel capacity and standardized containers, which has substantially reduced the cost of unloading and reloading (World Bank, 2009, p. 176-177). The cost of air freight has been falling even sharper: dramatically with the introduction of the jet engine but also, albeit at a slower rate, after 1970. For instance, Held et al. (1999, p. 170) reports that average air transport revenue per passenger mile declined from 16 to 11 US cents in fixed prices between 1970 and 1990.

Again, falling trade costs have enabled multinational firms to divide the production chain between affiliates in different countries, so called vertical integration. Production of different parts and components are located where it is most efficient and then shipped to another country for assembling and re-export. This development of vertically integrated production lines seems to be particularly important in East Asia (Athukorala and Kohpaiboon, 2013).

Vertically integrated product chains put larger request on communication compared to production that is kept within the home country. The technological progress in communication technologies has therefore been instrumental in enabling MNEs to operate their foreign affiliates. World Bank (2009) reports that a three minute phone call from New York to London fell in fixed

prices from about US dollars 293 in 1931 to about 1 dollar in 2001. The development and expansion of internet and emails have further advanced the ability to communicate over long distances. Other technological advances have also been important in the ability to establish vertically integrated production chains. The World Bank (2009) argue:

The ability to coordinate and control production processes in real time by computerized systems has been central to the vertical disintegration of production processes in the high-income countries and the outsourcing to medium-income countries.

### *Institutional change*

Technological changes have enabled countries and firms to engage in the international economy to an unprecedented extent. However, it might be argued that most of the technological progress that we have witnessed over the last decades have benefitted the whole world and might explain why FDI has increased but not necessarily why a large share of FDI goes to South East Asia. An equally important factor, and one that is crucial in understanding Southeast Asia's role as a host of FDI, is the changing view on MNEs and the institutional changes that have followed.

A fundamental criterion for attracting FDI is that the host country welcomes such investments. This has not always been the case in East Asia. Developing countries tended for a long time to use import substitution to encourage growth of domestic firms. A natural part of this strategy was to restrict access for foreign multinational firms to the domestic market. The most extreme result of this view was the nationalization of foreign MNEs. Such nationalizations were not restricted to the centrally planned economies in the region but were also taking place in, for instance, Indonesia, Malaysia, and the Philippines.

If nationalization was an exception in most of Southeast Asia, a less extreme version of import substitution was more common, including high tariffs on imports and large restrictions on

FDI. One prime reasons to the popularity of this development approach was that Japan used this strategy successfully, and that success had a strong impact on development strategies in other countries across Southeast Asia in the 1960's and 70's.

Some Southeast Asian countries eventually experimented with a different development strategy, including a stronger reliance on foreign multinational firms. Singapore started this development and the economic success of Singapore was inspiring other countries in Southeast Asia to liberalize their trade regimes and to encourage the entrance of foreign multinational firms. The timing of this change in development strategy differs across the region with, for instance, Malaysia making changes already in the 1970s, Indonesia in the late 1980s and early 1990s, and the (formerly) centrally planned countries even later. The FDI regimes still differ substantially among Southeast Asian countries, with some being more open than others, but all countries have become more open to FDI compared to the situation a few decades ago (Brooks and Hill, 2004).

It is interesting that the main reasons to a change in FDI regime in two countries pioneering reliance on FDI, Singapore and Malaysia, was mainly domestic political ones. It was domestic political struggles between different groups that made both countries look outward for capital and industrial know-how.

When Singapore was expelled from Malaya in 1965 it lost most of its previous domestic market on the Malaysian peninsular. The problem was aggravated by loss of exports caused by the conflict with Indonesia under President Sukarno (*konfrontasi*) and by the small size of the domestic market.

The lack of a sizable domestic market, together with the asset of being the prime location for trade in the region, convinced Singaporean policymakers to abandon an initial attempt of import substituting industrialization (Huff, 1994). Singapore became instead one of the very first developing countries to attempt the path of export orientation, aiming to overcome the constraint

of a small domestic market and to supply the world with labor intensive manufactures. The question was whom the industrialists were that should provide the export? The years around independence witnessed a struggle for power between on the one hand the People's Action Party (PAP) under Lee Kuan Yew and on the other hand leftist and Chinese nationalists groups. Lee Kuan Yew managed to secure power by a combination of repression against political opponents and measures to win over substantial parts of the Chinese community. However, a large part of the local Chinese business community opposed the PAP, partly because a strong British-educated elite dominated PAP. The PAP was therefore reluctant to rely on the domestic business community after it secured power. Instead, a deliberate effort to attract FDI was launched (Huff, 1994). One additional advantage with FDI was the perceived notion that the impact on growth and employment would be faster if foreign firms stood for the increases in production, since these firms were already hooked up to the world market. It would arguably have taken longer time for domestic entrepreneurs to gain access to foreign markets (Sjöholm, 2003).

The strategy to rely on foreign MNCs was fortunate by its good timing, since it coincided with an increased interest among electronics firms to locate labor intensive parts of production outside their home countries. Two of the first firms to outsource production to Singapore were Texas Instruments and National Semiconductors, who entered the economy already in the 1960s (Athukorala and Kohpaiboon, 2013). Their choice was determined by several factors, such as the uncertainty of locating on Taiwan, Hong Kong, or Korea, which were thought to be too close to an unstable China. There were also strong large subsidies to foreign firms that located in Singapore. The entrance of Texas instruments and National Semiconductors was soon followed by a large inflow of other MNCs, many in the electronics sector, which developed into the most important part of manufacturing.

