

RELATIVE FOREIGN DIRECT INVESTMENT ATTRACTIVENESS AMONG ASEAN  
COUNTRIES

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การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยดึงดูดการลงทุนในประเทศสมาชิกอาเซียน 4  
ประเทศได้แก่ ไทย มาเลเซีย อินโดนีเซีย และเวียดนาม โดยศึกษาเฉพาะการลงทุนที่มาจาก  
ประเทศสมาชิกอาเซียนบางประเทศ รวมถึงศึกษาหาปัจจัยที่เป็นสาเหตุทำให้เกิดความแตกต่าง  
ของความสามารถในการดึงดูดการลงทุนจากต่างประเทศโดยเปรียบเทียบ วิธีที่ใช้ศึกษาคือ  
(1)Panel Data Estimation เพื่อใช้หาปัจจัยดึงดูดการลงทุนในแต่ละประเทศในภาพรวม  
(2)Oaxaca-Blinder Decompositionเพื่อใช้หาปัจจัยที่เป็นสาเหตุทำให้เกิดความแตกต่างของ  
ความสามารถในการดึงดูดการลงทุนจากต่างประเทศโดยเปรียบเทียบ

ผลการวิจัยพบว่า(1)ปัจจัยดึงดูดการลงทุนของไทยคือค่าแรง ปัจจัยดึงดูดการลงทุน  
ของเวียดนามคือผลิตภัณฑ์มวลรวมในประเทศ ปัจจัยดึงดูดการลงทุนของมาเลเซียคืออัตรา  
แลกเปลี่ยนระหว่างประเทศ อัตราดอกเบี้ยเงินกู้ และระยะทาง (2)การส่งออก อัตราแลกเปลี่ยน  
ระหว่างประเทศ และระยะทางช่วยเพิ่มความสามารถในการดึงดูดการลงทุนจากต่างประเทศของ  
มาเลเซีย เมื่อเปรียบเทียบกับเวียดนามและไทย ในขณะที่ผลิตภัณฑ์มวลรวมในประเทศและอัตรา  
แลกเปลี่ยนระหว่างประเทศช่วยเพิ่มความสามารถในการดึงดูดการลงทุนจากต่างประเทศของ  
อินโดนีเซียเมื่อเปรียบเทียบกับมาเลเซีย ไทยและเวียดนาม ในขณะที่ค่าแรงช่วยเพิ่มความสามารถ  
ในการดึงดูดการลงทุนจากต่างประเทศของไทยเมื่อเปรียบเทียบกับเวียดนาม อินโดนีเซียและ  
มาเลเซีย ในขณะที่การส่งออก การนำเข้าและระยะทางช่วยเพิ่มความสามารถในการดึงดูดการ  
ลงทุนจากต่างประเทศของเวียดนามเมื่อเปรียบเทียบกับมาเลเซียและอินโดนีเซีย

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This study aims to explore the determinants of inward FDI in 4 ASEAN countries, namely; Thailand, Malaysia, Indonesia and Vietnam, from selected home countries in ASEAN, and also to explore the causes for their differences in inward FDI. Panel Data Estimation was used to analyze the determinants of FDI in these 4 host countries from selected home countries in ASEAN. Oaxaca-Blinder decomposition was applied to examine the causes of the difference in inward FDI by quantifying the contribution of each explanatory variable to the total gap, as a percentage of the total FDI gap, with some of the differences in FDI inflows between host ASEAN countries can be explained by the differences in the characteristics, so one will be able to learn which factor contributes to the increase or decrease of FDI gap between host countries.

Findings reveal that real wage helps to attract FDI into Thailand. Real GDP helps to attract FDI into Vietnam. Real exchange rate, real lending interest rate and geographic distance help to attract FDI into Malaysia. Real exports, real exchange rate and geographic distance help to increase FDI gap between Malaysia and other host countries; Vietnam and Thailand. Real GDP and real exchange rate helps to increase FDI gap between Indonesia and other host countries; Malaysia, Thailand and Vietnam. Real wage helps to increase FDI gap between Thailand and other host countries; Vietnam, Indonesia and Malaysia. Real exports, real imports and geographic distance help to increase FDI gap between Vietnam and other host countries; Malaysia and Indonesia.

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## CHAPTER I

### INTRODUCTION

This chapter presents background and significance of the problem, objectives, scope, expected benefits and application.

#### **1.1 Background and Significance of the Problem**

Due to the high competitiveness of the world economic situation, trade liberalization and regional integration take an important role in order to get higher level of trade and investment in the cooperation between countries. Accelerating the ASEAN Economic Community (AEC) by 2015, the largest market after China and India with the combined market of 584 million people, would promote foreign direct investment (FDI) with the countries both in ASEAN countries and non-ASEAN countries. Moreover, AEC would help to increase competitiveness of ASEAN countries against the background of China's and India's. For foreign investors, ASEAN is as an attractive investment destination owing to its competitive environment with large population, and the diverse resources of the region<sup>1</sup>(Table 1).

---

<sup>1</sup> ASEAN. Your Gateway to an Economic Community Jakarta: ASEAN Secretariat. 2009.

**Table1: Basic Indicators of ASEAN Member Countries<sup>2</sup>**

Country	Total land area	Total population <sup>1/</sup>	Population density <sup>1/</sup>	Annual population growth <sup>1/</sup>	Gross domestic product <sup>2/</sup> at current prices	Gross domestic product per capita at current prices		International merchandise trade <sup>5/</sup>			Foreign direct investments infow <sup>4/</sup>	
	km <sup>2</sup>	thousand	persons per km <sup>2</sup>	percent	US\$ million	US\$ <sup>2/</sup>	US\$ PPP <sup>3/</sup>	Exports	Imports	Total trade	US\$ million	US\$ million
	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
Brunei Darussalam	5,765	406.2	70	2.1	10,758.6	26,486.0	36,177.4	7,168.6	2,399.6	9,568.2	369.7	247.9
Cambodia	181,035	14,957.8	83	2.1	10,359.2	692.6	1,787.6	4,985.8	3,900.9	8,886.7	530.2	313.5
Indonesia	1,860,360	231,369.5	124	1.2	546,864.6	2,363.6	4,371.2	116,510.0	96,829.2	213,339.2	4,876.8	6,243.9
Lao PDR	236,800	5,922.1	25	2.8	5,579.2	910.5	2,250.0	1,237.2	1,725.0	2,962.1	318.6	100.6
Malaysia	330,252	28,306.0	86	2.1	193,107.7	6,822.0	12,353.3	156,890.9	123,330.5	280,221.4	1,381.0	3,313.0
Myanmar	676,577	59,534.3	88	1.8	24,972.8	419.5	1,138.1	6,341.5	3,849.9	10,191.3	578.6	n.a
The Philippines	300,000	92,226.6	307	2.0	161,357.6	1,749.6	3,591.8	38,334.7	45,533.9	83,868.6	1,948.0	732.0
Singapore	710	4,987.6	7,023	3.1	182,701.7	36,631.2	52,871.8	269,832.5	245,784.7	515,617.1	16,808.9	17,341.0
Thailand	513,120	66,903.0	130	0.6	264,322.8	3,950.8	7,943.5	152,497.2	133,769.6	286,266.8	4,975.6	3,511.8
Vietnam	331,212	87,228.4	263	1.2	96,317.1	1,119.6	3,123.8	56,691.0	69,230.9	125,921.9	7,600.0	4,310.0
<b>ASEAN</b>	<b>4,435,830</b>	<b>591,841.0</b>	<b>133</b>	<b>1.4</b>	<b>1,496,341.3</b>	<b>2,532.5</b>	<b>4,872.9</b>	<b>810,489.2</b>	<b>726,354.1</b>	<b>1,536,843.3</b>	<b>39,387.3</b>	<b>36,113.6</b>

Source: ASEAN Foreign Direct Investment Statistics Database

<sup>2</sup> ASEAN Finance and Macro-economic Surveillance Unit Database, ASEAN Merchandise Trade Statistics Database, ASEAN Foreign Direct Investment Statistics Database (compiled/computed from data submission, publications and/or websites of ASEAN Member States' national statistics offices, central banks and relevant government agencies, and from international sources), as of 15 February 2011.

FDI inflows have amounted to a large fraction of the ASEAN countries' GDP since the early 1990s due to the low wages, good management, abundant resources and large market size advantages which are very important for economic growth of the economies in the Southeast Asian region. FDI to ASEAN has been strong in terms of flows and rate of growth although there were a period of slow growth associated with the 1997-1998 Asian Crisis<sup>3</sup> and the global economic crisis of 2008-2009 which originated in the most developed economies and spread quickly to the rest of the world. However, monthly exports and imports in 2010 for most ASEAN economies were back to their pre-crisis levels, while FDI flows looked more stable than in the months before the crisis<sup>4</sup>.