The domestic political reasons for relying on FDI were different in Malaysia, because the domestic political struggle was of a different nature. In Malaysia, the conflict was mainly seen between ethnic Malays (*Bumiputeras*) and ethnic Chinese. The latter group dominated the Malaysian economy in the years after independence. Widespread concern of economic marginalization among the ethnic Malays, who in consequence of being the largest ethnic group had the largest political influence, led to the launch of the New Economic Policy (NEP) in 1970. This program introduced special treatment of ethnic Malays in, for instance, access to higher education and public employment. This first phase of the NEP was only marginally affecting the industrial sector but it changed with the introduction of the Industrial Coordination Act (ICA) in 1975. The program focused on the low ownership share of ethnic Malays in the industrial sector. It became mandatory with ethnic Malay ownership and employment quotas in all firms with more than 25 workers (Drabble, 2000).

An unsurprising result of the ICA was reluctance among ethnic Chinese to make fixed investments in industry since it was widely perceived that such investment might later be captured by ethnic Malays. As a result, the ethnic Chinese share of equity declined from about 70 percent in 1970 to below 30 percent in the late 1970's (Jesudason, 1989, Tables 5.1 and 5.2).

The decline in ethnic Chinese investments was followed by a slump in industrial production and economic growth. The new prime minister of Malaysia, Dr. Mahathir Mohamad, looked for ways to improve the situation and in particular to increase investment and fasten the industrialization. To encourage investments from the ethnic Chinese population was viewed as politically difficult so the result was a deliberate attempt to encourage inflows of FDI. This was also achieved both during the import substitution phase of 1980-1985 and during the later export oriented policy. Japanese firms were particularly encouraged to invest, partly as a result of Prime

Minister Mahathir's "Look East" policy that tried to imitate the industrial policies and practices of Japan.

Policies to encourage inflows of FDI included for instance a decline in the share that foreign firms had to give to Malaysian actors. Such ownership sharing requirements were totally abandoned in export oriented activities. Hitachi, Intel and Motorola were some of the firms that took advantage of this change in policy and set up factories in Malaysia that was heavily focused on exporting their production, either inputs to other factories in the region, or finished goods to the large markets in Japan, Europe and North America.

Hence, the discussion above points at something important: the deregulation of FDI regimes in Southeast Asia started as a reaction to domestic political conflicts. It is highly uncertain whether the major FDI receivers in Southeast Asia would have had a similar development in the absence of these domestic conflicts. This is in particular true for the two countries which pioneered the approach of deliberately trying to attract FDI – Singapore and Malaysia – but it is presumably also true for other countries in the region that got inspired by the experience of the pioneering countries.

### *Locational advantages*

Hence, the FDI regime has been liberalized in most of Southeast Asia but allowing foreign MNEs to enter is no guarantee for that they will actually chose to do so. Hence, to understand the inflows of FDI, we need to understand the main attractions of Southeast Asia for MNEs. As a first step, it is useful to distinguish different reasons for FDI. FDI can be pursued for three main

reasons: to serve the host country market with products produced locally, to get access to raw materials, and to produce for export.<sup>5</sup>

The market access reason for FDI is the most important one. FDI might be a substitute to export, to minimize transport costs, or a way to avoid other high trade costs, such as tariffs and non-tariff barriers.<sup>6</sup> The market access reason for FDI is presumably increasing in Southeast Asia because Southeast Asia's share of total world GDP has doubled since 1960 and amounts to about 2 percent (World Bank, 2009). The attraction of Southeast Asia has increased with the rapid growth and development and with the subsequent increase in local demand.

However, the rise of China and India might affect the ability of Southeast Asia to attract market seeking FDI. Multinational firms are sometimes constrained by internal capacity and can only expand in a selected number of countries. It is possible that India and China with their large markets will then be preferred over Southeast Asian countries. It is in this respect of some importance with an increased regional integration, in order to make Southeast Asia more of one integrated market. Regional integration is progressing in Southeast Asia but it is still a relatively fragmented market compared to markets in individual countries such as China and India (Hill and Menon, 2013).

Moreover, raw materials are a major determinant to FDI in some of the Southeast Asian countries. One prime example is Indonesia where a substantial share of FDI is directed towards mining and a relatively small share to manufacturing (Lipsey and Sjöholm, 2011b). The growth of East Asia has increased the demand for raw materials and increased resource seeking FDI.

Some of these FDI are directed to Southeast Asia. The home countries of resource seeking FDI

---

<sup>5</sup> In practice, most FDI involves more than one motive. Foreign subsidiaries might for instance produce for both the local market and export.

<sup>6</sup> The latter type of FDI, tariff-jumping FDI, is sometimes distinguished from other type of market access reasons to FDI. The relative importance of tariff-jumping FDI has presumably declined as trade barriers have come down in recent decades.

differ slightly from other types of FDI and a relatively large share is from European countries. Moreover Chinese FDI to Southeast Asia has increased rapidly in recent years and a large share of these investments is fuelled by the growing Chinese demand for raw materials (Frost, 2005). Chinese investments in Myanmar is a prime example: Chinese state owned oil companies have made large investments in recent years and are building a pipeline which is planned to supply China with 10 billion cubic meters of natural gas annually.

The most interesting type of FDI is when the foreign firms can choose between different locations. This is in particular the case when it comes to production for export. Southeast Asia has attracted a large amount of export oriented FDI and this raises the question what the aspects are that are viewed more favorable in Southeast Asia than in other parts of the world.

A good general business environment is crucial for attracting export oriented FDI. Various surveys of business environments in different parts of the world seem to suggest that the business environment is good in Southeast Asia but perhaps not exceptionally so. One example is the ranking of countries by ease of doing business, published annually by the World Bank. Rankings from 2012 of the five main developing regions and of individual Southeast Asian countries are shown in table 4. There are a 175 countries included in 2005 and 185 countries in 2012. A low rank represents a favourable business environment and a high rank indicates difficult conditions.

Northeast Asia is by a large margin the easiest region for doing business in, both in 2005 and 2012. The lowest ranked country in Northeast Asia in 2012, China, is ranked ahead of six Southeast Asian countries. Southeast Asia has the second best ranking among the developing regions, followed by Latin America and Africa.

Looking at the individual Southeast Asian countries, there is large variety in the ease of doing business, going from the world's best ranked country Singapore, to one of the worst ranked countries, Timor Leste. Three countries are ranked among the best 10 percent in the world in 2012, Singapore, Malaysia, and Thailand, and 2 countries among the lowest 10 percent, Laos and Timor Leste. Vietnam, Indonesia, Cambodia, and the Philippines are ranked below the average. The rankings in 2005 and 2012 are relatively stable for most Southeast Asian countries, with the exception of a large improvement in Malaysia and a deterioration in the Philippines.

**Table 4. The ranking of business climate in Southeast Asia and other regions (2012).**

	2005	2012
Singapore	2	1
Malaysia	25	12
Thailand	19	18
Brunei	n.a.	80
Vietnam	98	99
Indonesia	131	128
Cambodia	142	133
Philippines	121	138
Laos	163	163
Timor-Leste	174	169
Southeast Asia	97	94
Northeast Asia	38	36
Africa	128	139
Latin America	100	102

Source. World Bank. <http://www.doingbusiness.org/rankings#>

Note: The ranking is based on 175 countries in 2005 and 185 countries in 2012. The criteria behind the ranking have changed over the years making rankings in 2005 and 2012 not directly comparable.

## **Other determinants to FDI inflows**

The figures in Table 4 suggest that there is a reasonably good business environment in Southeast Asia but not as good as in Northeast Asia and not much better than the one in Latin America. Moreover, the business environment in Southeast Asia did not stand out as exceptionally good when FDI inflows started to take off a few decades ago. On the contrary, many of the host country aspects important for foreign multinational firms were relatively poor in Southeast Asia. One example would be the high levels of corruption. Another weakness of the region, historically as well as presently, is the poor level of education (Coxehead and Phan, 2013).<sup>7</sup>

The main reasons to FDI inflow therefore has to be found elsewhere. Two factors are arguably of large importance, stability and geography.

### *Political and macroeconomic stability*

Macroeconomic stability is a key factor when MNEs choose where to locate their affiliates. Macroeconomic turbulence wants to be avoided since it hurts domestic demand from households and firms, and since economic volatility will increase uncertainty. Macroeconomic turbulence will also affect the exchange rate and thereby the cost of imports and exports. It is therefore not surprisingly that several empirical studies find exchange rate volatility to be negative for FDI inflows to developing countries (e.g. Abbott et al., 2012).

Political stability is also of large importance for MNEs. It is partly the resulting changes in the regulatory framework that is a concern for MNEs but also the economic turbulence that might follow from political turbulence. Political turbulence therefor makes firms avoid making fixed investments.<sup>8</sup>

---

<sup>7</sup> See also Booth (1999a; 1999b) and Sjöholm (2005) on the poor quality of education in Southeast Asia.

<sup>8</sup> It is here important to note that stability can be achieved both in authoritarian and in democratic countries.

All major receivers of FDI in Southeast Asia – Malaysia, Singapore, Thailand, and Indonesia – have shown large political and macroeconomic stability in comparison to most other developing parts of the world.

For instance, we did previously mention that Singapore was viewed as a better choice than Northeast Asian countries by foreign MNEs in the 1960's because of the latter region's potential political conflicts. The stability of Singapore was not only a result of the authoritarian regimes strong grip on power but was enhanced by a large emphasis on macroeconomic stability.

Also Malaysia, Thailand, and Indonesia (since 1967) have had, in comparison with most other developing countries, relatively stable macroeconomic policies. For instance, inflation rates have been lower in Southeast Asia than in most other parts of the world (Phung and Coxehead, 2013).

Moreover, the exchange rates have by large been managed floating regimes. There have been periods of both fully floating and fixed exchange rates in different countries, but the larger Southeast Asian countries have tended to return to a system of a crawling peg to the US dollar. The stability of the exchange rates has, as discussed above, been positive for FDI inflows (Dutta and Roy, 2011).