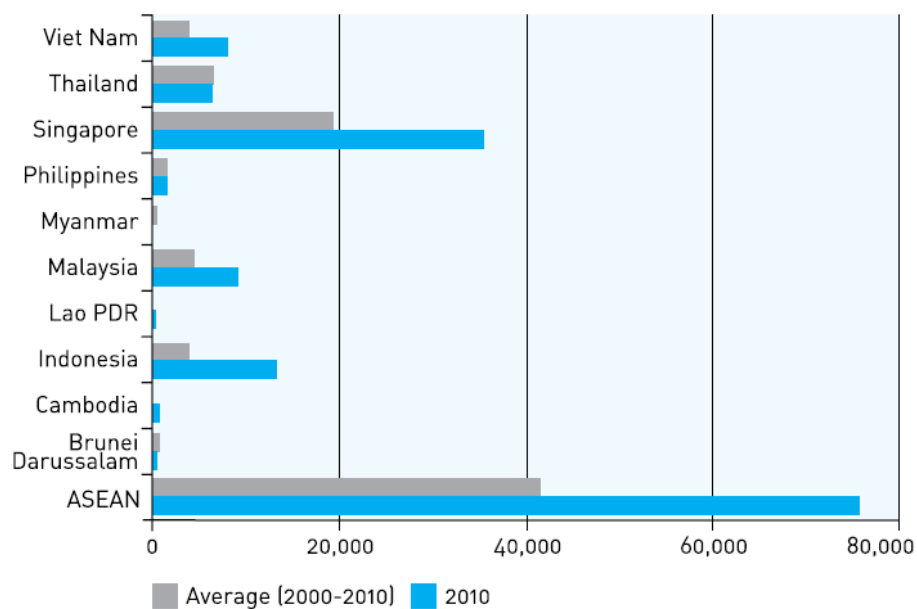
In 2010, FDI to ASEAN increased by 100% or surged to \$79 billion, surpassing 2007's previous record of \$76 billion. The increase of FDI inflows was driven by proactive policy efforts at the country level, improvement of economic fundamentals, ability to implement the structural reforms strengthening of investors' confidence, and sharp rises of FDI inflows to Malaysia (563%), Indonesia (173%) and Singapore (133%) as shown in Table 2. Almost ASEAN countries received higher inflows than the year before 2010 (Figure1) owing to: Cambodia, Indonesia and the Philippines liberalized more industries; Indonesia improved its FDI-related administrative procedures; and the Philippines strengthened the supportive services for public private partnerships (PPPs). In Singapore, which accounted for half of ASEAN's FDI, inflows amounted to a historic level of \$39 billion in 2010. As a global financial centre and a regional hub of TNC headquarters, Singapore has benefited considerably from increasing investment in developing Asia. Indonesia and Vietnam have gained benefits from the rising production costs in China owing to their low-cost production locations, especially for low-end manufacturing. ASEAN Least Developed Countries also received increasing inflows, particularly from neighboring countries like China and Thailand, for instance, the Lao People's Democratic Republic has been successful in attracting foreign investment in infrastructure in recent years as a result of Chinese investment in an international high-speed rail network. The countries in ASEAN region that attracted most FDI inflows are Singapore (35.5 billion USD or 47% of total inflows), Indonesia (13.3 billion USD), Malaysia (9.1 billion USD) and Vietnam (8 billion USD).

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<sup>3</sup> Michael G. Plummer and David Cheong. FDI Effects of ASEAN Integration. 2009. MPRA Paper 26004, University Library of Munich, Germany, 2009.

<sup>4</sup> UNESCAP. Asia-Pacific Trade and Investment Report 2010. 2010. (Mimeographed)



**Figure1: ASEAN FDI Inflows (in Million U.S. Dollars)**

Source: ASEAN Secretariat FDI Database

**Table 2: Flows of Inward Direct Investment to ASEAN  
(in Million U.S. Dollars, Percent per Year)**

HOST COUNTRY	Average (1995-2009)	Average (2004-2007)	2007	2008	2009	2010 <sup>(p)</sup>
Brunei Darussalam	686 (21.3)	299 (-11.7)	260 (-40.0)	239 (-8.1)	370 (54.5)	629 (70.3)
Cambodia	322 (23.2)	466 (88.2)	867 (79.5)	815 (-6.0)	539 (-33.9)	783 (45.2)
Indonesia	2,694 (-6.8)	5,518 (-19.5)	6,928 (41.0)	9,318 (34.5)	4,877 (-47.7)	13,304 (172.8)
Lao PDR	107 (43.4)	139 (174.8)	324 (72.6)	228 (-29.6)	319 (39.9)	333 (4.5)
Malaysia	4,533 (31.1)	5,825 (41.2)	8,538 (40.6)	7,248 (-15.1)	1,381 (-80.9)	9,156 (563.0)
Myanmar*	455 (13.8)	407 (32.2)	715 (67.1)	976 (36.5)	579 (-40.7)	N / A N / A
Philippines	1,614 (62.8)	2,095 (66.8)	2,916 (-0.2)	1,544 (-47.1)	1,963 (27.1)	1,713 (-12.7)
Singapore	15,643 (20.3)	25,716 (41.4)	37,033 (26.2)	8,589 (-76.8)	15,279 (77.9)	35,520 (132.5)
Thailand	5,805 (14.5)	8,675 (21.6)	11,330 (19.8)	8,539 (-24.6)	4,976 (-41.7)	6,320 (27.0)
Viet Nam	2,970 (18.3)	3,192 (59.0)	6,739 (180.8)	9,579 (42.1)	7,600 (-20.7)	8,000 (5.3)
<b>ASEAN TOTAL</b>	<b>34,829</b> <b>(5.8)</b>	<b>52,332</b> <b>(33.2)</b>	<b>75,650</b> <b>(33.5)</b>	<b>47,076</b> <b>(-37.8)</b>	<b>37,881</b> <b>(-19.5)</b>	<b>75,758</b> <b>(100.0)</b>

Source: ASEAN Secretariat FDI Database

In terms of intra-ASEAN FDI inflows, investment among ASEAN countries has also increased in 2010 (Table 3). Intra-ASEAN FDI inflows exceeded the 10 billion USD mark for the first time since the Asian financial crisis in 1997, it also exceeded the peak in 2007 (9.6 billion USD) and the average levels (4.5 billion USD) in the last 15 years (1995-2009). However, the level of FDI inflows in the region is still small at 4.2% of regional GDP. These inflows were directed to Indonesia (5.9 billion USD), Singapore (3.3 billion USD) and Vietnam (1.3 billion USD) in 2010. On the other hand, FDI outflows in ASEAN did not increase much over the last 15 years. During the period 1995-2009, average inflows continued to exceed average outflows of the ASEAN region (Figure 3). Inward FDI stock also outpaced outward FDI stock. Singapore and Malaysia have been the key players for outward investments, accounting for 46.7% and 31.5%, respectively of total FDI outflows from the region in 2010. The increasing strength of intra-ASEAN FDI inflows could be explained by the rising confidence of ASEAN investors in investing in Member States of ASEAN given shared geographical and cultural similarities. Moreover, there have been more ASEAN integration efforts lowering barriers to trade and investment, so higher levels of intra-ASEAN FDI inflows have occurred.

**Table 3: Foreign Direct Investments Net Inflow, Intra- and Extra-ASEAN<sup>5</sup>**

Country	2008			2009			2010			Share to total net inflow to ASEAN, 2010			Share of Intra-ASEAN, 2010		
	Intra-ASEAN	Extra-ASEAN	Total net inflow	Intra-ASEAN	Extra-ASEAN	Total net inflow	Intra-ASEAN	Extra-ASEAN	Total net inflow	Intra-ASEAN	Extra-ASEAN	Total net inflow	Intra-ASEAN	Extra-ASEAN	Total net inflow
Brunei Darussalam	0.9	238.3	239.2	3.2	366.5	369.7	89.6	539.9	629.5	0.7	0.8	0.8	14.2	85.8	100.0
Cambodia	240.9	574.3	815.2	174.0	365.1	539.1	349.0	433.6	782.6	2.8	0.7	1.0	44.6	55.4	100.0
Indonesia	3,398.0	5,920.1	9,318.1	1,380.1	3,496.7	4,876.8	5,904.2	7,400.1	13,304.3	48.1	11.6	17.5	44.4	55.6	100.0
Lao PDR	47.7	180.1	227.8	57.3	261.3	318.6	135.4	197.2	332.6	1.1	0.3	0.4	40.7	59.3	100.0
Malaysia	1,645.5	5,602.9	7,248.4	(269.7)	1,650.7	1,381.0	525.6	8,630.2	9,155.9	4.3	13.5	12.0	5.7	94.3	100.0
Myanmar	103.5	872.1	975.6	67.8	895.5	963.3	171.7	278.5	450.2	1.4	0.4	0.6	38.1	61.9	100.0
The Philippines	139.9	1,404.1	1,544.0	(4.9)	1,967.9	1,963.0	(7.8)	1,720.8	1,713.0	-0.1	2.7	2.2	-0.5	100.5	100.0
Singapore	659.5	7,929.4	8,588.9	2,108.3	13,170.7	15,279.0	3,377.0	32,143.2	35,520.2	27.5	50.3	46.6	9.5	90.5	100.0
Thailand	508.4	8,031.0	8,539.5	1,326.0	3,649.6	4,975.6	433.6	5,886.1	6,319.7	3.5	9.2	8.3	6.9	93.1	100.0
Viet Nam	2,705.0	6,874.0	9,579.0	428.7	7,171.3	7,600.0	1,300.9	6,699.1	8,000.0	10.6	10.5	10.5	16.3	83.7	100.0
<b>Total</b>	<b>9,449.3</b>	<b>37,626.3</b>	<b>47,075.6</b>	<b>5,270.7</b>	<b>32,995.3</b>	<b>38,266.0</b>	<b>12,279.2</b>	<b>63,928.7</b>	<b>76,207.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	16.1	83.9	100.0
ASEAN 5 <sup>1/</sup>	6,351.3	28,887.6	35,238.9	4,539.7	23,935.6	28,475.3	10,232.7	55,780.4	66,013.1	83.3	87.3	86.6	15.5	84.5	100.0
BLCMV <sup>1/</sup>	3,098.0	8,738.7	11,836.7	731.0	9,059.7	9,790.7	2,046.5	8,148.3	10,194.8	16.7	12.7	13.4	20.1	79.9	100.0