This is not to say that there have been no major political, financial and macroeconomic crises. For instance, the regional turbulence in the late 1990's clearly bears witness to the contrary. However, the crises are relatively infrequent and the recovery relatively quick. Even Indonesia, which faced a very large decline in GDP and a major political turmoil in the late 1990's, did recover to macroeconomic and political stability in a surprisingly short time. Moreover, some Southeast Asian countries have seen continuous macroeconomic and political turbulence. Philippines is one such countries and also a country that have received lower inflows of FDI than what would have been expected from some other country characteristics.

### *The role of Geography*

Southeast Asia has arguably benefited from having strong and growing neighbors in Northeast Asia (Phung and Coxehead, 2013). Some of this positive growth effect emerges through FDI flows. Southeast Asia has received a large amount of FDI from its Northeast Asian neighbors; FDI from Japan in particular but also from Hong Kong, South Korea, and Taiwan, has constituted a large share of FDI since the 1970s (Thee, 2010). Some of this FDI came to Southeast Asia to sell on the domestic market. However, a large amount of FDI from Northeast Asia was export oriented.

Japanese firms were in the 1970's favoring FDI to Hong Kong, Singapore, and Taiwan. However, the appreciation of the Japanese Yen, and of the currencies in the tiger economies, resulted in much larger inflows to Indonesia, Malaysia, and Thailand. This was particularly the case after the Plaza accord in 1985 which led to a 60 percent appreciation of the Yen against the US dollar. Japanese firms struggled to remain their competitiveness by shifting labor intensive parts of production to South East Asia while keeping more skilled intensive production in Japan.

The Japanese government supported the outflow of FDI as a way to remain competitiveness of Japanese firms. The support took the form of direct subsidies in terms of low-interest loans, as well as provision of information about, and assistance in the new markets through the Japan External Trade Organization (JETRO).

Textiles was one of the first industries to experience this type of FDI. The search for lower production costs was an important but not the only determinant: part of the reason to outlocalize textile production was a way to get around quotas on textile export that were in place until the abolishment of the multifibre agreement. Textiles was followed by FDI in many other industries such as footwear, electronics and auto parts.

Japanese FDI started to decline after the Japanese crises started in the late 1980s. The Asian crisis in the late 1990's led to a further reduction in Japanese FDI. As was seen in Table 3, FDI inflows from Japan are less than within region FDI and less than inflows from the European Union. However, the production networks and the industrial base has remained an important determinant to new FDI from other countries. In other words, the Japanese firms remained in the region and foreign firms from other countries can rely on a labor force used to manufacturing, to a bureaucracy used to foreign firms, and to a developed network of suppliers.

The emergence of China as a major destination for FDI does not seem to have had a negative impact on FDI to Southeast Asia. While a large part of final assembling activities are today taking place in China, production of parts and components have not left Southeast Asia.

### **Effects of FDI in Southeast Asia**

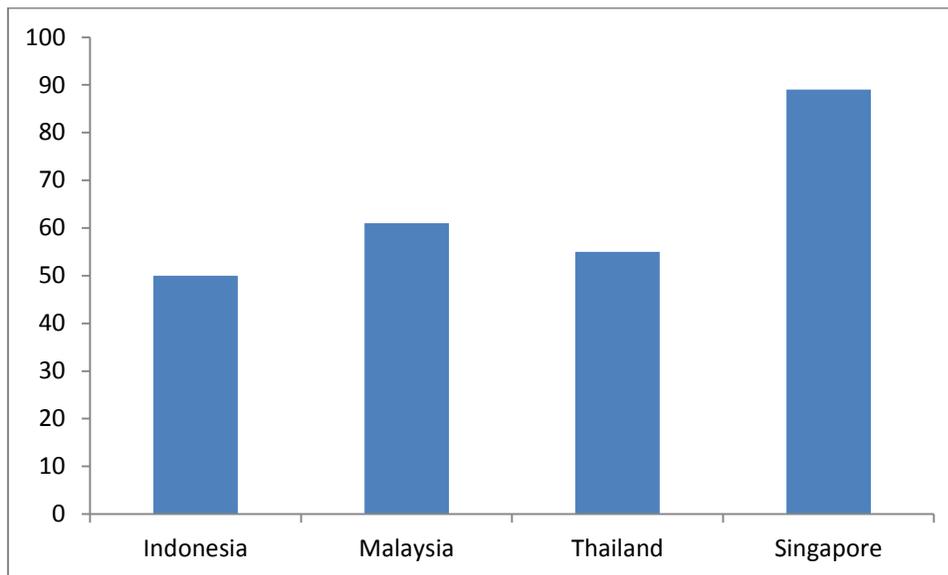
#### *Industrialization, Growth, and Trade*

The changing attitude towards FDI in Southeast Asia and other regions is based on a notion that foreign multinational firms might contribute to economic growth and development. This is a reasonable belief. Some Southeast Asian countries would presumably have developed at a high pace even without FDI inflows but it is difficult to imagine that the development would have been as good as the one we have seen over the last decades.