<sup>5</sup> ASEAN Foreign Direct Investment Statistics Database (compiled/computed from data submission, publications and/or websites of ASEAN Member States' central banks, national statistics offices, and relevant government agencies through the ASEAN Working Group on Foreign Direct Investment Statistics), as of 15 February 2012.

Symbols used:

- not available as of publication time
- n.a. not applicable/not available/not compiled
- 0.0 value is below 0.1%
- p/ preliminary figures

Data in italics are the latest updated/revised figures from previous posting.

Notes:

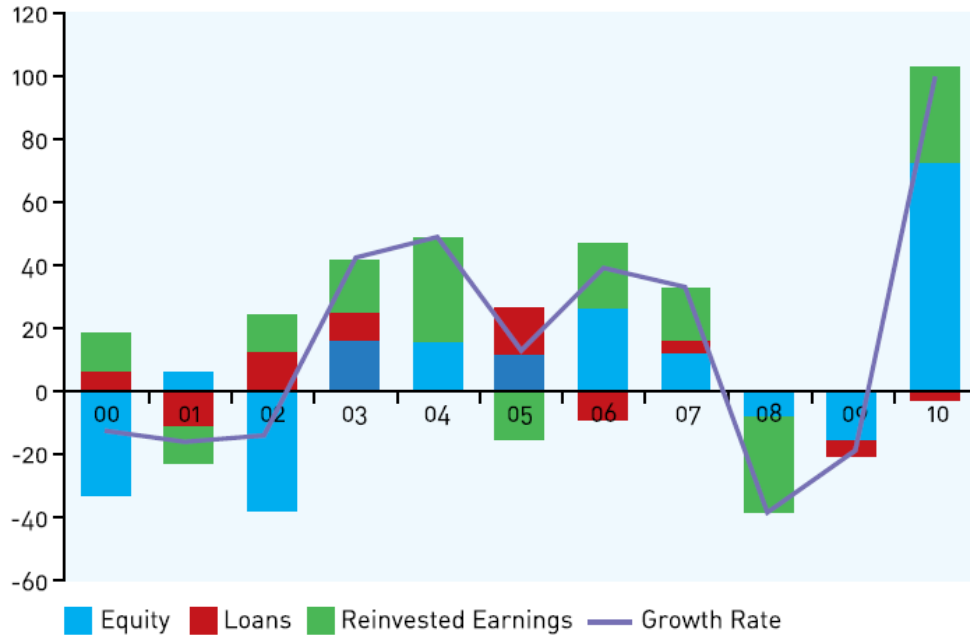
Details may not add up to totals due to rounding off errors.

1/ ASEAN 5 consists of Indonesia, Malaysia, the Philippines, Singapore and Thailand, while BCLMV comprises Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Vietnam.

The FDI is on a net basis, and computed as follows:  $\text{Net FDI} = \text{Equity} + \text{Net Inter-company Loans} + \text{Reinvested Earnings}$ . The net basis concept implies that the followings should be deducted from the FDI gross flows: (1) reverse investment (made by a foreign affiliate in a host country to its parent company/direct investor; (2) loans given by a foreign affiliate to its parent company; and (3) Repayments of intra-company loan (paid by a foreign affiliate to its parent company). As such, FDI net inflow can be negative.

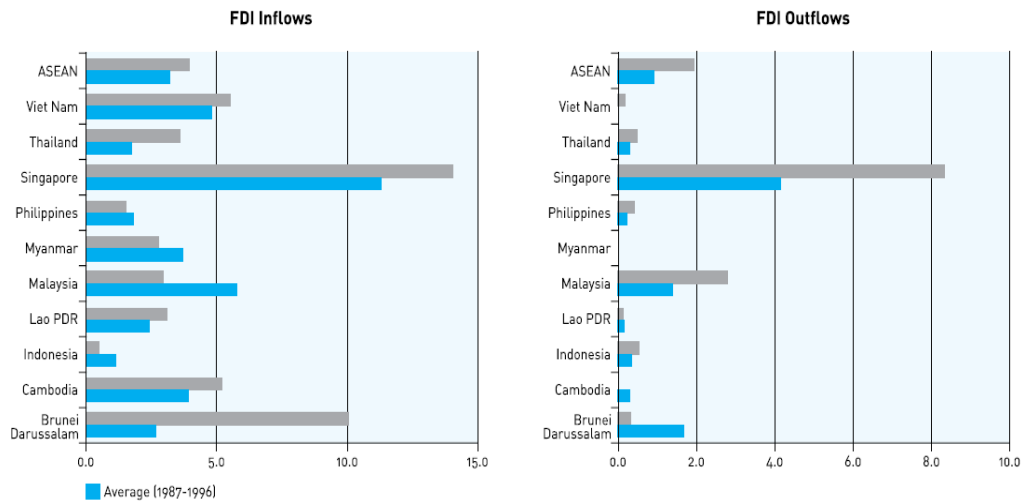
Source: ASEAN Foreign Direct Investment Statistics Database

**Figure 2: Components of ASEAN FDI Inflows (in Percent per Year)**



Note: Figures do not include Lao PDR and Myanmar due to incomplete data  
 Source: ASEAN Secretariat FDI Database

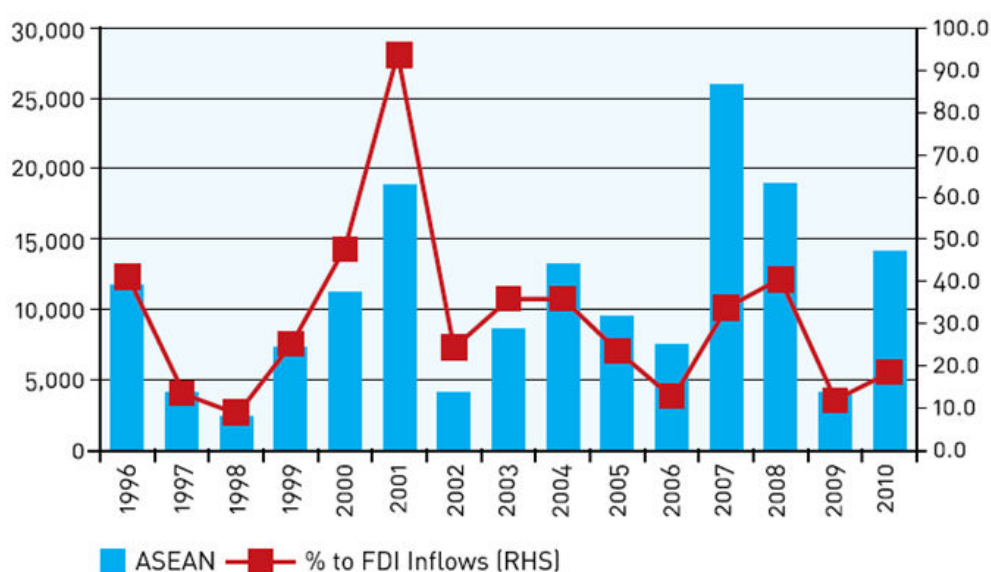
**Figure 3: Volatility of Capital Flows in ASEAN (in Percent of Flows to GDP)**



Source: ASEAN Secretariat FDI Database (FDI Inflows), UNCTAD (FDI Outflows)

In terms of key drivers of FDI growth in ASEAN, equity capital and reinvested earnings remained the key factors of FDI growth in ASEAN. Another factor is the increasing trend by more than 200% in 2010 toward mergers and acquisitions (M&A) purchases in ASEAN (Figure 4). Around 33% of FDI inflows in ASEAN are in financial and industrial sectors, particularly in building and infrastructure activities and banking services.

**Figure 4: Mergers and Acquisitions Purchases  
(in Millions U.S. Dollars, Percent per Year)**



Source: ASEAN Secretariat FDI Database

In terms of policy promoting the liberalization and facilitation of FDI in ASEAN, the ASEAN Investment Agreement (AIA) established in 1998 as well as the ASEAN Comprehensive Investment Agreement (ACIA) established in 2009 have strengthened ASEAN's investment regime. Free flow of investment along with free movement of goods, services, skilled labor, and freer flow of capital is targeted under the ASEAN Economic Community (AEC) in order to achieve an integrated single market and production base by 2015. After the global financial crisis, ASEAN countries have launched various measures which ease entry conditions, i.e., ease of doing business in Malaysia's banking industry and Philippines' aviation industry, promotion of outward investment in Thailand, specific measures on taxation in Vietnam, and establishment of Special Economic Zone in Myanmar. However, ASEAN's investment is still below its saving rates.

In terms of FDI which can be defined as an investment made by a resident of one economy in another economy resulting in a significant degree of influence on the management of the enterprise<sup>6</sup>, investment in case of trade-oriented FDI has been shifted from the home country

<sup>6</sup> UNCTAD. World Investment Prospects Survey 2009-2011. United Nations Conference on Trade and Development Division on Investment and Enterprise(2009).

which has comparative disadvantages to a host country which has comparative advantages. The host country can be viewed as a production base with lower cost of production than in home country. This would accelerate trade between the two nations, and promote beneficial industrial restructuring in both home and host countries. The difference of FDI inflows among ASEAN countries may result from various reasons, for example, degree of openness, investment incentives and resources, cost of doing business (Table 4), logistics performance (Table 5), and governance indicator (Figure 5), etc.



**Table 4: ASEAN Cost of Doing Business: 2007-2011**

COUNTRY	Ease of Doing Business	COST OF DOING BUSINESS INDICATORS**								
		Starting Business	Getting Permits	Registration	Taxes	Trading Across	Investor Protection	Credit	Contract	Closing Business
Brunei Darussalam	78 [112]	↓	↓	↓	↑	↓	↑	↓	↓	↓
Cambodia	143 [147]	↓	↑	↓	↓	↓	↑	↑	↓	↓
Indonesia	135 [121]	↑	↑	↑	↑	↑	↑	↓	↓	↓
Lao PDR	159 [171]	↓	↑	↓	↓	↓	↓	↑	↑	↓
Malaysia	25 [21]	↓	↑	↑	↑	↑	N/C	↑	↑	↓
Philippines	126 [148]	↓	↓	↓	↓	↑	↓	↑	↑	↓
Singapore	1 [1]	↓	↑	↓	↑	↑	N/C	↑	↑	N/C
Thailand	18 [19]	↓	↓	↓	↓	↑	↑	↓	↑	↓
Viet Nam	104 [78]	↓	↓	↓	↓	↑	↓	↑	↑	↓
<b>ASEAN</b>	<b>87 [89]</b>	↓	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	↓	↓

Note :

1) Figures represent the overall rank in the ease of doing business in 2007. Those in parentheses are the corresponding rank in 2011.

2) Arrow represents direction of ranking in each indicator for 2007 Doing Business Report and 2011 Doing Business Report, both improvement and deterioration in ranking; N/C represents no change in ranking; and N/A represents no ranking available.

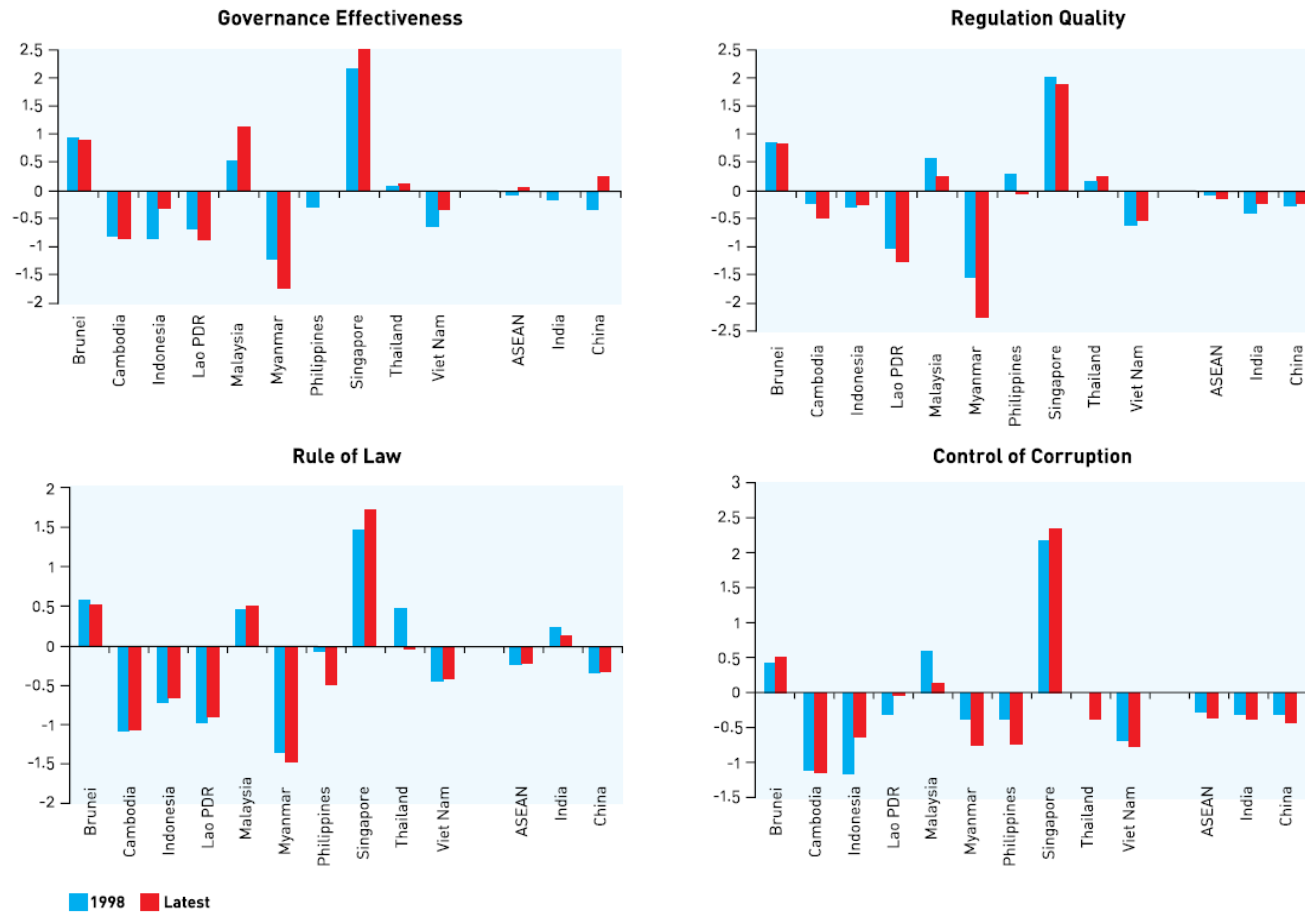
Source : World Bank, Doing Business Reports (Various Years)

**Table 5: Logistics Performance Index (LPI) Score**

Countries	LPI		Customs		Infrastructure		International Shipments		Logistics Quality Competence		Tracking & Tracing		Domestic Logistic Cost		Timeliness	
	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010	2007	2010
Brunei Darussalam	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cambodia	2.50	2.37	2.19	2.28	2.30	2.12	2.47	2.19	2.47	2.29	2.53	2.50	3.21	n.a.	3.05	2.84
Indonesia	3.01	2.76	2.73	2.43	2.83	2.54	3.05	2.82	2.90	2.47	3.30	2.77	2.84	n.a.	3.28	3.46
Lao PDR	2.25	2.46	2.08	2.17	2.00	1.95	2.40	2.70	2.29	2.14	1.89	2.45	2.13	n.a.	2.83	3.23
Malaysia	3.48	3.44	3.36	3.11	3.33	3.50	3.36	3.50	3.40	3.34	3.51	3.32	3.13	n.a.	3.95	3.86
Myanmar	1.86	2.33	2.07	1.94	1.69	1.92	1.73	2.37	2.00	2.01	1.57	2.36	2.08	n.a.	3.29	2.92
Philippines	2.69	3.14	2.64	2.67	2.26	2.57	2.77	3.40	2.65	2.95	2.65	3.29	3.27	n.a.	3.14	3.83
Thailand	3.31	3.29	3.03	3.16	3.02	3.16	3.24	3.27	3.31	3.16	3.25	3.41	3.21	n.a.	3.91	3.73
Singapore	4.19	4.09	3.90	4.02	4.27	4.22	4.04	3.86	4.21	4.12	4.25	4.15	2.70	n.a.	4.53	4.23
Vietnam	2.89	2.96	2.89	2.68	2.50	2.56	3.00	3.04	2.80	2.89	2.90	3.10	3.44	n.a.	3.22	3.44
<b>ASEAN</b>	<b>2.92</b> <b>(64)</b>	<b>2.98</b> <b>(70)</b>	<b>2.76</b> <b>(61)</b>	<b>2.70</b> <b>(69)</b>	<b>2.71</b> <b>(67)</b>	<b>2.73</b> <b>(74)</b>	<b>2.92</b> <b>(62)</b>	<b>3.02</b> <b>(66)</b>	<b>2.88</b> <b>(63)</b>	<b>2.82</b> <b>(76)</b>	<b>2.90</b> <b>(66)</b>	<b>3.04</b> <b>(69)</b>	<b>2.97</b> <b>(62)</b>	<b>2.97</b> <b>(62)</b>	<b>3.37</b> <b>(63)</b>	<b>3.55</b> <b>(65)</b>