Empirical studies confirm that FDI has contributed to the rapid economic growth of South East Asia (e.g. Urata, Chia, and Kimura, 2005). That has been the case for most of the countries in the region even though the impact of FDI is hard to disentangle from the effects of other forms of liberalization or other contributors to development, such as investment in human capital (Carkovic and Levine, 2005; Lipsey and Sjöholm, 2011a).

Some of the growth effect seems to come from a reallocation of markets shares and the exit of weak local firms following the entry of foreign MNEs (e.g. Okamoto and Sjöholm, 2005). However, there are in particular two other growth enhancing aspects of MNEs that make them attractive for host countries: their access to foreign markets and to new technologies.

**Figure 3. Foreign share of manufacturing export (2006)**



Source: Ramstetter (2009)

Notes: Figures for Malaysia are from 2004. A firm is defined as foreign if the foreign ownership is 10 percent or higher except in Singapore (1%) and perhaps in Malaysia (definition unclear).

MNE's good access to foreign markets is of large importance for countries that want to increase production by producing for exports. Export is difficult: it requires detailed knowledge about foreign institutions, regulations, distribution networks and preferences. MNEs are in a good position to enter foreign markets because of their experience of operation in many countries. It is therefore not surprising that foreign firms are always more export intensive than domestic firms. This is also the case in Southeast Asia as seen in Figure 3 which is based on the calculations by Ramstetter (2009). There is information on manufacturing export by ownership for four countries

and all of them have high export shares: ranging from 50 percent in Indonesia to 89 percent in Singapore. Moreover, all included countries have foreign export shares that are higher than the foreign shares of employment or output (Figure 2), which shows the relative high export intensities of foreign MNEs.

The figures on export from foreign multinational firms can be compared to the figures in European countries in Table A1. The FDI share of exports varies between 17.5 percent in Finland to 92.3 percent in Ireland. Just as for the comparison of output and employment previously discussed, we conclude that there are large variations in the FDI share of exports both in Southeast Asia and in Europe and that the situations in the two regions are relatively similar.

The positive impact on export from FDI means that the Southeast Asian countries have been able to overcome small domestic markets and expand production more than would have been possible in the absence of foreign MNEs. The exact contribution this export expansion has had on the development is difficult to estimate but it is likely to be rather high.

The second main contribution of foreign FDI has been their access to technology. Almost all new technology in the world is developed in MNEs, whether it is product or process technologies. Some large MNEs have R&D budgets that are high in comparison to the expenses on R&D in some of the smaller developing Southeast Asian countries. Inflows of FDI is therefore a way to get access to new technology which in turn will increase production and economic growth.

There is ample of evidence that foreign MNEs in Southeast Asia have superior technologies. One indication is the figures on output and employment in Figure 2 which suggest that productivity should be higher in foreign than in domestic firms. This is confirmed in firm

level studies on Thailand (Ramstetter, 2006), Vietnam (Tran, 2007), Indonesia (Arnold and Javorcik, 2009) and Malaysia (Ramstetter and Ahmad, 2009).<sup>9</sup>

The high productivity in foreign firms has benefited broad segments of the population. For instance, it is well established that foreign MNEs pay higher wages than domestic firms (e.g. Lipsey and Sjöholm, 2004a, 2006; Movshuk and Matsuoka-Movshuk, 2006; Ramstetter and Ahmad, 2009) and that the presence of FDI increase wages also in local firms (Lipsey and Sjöholm, 2004b).

High wages for employees is important but equally important is presumably how many workers that are employed in MNEs. To create job opportunities in the modern sector and thereby be able to move people out of agriculture and informal services is a key challenge in any country trying to improve incomes and welfare (Lewis, 1954). As discussed above, MNEs could play an important role in such employment creation with their knowledge of markets, technologies and distribution channels. It is therefore no surprise that MNEs are always larger than local firms, irrespective of which country one is examining. Equally important but less examined, MNEs are not only relatively large, but the growth in employment is relatively high. More specifically, Lipsey et al. (2013) examines employment growth in MNEs and local firms in Indonesia. Their results show a positive effect of FDI on employment. Employment growth is about 5.5 percentage points faster in MNEs than in local plants, and local plants acquired by MNEs grew about 11 percentage points faster than their pre-acquisition level. Considering that foreign plants are on average considerably larger than domestic plants, the difference in the number of jobs created is large. Finally, the positive effect on employment depends on the trade

---

<sup>9</sup> The result for Thailand is less clear than the results for the other countries: foreign MNEs tend to have relatively high labor productivity but it is uncertain if they have relatively high total factor productivity.

regime: unlike FDI during export oriented policy regimes, FDI during import substitution periods did not generate high employment growth.

### *Spillovers*

The impact of FDI on indigenous firms is an issue much discussed by academics and policy makers alike. It is not obvious that the existence of externalities, often referred to as spillovers, deserves such attention. Inflows of FDI will, as described above, increase access to foreign markets and new technologies with positive effects on the host economy irrespective on the existence of externalities. In fact, the most FDI intensive country in Southeast Asia, Singapore, has relatively few indigenous firms that can benefit from spillovers but is also the economically most successful country in the region. The focus on the effect on indigenous firms is partly caused by political reasons: many countries in the region have been promoting indigenous firms and are reluctant to see an economy dominated by foreign MNEs.