Remark : Figures in parentheses represent rank out of 150 countries surveyed in 2007 and 155 countries surveyed in 2010; and n.a. represents not available.  
Source: World Bank, Connecting to Compete reports (2007 and 2010)

**Figure 5: Governance Indicators**



Note: 1) Figures reflect quality of governance for each category based on index value (-2.5 to 2.5; higher value indicates better level of governance for each category).

2) Red colour represents the year 2010.

Source: World Bank, World Trade Indicators

The attraction of foreign direct investment (FDI) inflows is an important goal of the ASEAN Economic Community (AEC); it will determine the success of ASEAN's integration efforts. ASEAN countries are now on the tendency of export orientation or import substitution. Therefore, examining attraction of foreign direct investment will benefit ASEAN countries in order to adapt themselves to the change of global economic environment, technology creation, political liberalization, etc. Moreover, there is a great deal of research as well as policy debate has recently focused on FDI attraction. But most of the previous studies were analyzed by the non-updated data and those data are not corresponding with the current situation.

This study aims to examine the determinant of inward FDI in 4 host ASEAN countries which are Thailand, Malaysia, Indonesia and Vietnam. These 4 countries are likely to be the most preferred ASEAN destinations for Intra-ASEAN FDI because of their natural resources, markets, technology, industry-clusters and cost savings advantages. They have various investment opportunities attracting FDI<sup>7</sup> as follows :**Thailand's** investment opportunities are alternative energy, agro-industry, automotive, biotechnology, electrical and electronics, fashion, machinery, petrochemicals, and services.; **Malaysia's** investment opportunities are electrical and electronics, engineering support, food processing, life sciences, machinery and transport equipment, petrochemicals and polymers, R&D, ICT, and services.; **Indonesia's** investment opportunities are agro-industry, fishery, food, automotive, refinery, steel, petrochemicals, shipping, oleochemicals, fertilisers, mining, textiles and textiles products.; and **Vietnam's** investment opportunities are infrastructure development, high-tech products, IT, food processing, real estate development, agriculture product development, and construction materials. Recently, these 4 countries have different measures to attract FDI, i.e., **Indonesia** has allowed tax holidays for certain investments (i.e., base metals, oil refining, petrochemicals and renewable energy) and revised rules for tax allowances for at least 50 billion rupiah investment.; **Thailand** has provided further corporate income tax exemptions for companies and entrepreneurs affected by Thailand's recent floods in 2011.; **Malaysia** has implemented a RM 6 billion Special Stimulus Package via Private Financing Initiative in 2012 to attract investments.; and **Vietnam** has implemented the significant change in limitations on foreign ownership regulations for 100 percent foreign-owned enterprises and joint ventures in 2012. Factor comparisons between 4 host ASEAN countries examined in this study are shown in Figure 6-12. ASEAN ranked second in the major source of ASEAN FDI inflows in 2008-2010 (Table 6), therefore, this study focuses on only ASEAN countries as the home countries, which are Indonesia, Malaysia, Singapore, Thailand and Vietnam.

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<sup>7</sup> ASEAN. Your Gateway to an Economic Community Jakarta: ASEAN Secretariat. 2009.

**Table 6: Top Ten Sources of Foreign Direct Investment Inflow to ASEAN<sup>8</sup>**

Country/region <sup>1/</sup>	Value				Share to total inflow			
	2008	2009	2010 <sup>p/</sup>	2008-2010	2008	2009	2010 <sup>p/</sup>	2008-2010
European Union (EU)	7,010.1	9,132.4	17,065.9	33,208.4	14.9	23.9	22.4	20.6
ASEAN	9,449.3	5,270.7	12,279.2	26,999.3	20.1	13.8	16.1	16.7
USA	3,517.5	4,086.7	8,578.1	16,182.4	7.5	10.7	11.3	10.0
Japan	4,129.4	3,762.7	8,386.3	16,278.3	8.8	9.8	11.0	10.1
Republic of Korea	1,595.7	1,346.9	3,769.5	6,712.2	3.4	3.5	4.9	4.2
Cayman Islands	4,673.0	-693.2	3,089.4	7,069.2	9.9	-1.8	4.1	4.4
China	1,874.0	4,157.7	2,861.3	8,893.0	4.0	10.9	3.8	5.5
India	547.3	811.3	2,584.3	3,942.9	1.2	2.1	3.4	2.4
Australia	787.3	775.9	1,765.1	3,328.4	1.7	2.0	2.3	2.1
Canada	661.1	503.9	1,641.0	2,806.0	1.4	1.3	2.2	1.7
Total top ten sources	34,244.7	29,155.1	62,020.2	125,420.0	72.7	76.2	81.4	77.6
Others <sup>2/</sup>	12,830.9	9,110.9	14,187.7	36,129.6	27.3	23.8	18.6	22.4
<b>Total FDI inflow to ASEAN</b>	<b>47,075.6</b>	<b>38,266.0</b>	<b>76,207.9</b>	<b>161,549.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: ASEAN Foreign Direct Investment Statistics Database (compiled/computed from data submission, publications and/or websites of ASEAN Member States' central banks, national statistics offices, and relevant government agencies through the ASEAN Working Group on Foreign Direct Investment Statistics)

Symbols used:

p/ preliminary figures

- not available as of publication time

n.a. not applicable/not available/not compiled

Data in italics are the latest updated/revised figures from previous posting.

Notes: Details may not add up to totals due to rounding off errors.

1/ Ranked according to FDI inflows in 2010; covers countries on which data is available.

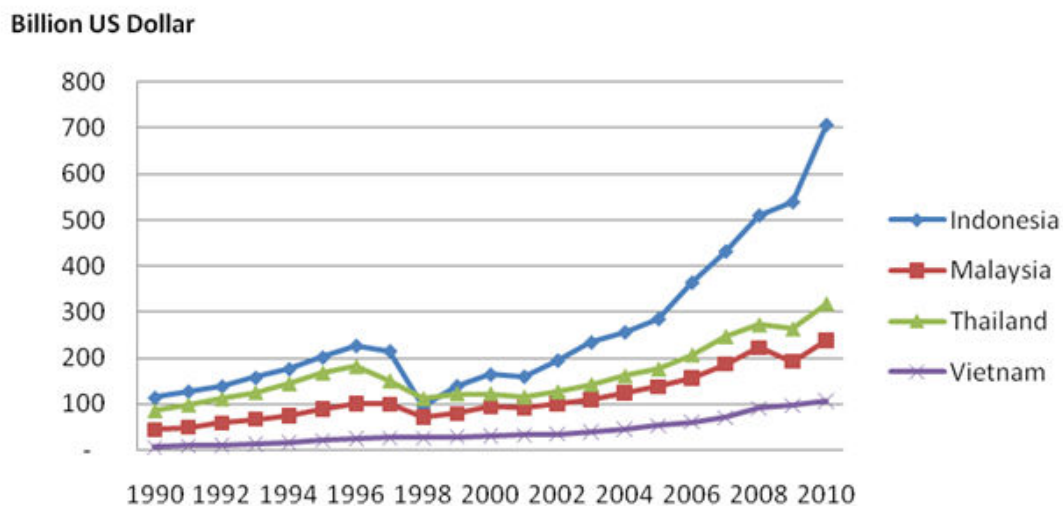
2/ Includes inflow from all other countries, as well as total reinvested earnings and inter-company loans in the Philippines.

The FDI is on a net basis, and computed as follows: Net FDI = Equity + Net Inter-company Loans + Reinvested Earnings. The net basis concept implies that the followings should be deducted from the FDI gross flows: (1) reverse investment (made by a foreign affiliate in a host country to its parent company/direct investor); (2) loans given by a foreign affiliate to its parent company; and (3) repayments of intra-company loan (paid by a foreign affiliate to its parent company). As such, FDI net inflow can be negative.