Whereas it seems clear that FDI benefits the host economies, it is less certain how they affect indigenous firms. On the one hand, foreign MNEs will increase competition for local firms and might force them to operate at a lower scale of production or might even force them out of the market. On the other hand, foreign MNEs might benefit indigenous firms in neighboring industries through support of suppliers and customers. There might also be positive within industry effects on indigenous firms, if they will learn about new technologies or foreign markets from the MNEs. One such mechanism for learning could be the recruitment of personnel from the MNEs but it could also be mere demonstration effects.

The academic literature on externalities from FDI, often referred to as spillovers, tend to find positive effects. The effects might differ depending on the context, in particular on the absorptive capacity, which in turn depends on the skill level of the indigenous firms. Moreover, it

seems from the literature that between industry spillovers are more common than within industry spillovers (Görg and Greenaway, 2004).

Most studies on spillovers in Southeast Asia focus on the effect on productivity but there are also studies on wage spillovers. Almost all of the studies find evidence of positive spillovers: local firms benefit from the presence of foreign firms.<sup>10</sup> For productivity, the positive effect is likely to come from technology spillovers, new technologies and knowledge that are made available for domestic firms, and from increased competition, a pressure to improve to secure market shares and survival. For wages, the positive effect of FDI is likely to be the result both of increased productivity through the discussed spillovers, and through an increased demand for labor. Since the foreign plants also have higher productivity and pay higher wages than local firms, the two factors together imply that higher foreign presence raises the general productivity and wage level.

### **Concluding remarks**

The last decades' economic development in Southeast Asia has been impressive. It is partly explained by the region's ability to integrate in the global economy through trade and FDI. Multinational firms are key actors in the global economy and Southeast Asia has been relatively successful in attracting FDI inflows. Aggregate figures on FDI show a larger share of global FDI inflows than the share of global incomes. Also more reliable data on actual production in MNEs and in indigenous firms in a selection of Southeast Asian countries suggest that the share of FDI

---

<sup>10</sup> Many of these studies are conducted on Indonesia because of the availability of good data. See Lipsey and Sjöholm (2011) for an overview of spillover studies on Indonesia. See also e.g. Ministry of Trade and Industry (2012) for Singapore, Pham (2009) for Vietnam, Aldaba and Aldaba (2012) for the Philippines, and Kohpaiboon (2006) for Thailand. All of these studies find positive spillovers from FDI.

is relatively large. More precisely, several countries have FDI shares of manufacturing output that is around 40 percent, and in Singapore is it as high as over 80 percent.

One main reason to the inflows of FDI can be traced to domestic political developments in Singapore and Malaysia. Governments in both countries have at important stages of their countries' development choose not to depend on the major indigenous business community, and instead encouraged inflows of foreign MNEs. The strong economic performance of Singapore and Malaysia did arguable encourage also other countries in the region to liberalize the FDI regimes.

It is one thing to allow foreign MNEs to establish themselves in a country but another to convince them to actually do so. The business environment in Southeast Asia is relatively good which is of course important. However, it is difficult to argue that the business environment is exceptionally good or that it was so when FDI started to flow in to the region at a large scale. Hence, other factors have presumably also been important in explaining FDI inflows to Southeast Asia. Two such factors that seem important are stability and geography. Stability is certainly not something that has characterized all countries in the region, whether we are referring to political or macroeconomic stability, but it has been high in the main receivers of FDI in comparison to most other developing parts of the world.

Moreover, Southeast Asia has benefited from its fortunate geographic location. When Japanese and other Northeast Asian countries' MNEs started to shift out labor intensive parts of the production, Southeast Asia was ideally located. With time, networks of producers of parts and components have developed in the region, which in turn has attracted new firms. These networks are not footloose but have remained relatively intact over the last decades despite large changes taking place in Southeast Asia itself as well as in other parts of the world.

It is safe to say that Southeast Asia has benefited from inflows of FDI. In particular, foreign firms have increased growth by expanding production and by introducing new technologies. They have also benefited broad segments of the populations by providing modern sector employment and relatively high wages.

To make predictions of future development is difficult. There are signs of more restrictions towards FDI in an important neighboring country, China, which might spill over to FDI regimes in the region (Sjöholm and Lundin, 2013). Moreover, the FDI regime in Indonesia, the largest economy in Southeast Asia, is seeing signs of again becoming more restrictive (Lipse and Sjöholm, 2011). However, it is also clear that there are many other developments that suggest that FDI inflows will remain large in the region. For instance, the integration in ASEAN continues with lower barriers making the region more attractive for MNEs. Moreover, Myanmar has recently liberalized its economy with the result of international sanctions being lifted, which is likely to increase FDI inflows. Also other formerly centrally planned economies in the region have the potential to attract more FDI. Hence, there are reasons to believe that FDI will remain an important aspect of Southeast Asia's economic development.