<sup>8</sup> ASEAN Foreign Direct Investment Statistics Database (compiled/computed from data submission, publications and/or websites of ASEAN Member States' central banks, national statistics offices, and relevant government agencies through the ASEAN Working Group on Foreign Direct Investment Statistics), as of 15 February 2012.

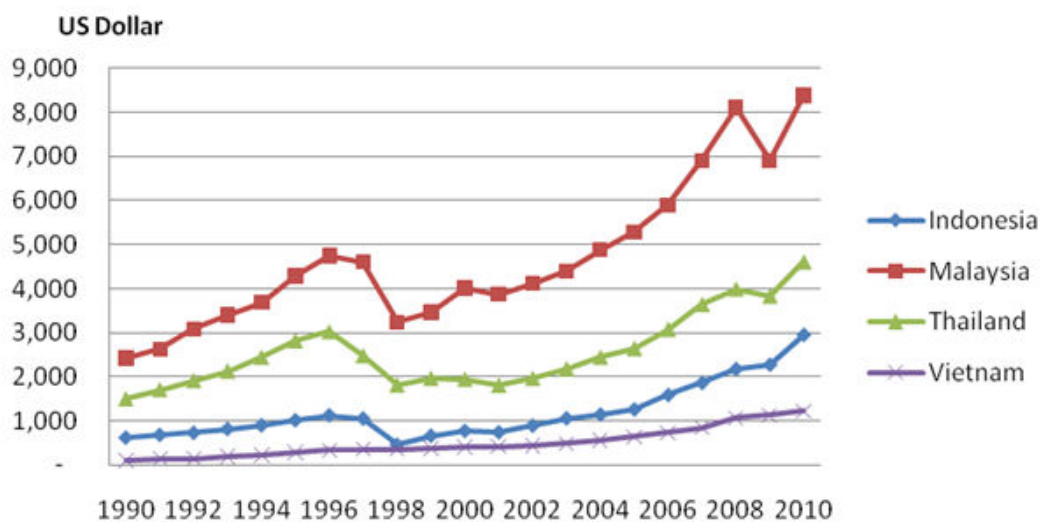
## Factor Comparisons between 4 Host ASEAN Countries