## Appendix

Table A1. The share of foreign firms in a selection of countries (%)

	Finland	France	Ireland	Holland	Poland	Sweden
Employment	17.2	26.2	48.0	25.1	28.1	32.4
Sales	16.2	31.8	81.1	41.1	45.2	39.9
Exports	17.5	39.5	92.3	60.0	69.1	45.8

Source: OECD, AMNE Database

## References

Abbott, Andrew, David O. Cushman, and Glauco De Vita (2012), “Exchange Rate Regimes and Foreign Direct Investment Flows to Developing Countries”, *Review of International Economics*, Vol. 20(1), pp. 95-107.

Aldaba, R.M. and F. T Aldaba (2012), Do FDI Inflows have Positive Spillover Effects? The Case of the Philippine Manufacturing Industry, Philippine Institute for Development Studies, Policy Notes, No. 2012-01.

Antrás, Pol, and Stephen R. Yeaple (2013), “Multinational Firms and the Structure of International Trade”, NBER Working Paper Nr. 18775.

Arnold, J.M. and Beata Javorcik S. (2009) ‘Gifted Kids or Pushy Parents? Foreign Acquisitions and Plant Performance in Indonesia’, *Journal of International Economics*, Vol. 79, pp. 42-53.

Athukorala, P. and A. Kohpaiboon (2013), “Global Production Sharing and Trade Patterns in Southeast Asia”, paper presented at Handbook of Southeast Asian Economics Conference, Bangkok, March 21-23.

Booth, A. (1999a) ‘Education and Economic Development in Southeast Asia: Myths and Realities’, *ASEAN Economic Bulletin* 16(3): 290-306.

Booth, A. (1999b) ‘Initial Conditions and Miraculous Growth: Why is South East Asia Different from Taiwan and South Korea?’, *World Development* 27(2): 301-322.

Brooks, D.H. and Hill, H. (2004) ‘Divergent Asian views on foreign direct investment and its governance’, *Asian Development Review* 21 (1): 1–36.

Carkovic, M. and Levine, R. (2005) ‘Does Foreign Direct Investment Accelerate Economic Growth?’ in *Does Foreign Direct Investment Promote Development?*, eds Moran, T.H., Graham, E.M. and Blomström, M., Institute for International Economics, Center for Global Development, Washington D.C.

Coxehead, Ian and Diep Phan (2013), “Human Capital in Southeast Asia: Investment, Achievements and Returns”, paper presented at Handbook of Southeast Asian Economics Conference, Bangkok, March 21-23.

- Dobson, Wendy (1997) 'East Asian integration: synergies between firm strategies and government policies', in *Multinationals and East Asian Integration*, eds. Wendy Dobson and Chia Siow Yue, Institute of Southeast Asian Studies, Singapore.
- Drabble, John H. (2000), *An Economic History of Malaysia, c. 1800-1990: the Transition to Modern Economic Growth*, Houndmills and New York: MacMillan and St. Martin.
- Dutta, Nabamita, and Sanjukta Roy (2011), Foreign Direct Investment, Financial Development and Political Risks, *The Journal of Developing Areas*, Vol. 44(2), pp. 303-327.
- Frost, Stephen (2005) "Chinese outward direct investment in Southeast Asia: how big are the flows and what does it mean for the region?", *Pacific Review*, Vol. 17(3), pp. 323-340.
- Görg, Holger, Greenaway, David (2004), "Much ado about nothing? Do domestic firms really benefit from foreign direct investment?", *World Bank Research Observer*, Vol. 19(2), pp. 171-197.
- Held, David, Anthony G. McGrew, David Goldblatt, and Jonathan Perraton (1999), *Global transformations: politics, economics and culture*, Stanford University Press.
- Hill, H. and J. Menon (2013), "Southeast Asian Commercial Policy: Outward-Looking Regional Integration", paper presented at Handbook of Southeast Asian Economics Conference, Bangkok, March 21-23.
- Huff, W.G. (1994), *The Economic Growth in Singapore: Trade and Development in the Twentieth Century*. Cambridge: Cambridge University Press
- Jesudason, J.V. (1989), *Ethnicity and the Economy: The State, Chinese Business and Multinationals in Malaysia*, Singapore: Oxford University Press.
- Kohpaiboon, Archanun (2006), "Foreign Direct Investment and Technology Spillover: A Cross-Industry Analysis of Thai Manufacturing", *World Development*, Vol. 34(3), pp. 541-556.
- Lewis, W. Arthur (1954), Economic Development with Unlimited Supplies of Labour, *Manchester School of Economic and Social Studies*, Vol. 22(2), pp. 139-191.
- Lipsey, R.E. and Sjöholm, F. (2004a) 'Foreign Direct Investment, Education, and Wages in Indonesian Manufacturing', *Journal of Development Economics* 73: 415-422.
- Lipsey, R.E. and Sjöholm, F. (2004b) 'FDI and Wage Spillovers in Indonesian Manufacturing', *Review of World Economics* 140(2): 321-332.

Lipsey, R.E. and Sjöholm, F. (2006) 'Foreign Firms and Indonesian Manufacturing Wages: An Analysis with Panel Data', *Economic Development and Cultural Change* 55(1): 201-221.

Lipsey, Robert E., and Fredrik Sjöholm (2011a), South-South FDI and Development in East Asia, *Asian Development Review*, vol. 28(2), pp. 11-31.