**Figure 6: GDP Comparisons between 4 Host ASEAN Countries**



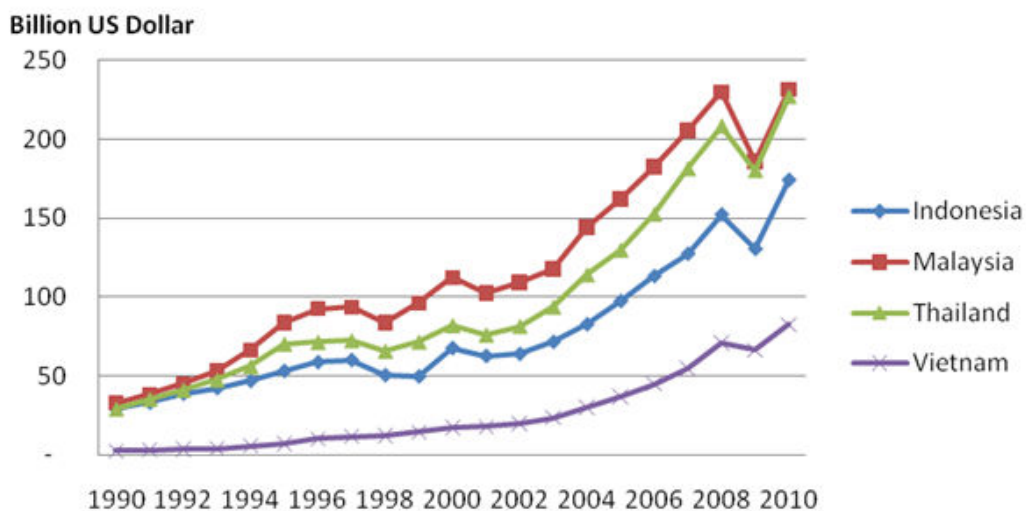
Source: World Bank

**Figure 7: GDP per Capita Comparisons between 4 Host ASEAN Countries**



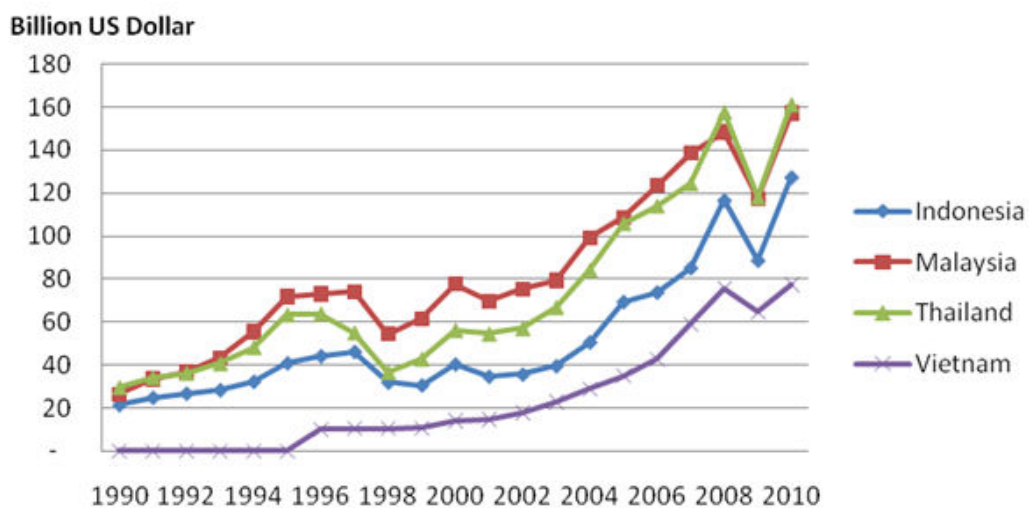
Source: World Bank

**Figure 8: Exports of Goods and Services Comparisons between 4 Host ASEAN Countries**



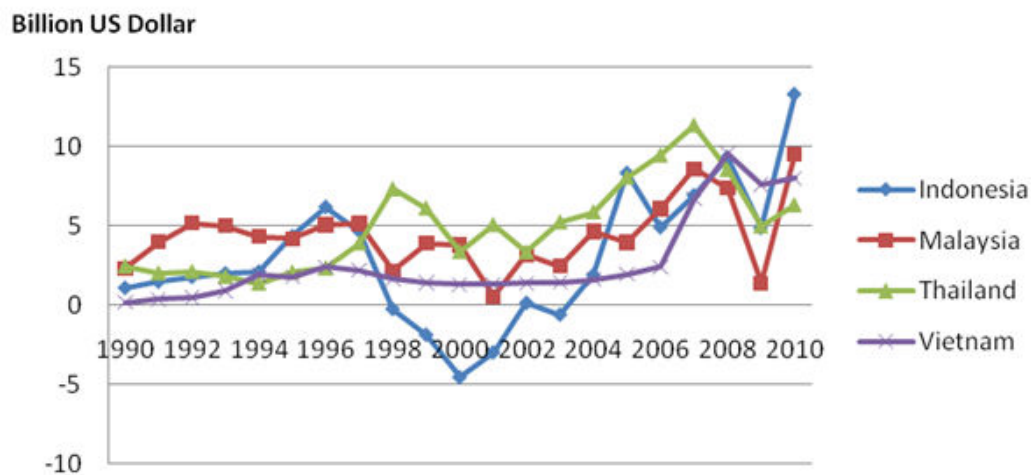
Source: World Bank

**Figure 9: Goods Imports Comparisons between 4 Host ASEAN Countries**



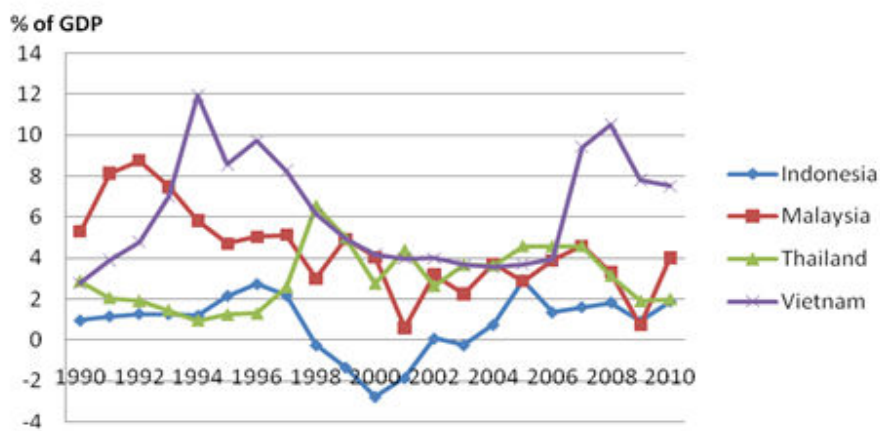
Source: World Bank

**Figure 10: FDI (Net Inflows in US\$) Comparisons between 4 Host ASEAN Countries**



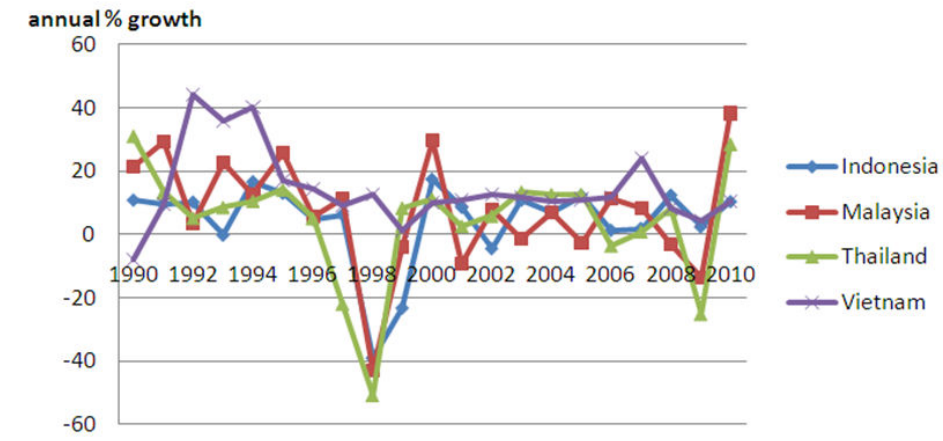
Source: World Bank

**Figure 11: FDI (Net Inflows in % of GDP) Comparisons between 4 Host ASEAN Countries**



Source: World Bank



**Figure 12: Gross Capital Formation Comparisons between 4 Host ASEAN Countries**

Source: World Bank

## 1.2 Objectives

1.2.1 This paper is devoted to examine the determinants of inward FDI from ASEAN investors in 4 ASEAN countries as host countries (i.e., Thailand, Malaysia, Indonesia and Vietnam) by focusing on ASEAN countries' FDI attractiveness from key ASEAN investors.

1.2.2 This paper is devoted to quantify the contribution of each explanatory variable to the total gap, as a percentage of the total FDI gap (Some of the differences in FDI inflows between host ASEAN countries can be explained by the differences in the characteristics). Moreover, this paper also examines which factor helps increase or decrease FDI gap between the host countries.

## 1.3 Scope

This study focuses on 4 ASEAN countries as host countries, i.e., Thailand, Malaysia, Indonesia and Vietnam.

Each host country along with its key home countries in this study can be explained as follows:

1.3.1 Host country: Thailand

Home country: Indonesia, Malaysia, Singapore and Vietnam

1.3.2 Host country: Malaysia

Home country: Indonesia, Singapore and Thailand

1.3.3 Host country: Indonesia

Home country: Malaysia, Singapore and Thailand

1.3.4 Host country: Vietnam

Home country: Indonesia, Malaysia, Singapore and Thailand

The data is collected over 21 years or from 1990 to 2010.

There are seven exogenous variables used to determine inward foreign direct investment in 4 host ASEAN countries: real GDP, real export, real import, real wage, real exchange rate, real lending interest rate, and geographic distance between host and home countries.

## 1.4 Expected Benefits and Application

The importance of examining the determinants of inward FDI from ASEAN investors in 4 ASEAN countries as host countries, and quantifying the contribution of each explanatory variable to the total gap, as a percentage of the total FDI gap are as follows:

1.4.1 The attraction of foreign direct investment (FDI) inflows is an important goal of the AEC; it will also in large part determine the success of ASEAN's integration efforts.

1.4.2 The results of this study will show the differences in resource need and investment efficiency between ASEAN countries.

1.4.3 FDI inflows are beneficial to the economic growth of ASEAN countries resulting from bringing in new capital flows, creating a more stable environment and internal policy competition, easy access to foreign markets, tendency to strengthen institutions within developing countries including in the financial sector,<sup>9</sup> and technology transfer.

1.4.4 Up to now, there is a great deal of research as well as policy debate has recently focused on FDI attraction. But most of the previous studies were analyzed by the non-updated data and those data are not corresponding with the current situation. The data used in

<sup>9</sup> Prasad, Kose, Rogoff, and Wei, 2006.

Michael G. Plummer and David Cheong. *FDI Effects of ASEAN Integration*. 2008.

this study is the most updated, reliable, and available. This study will help us better to analyze the effects of crucial changes in current situation which are the environment, periods of abnormal economic or political conditions, and macroeconomic variables of host countries on FDI.

1.4.5 Economic factors have been changed over time according to economic recession and recovery, so the results of this study show how those changes determine inward FDI in ASEAN countries<sup>10</sup>.

1.4.6 ASEAN countries are now on the tendency of export orientation or import substitution<sup>11</sup>. Therefore, examining attraction of foreign direct investment will benefit ASEAN countries in order to adapt themselves to the change of global economic environment, technology creation, political liberalization, etc.

According to the above reasons, it is important to understand the determinants of foreign direct investment (FDI) in ASEAN countries in order to implement the proper policy, to improve the investment environment for more investment attraction, and to deal with the barriers to investment in ASEAN.

The rest of this paper is organized as follows. Chapter 2 presents the related empirical literature. An overview of intra-ASEAN FDI in selected ASEAN countries is described in chapter 3. Chapter 4 presents the methodology and the descriptions of data. Chapter 5 distinguishes the empirical results. Finally, conclusion and recommendations are provided in chapter 6.

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<sup>10</sup> Pichit Chaisaowong. Inward FDI of East Asian Countries. 2004.

<sup>11</sup> Mana Lertsukulbanlue. Determinants of Foreign Direct Investment in Thailand. 1996.

## CHAPTER II

### LITERATURE REVIEW

This chapter presents relevant research, concept and theory.

#### **2.1 Relevant Research**

##### **2.1.1 Relevant Research in FDI Attractiveness**

As foreign direct investment (FDI) is an interesting issue, there is the existence of a number of FDI studies in details of determinants of FDI.

This study focuses on FDI in the same aspects as Wenhui Wei (2005) who examined the determinants of inward FDI in China and India and the causes for their huge differences. Panel data estimation is applied to estimate the determinants of FDI and then an econometric decomposition method (Oaxaca-Blinder decomposition) is applied to estimate the differences in those determinants. He found that China's much higher FDI from OECD countries was mainly due to its larger domestic market and higher international trade ties with OECD countries. And India had advantage in its cheaper labor cost, lower country risk, geographic closeness to OECD countries, and cultural similarity.

**There are many studies examining determinant of foreign direct investment in ASEAN as follows:**

Chia-Siow Yue (1993) examined determinants of FDI in ASEAN. Chia-Siow Yue found that the significant variables are social stability, political stability, economic stability, high economic growth, large market size, abundant resource and labor in ASEAN-4, FDI attraction policy, and Yen appreciation (due to Plaza Accord Agreement in 1985).

Aut (1997) examined the comparison of determinants of foreign direct investment in ASEAN in 1975-1996. He found that each ASEAN country has different determinant attracting FDI. The significant variables in his study are level of GNP, labour cost, government expenditure, degree of openness and the change in GNP.

Urata (1998) found the liberalization of FDI policies in ASEAN is an important factor in attracting FDI in ASEAN's manufacturing.

**Many studies examined the determinant of FDI in each ASEAN country separately as follows:**

Supanee (1985), Surachai (1992) and Somchai (1997) examined the determinant of FDI in Thailand by applying OLS.

Nguyen Thi Van Anh (1995), Pham Hoang Mai (2002), Le Viet Anh (2004), Meyer and Nguyen (2005), Pham Hoang Mai, Nguyen Ngoc Anh and Nguyen Thang (2007), Thu Thi Hoang (2008), and Nguyen Thi Hoang My (2009) examined the determinant of FDI in Vietnam by applying OLS and panel data estimation.

Root and Ahmed (1979), Schneider and Frey (1985), Lucas (1993), Pichit (2004) examined the determinant of FDI at regional levels by applying multiple regression model and panel data estimation.

**Some researchers considered FDI inflows in relative terms as follows:**

Aut Vajiraphisitsoebhin (1997) examined the comparison of determinants of FDI in ASEAN in 1975-1996, focusing on inward FDI in Indonesia, Malaysia, Philippines, Singapore, and Thailand. He found that each ASEAN country has comparative advantage in different factor, i.e., Indonesia, Malaysia and Philippines have comparative advantage in level of GNP.; Singapore has comparative advantage in labor cost.; Indonesia, Singapore and Thailand have comparative advantage in degree of openness.; Malaysia can attract more FDI owing to government expenditure.; and Philippines and Thailand can attract more FDI owing to their change in GNP.

There is another interesting study by Thomas Hiestand (2005) paying attention to relative determinants of FDI in non-ASEAN country. He examined which countries that contribute largely to Taiwan FDI and also explored the factors that draw FDI into Taiwan. The variables he used to find the determinants of FDI are relative market size, relative labor cost, distance and literacy rate. He found relative market size hypothesis was consistently proved to be a key determinant of FDI in Taiwan. His study gives an idea of using relative factor between countries to find the key factor of FDI.