Lipsey, Robert E., and Fredrik Sjöholm (2011b), FDI and Growth in East Asia: Lessons for Indonesia, *Bulletin of Indonesian Economic Studies*, Vol. 47(1), pp. 35-63.

Lipsey Robert E., Sjöholm, Fredrik, and Jing Sun (2013), Foreign Ownership and Employment Growth in a Developing Country, *Journal of Development Studies*, Vol. 49(8), pp. 1137-1147.

Low, L., E. D. Ramstetter, and H. W.C. Yeung. 1998. Accounting for Outward Direct Investment from Hong Kong and Singapore: Who Controls What? In Robert E. Baldwin, Robert E. Lipsey, and J. David Richardson, *Geography and Ownership as Bases for Economic Accounting*, Studies in Income and Wealth 69. Chicago: University of Chicago Press.

Ministry of Trade and Industry (2012), Productivity Spillovers to Local Manufacturing Firms from Foreign Direct Investment, Report, Singapore: Ministry of Trade and Industry.

Movshuk, Oleksandr and Matsuoka-Movshuk, Atsuko (2006), Multinational Corporations and Wages in Thai Manufacturing, in Ramstetter, Eric D. and Sjöholm, Fredrik (Eds.), *Multinational Corporations in Indonesia and Thailand*, Hampshire: Palgrave-MacMillan.

OECD (2013) AMNE Database – Activity of Multinational Enterprises

Okamoto, Y. and Sjöholm, F. (2005) 'FDI and the Dynamics of Productivity in Indonesian Manufacturing', *Journal of Development Studies* 41(1): 160-182.

Pham, T.H. (2009), "Assessment of FDI Spillover Effects for the Case of Vietnam: A Survey of Micro-data Analyses", in Corbett, J. and S. Umezaki (eds.), *Deepening East Asian Economic Integration*. ERIA Research Project Report 2008-1, pp. 473-495. Jakarta: ERIA

Phung, Tracy and Ian Coxehead (2013), "Lucky Countries? Internal and External Sources of Southeast Asian Growth, 1970-2010", paper presented at Handbook of Southeast Asian Economics Conference, Bangkok, March 21-23.

Ramstetter, Eric D. (2006), "Are Productivity Differentials Important in Thai Manufacturing", in Ramstetter, Eric D. and Sjöholm, Fredrik (Eds.), *Multinational Corporations in Indonesia and Thailand*, Hampshire: Palgrave-MacMillan.

Ramstetter, Eric D. (2009), "Firm- and Plant-level Analysis of Multinationals in Southeast Asia: the Perils of Pooling Industries and Balancing Panels", ICSEAD Working Paper no. 2009-22.

Ramstetter, Eric D. (2011), "Recent Downturns in Inward Direct Investment in Asia's Large Economies", ICSEAD Working Paper no. 2009-22.

Ramstetter, Eric D. and Ahmad, Shahrazat B.H. (2009), "Foreign Multinationals in Malaysian Manufacturing After the Crisis", ICSEAD Working Paper no. 2009-13

Sjöholm, Fredrik (2003), Industrial Upgrading in a Globalized Economy: The Case of Singapore, in Lundahl, Mats (ed.) *Globalization and its Enemies*, Stockholm: EFI.

Sjöholm, F. (2005) 'Educational Reforms and Challenges in Southeast Asia' in *Institutional Change in Southeast Asia*, eds Sjöholm, F. and Tongzon, J. (2005), Routledge, London.

Sjöholm, Fredrik and Nannan Lundin (2013), "Foreign Firms and Indigenous Technology Development in China", *Asian Development Review*, Vol. 30(2), pp. 49-75.

Tran, Tien Q. (2007), *Foreign Direct Investment in Industrial Transition: A Case Study of Vietnam*, Ph.D. Thesis, Australia National University.

Te Velde, D.W. (2001), *Policies Towards Foreign Direct Investment in Developing Countries: Emerging Best-Practices and Outstanding Issues*. London: Overseas Development Institute

Thee, Kian Wie (2011), "Foreign Direct Investment from Northeast Asia to Southeast Asia", *The Indonesian Quarterly*, Vol. 38(2), pp. 188-212.

UNCTAD (United Nations Congress on Trade and Development) 2006. *World Investment Report, 2006: FDI from Developing and Transition Economies: Implications for Development*. New York and Geneva: United Nations.

UNCTAD (United Nations Conference on Trade and Development) 2009. *World Investment Report*, New York and Geneva: United Nations.

UNCTAD (United Nations Congress on Trade and Development) (2007), *World Investment Report*, United Nations: New York and Geneva.

UNCTAD (United Nations Congress on Trade and Development). 2010. *World Investment Report, 2010: Investing in a Low-Carbon Economy*. New York and Geneva: United Nations

UNCTAD (2013), Inward and outward foreign direct investment flows, UNCTADStat. Available for downloading at <http://unctadstat.unctad.org/TableViewer/tableView.aspx?ReportId=88>

Urata, S., Chia S.Y. and Kimura, F. (eds.) (2006) *Multinationals and Economic Growth in East Asia: Foreign Direct Investment*, Routledge, London and New York NY.

World Bank (2009), *World Development Report 2009: Reshaping Economic Geography*, Washington D.C: The World Bank.