**There are some researches paying attention to the impact of economic integration and trade liberalization on FDI, which can give an idea about how these factors help increasing FDI inflows to the member countries, as shown in Table 7.**

**Table 7: Literature Reviews Relating to Impact of Economic Integration and Trade Liberalization on FDI**

Researcher/Year	Topic
Prema-Chandra Athukorala & Jayant Menon (1995)	Impact of ASEAN Establishment on FDI in ASEAN
Suthiphand Chirathivat (1997)	Impacts of AFTA to ASEAN Members
Prema-Chandra Athukorala and Jayant Menon (1997)	Impacts of AFTA to FDI and Trade in ASEAN
Bende-Nabende (1999)	Examining Results of APTA(ASEAN Preferential Trading Arrangement)in Attracting FDI in ASEAN and Length of Results
Nuttaya Yuangyai(1999)	Impact of AFTA on FDI in ASEAN
Unchalee Rutngamlug (2002)	ASEAN Economic Integration and Its Impact on Foreign Direct Investment : AFTA

Moreover, other studies relating to FDI were reviewed and cited in the part of reference.

All the reviewed literatures concern with the inward FDI and seek the determinant that encourages FDI into the country or the region by using various econometric methodologies. Some main determinants of FDI such as GDP, economic growth, and per capita GDP, human capital, labor costs, exports, taxes, political stability and openness are most supported in the empirical literatures.

In conclusion, most factors driving FDI found in the reviewed literatures can be separated into 3 categories as follows:

- 1.) Market factors (i.e., local market size, market growth, and access to regional/international markets)
- 2.) Factors relating to the quality of the overall business environment (i.e., presence of suppliers/partners, business-friendly environment, availability of skilled labour, quality of infrastructure, and government effectiveness)
- 3.) Other factors (i.e., cheap labour and natural resources)

### **2.1.2 Relevant Research in Quantifying the Contribution of Variable by Using Oaxaca-Blinder Decomposition**

Oaxaca-Blinder Decomposition, or the counterfactual decomposition technique popularized by Blinder (1973) and Oaxaca (1973) is widely used to study mean outcome differences between groups in measurable characteristics (i.e., education, experience, marital status, and geographical differences) to racial and gender gaps in outcomes. The mean outcome difference can be expressed as the difference in the linear prediction at the group-specific means of the regressors. The technique is easy to apply and only requires coefficient estimates from linear regressions for the outcome of interest and sample means of the independent variables used in the regressions.

Sara de la Rica, Juan J. Dolado, & Vanesa Llorens (2005), Janneke Plantenga & Chantal Remery (2006), and Wu Ya (2009) examined the gender wage gaps referring to the differences between the wages earned by women and by men. They implemented Oaxaca-Blinder decomposition to estimate the component of the gender wage gaps between male and female.

In the aspect of FDI, Wenhui Wei (2005) examined the causes of the huge differences in inward FDI between China and India by applying the econometric decomposition method (Oaxaca-Blinder decomposition). He found that China and India have different factors help increasing FDI gap between countries.

## **2.2 Concept and Theory**

### **2.2.1 Definition of Foreign Direct Investment (FDI)**

Foreign direct investment (FDI) is direct investment made by a company in distribution located in another country either by sharing a company in the country or by expanding operations of an existing business in the country. Foreign direct investment is caused for many reasons including to take advantage of cheaper distribution costs in the country, special investment privileges such as tax increase offered by the country as an incentive for investment, or to gain tariff-free access to the companies of the country. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds<sup>1</sup>.

### **2.2.2 Theory Relating to Foreign Direct Investment (FDI)**

There are a number of main theories explaining FDI. This chapter examines the theoretical literatures relating to FDI. The benefit from these reviews of theories is to focus on the factors which really determine FDI based on the economic theories.

#### **2.2.2.1 The Eclectic Paradigm<sup>2</sup>**

Dunning's most well-known academic contribution is his eclectic (OLI) paradigm.

<sup>1</sup> Bishop Matthew. *Essential Economics*. London: The Economist Newspaper, pp. 102-103. 2004.

<sup>2</sup> Anita Koh, John Dunning. *A Profile*(2005): 3.

In summary, the eclectic paradigm maintains that the extent and pattern of international production is determined by the interaction of three sets of variables (Dunning, 2000; 2001):

### **1.) Ownership-specific (O) Advantages**

The investing firms will be able to engage in or increase foreign production when they have the greater competitive advantages relative to other firms. These advantages may arise from the firm's exclusive ownership of, or access to, a set of income-generating assets, or from their ability to co-ordinate these assets with other assets across national boundaries, relative to other firms.

The examples of ownership-specific advantages are trademark, production technique, entrepreneurial skills, and returns to scale, etc.

### **2.) Locational (L) Advantages**

Locational advantages refer to endowments and attractions that are specific to the market where the company invests. The firms will choose to make use of their ownership specific advantage through engaging in FDI when there are more immobile, natural or created endowments which firms need to use jointly with their own competitive advantages.

The examples of locational advantages are existence of raw materials, low wages, and special taxes or tariffs, etc.

### **3.) Internalisation (I) Advantages**

These advantages are benefits deriving from producing internally to the firms, since they allow it to bypass external markets and the associated transaction costs. These advantages also refer to transaction costs, and occur when it is cheaper to exploit ownership and location advantages through FDI than it is to export. Therefore, the advantages affect the ways that firms may organise the creation and exploitation of their core competencies.

The examples of internalisation advantages are advantages by producing through a partnership arrangement such as licensing or a joint venture.

#### **2.2.2.2 Covered Interest Parity**

It is often said that interest rate parity determines exchange rates between currencies of different countries. If interest rate parity holds then there is no opportunity for covered interest arbitrage.

The arbitrage conditions seek to equate rates of returns of comparable assets across different markets/ economies. If capital mobility is high, then any differences in rates of return will be alleviated through arbitrage in those markets. Hence, high capital mobility implies that the various interest differentials will be low; perfect capital mobility implies a zero differential; while nonzero differentials suggest that there are barriers to capital flows. Therefore, in a perfectly integrated financial market, investors will detect any gaps between the domestic currency return on a domestic asset and a foreign asset, and will seek to close that gap.

#### **2.2.2.3 Aliber's Currency Area Theory**

Currency Areas Theory is another notable theory of FDI. Aliber (1970) explained a theory of direct investment based on currency areas. Aliber argued that a multinational

corporation from hard currency area can invest at lower rates<sup>3</sup> in a soft currency country than local firms.<sup>4</sup> FDI can be explained by the difference in exchange rate and imperfect market.<sup>5</sup>

According to Aliber's Currency Area Theory, almost results of the previous studies about "Determinant of Foreign Direct Investment" conclude that both real exchange rate and nominal exchange rate are significant and positive relationship with foreign direct investment.

#### **2.2.2.4 Location Theory**

This theory explains why it is worthwhile for firm to invest abroad.

Generally, location theory is concerned with territorial allocation of resources within a country. The location theory explains FDI in the context of the location specific factor differentials. Location theory explains about supply (cost factors) and demand (market factor) variables that affect the distribution processes of firms. The comparative advantage, the availability of raw materials and transportation cost are main determinants in this theory. The location theory's explanation for foreign direct investment can be discussed by the following factors.

First, availability and cost of inputs can explain the existence of FDI. A firm investing abroad may be attracted by the availability in another country of some inputs, which are scarce at home, or by the lower cost of inputs abroad such as lower labor cost. The lower labor costs can be the main reasons for direct investment in developing countries.

Second, marketing factors are the main factors that stimulate foreign firms to invest abroad. A firm can get many advantages by locating a production plant near the market. Firms can conduct business smoothly due to locating the firm abroad, because the firm can better exploit the local market, avoid the tariff barriers, and reduce the transportation cost. Moreover, the production via the setting up of subsidiaries in a host country may be more accepted by the local people than direct exporting.

Third, direct investment is stimulated by the existence of trade barriers. Subsidiaries of foreign firms are often set up in another country that is not yet subject to trade restrictions. Then the products are exported to those markets that have imposed restrictions on the exports of the investing country.

Finally, the factor of government of host countries has an effect on FDI owing to creating favorable investment climate, for example, lower tax rates, better infrastructure, and greater political stability. A firm is often attracted to invest abroad because another country offers some advantages.

Furthermore, Location Theory can be focused into five factors<sup>6</sup>: marketing specific factor (real GDP, growth of GDP), availability and cost of input (real wage), climate investment (the relative price, lagged value of the real capital stock of home country in host country), trade barriers and government-policies factors.

#### **2.2.2.5 Theory of Gravity**

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<sup>3</sup> Sirasoontorn (1997).

<sup>4</sup> Vareeya Tevutipong. Determinants of Japanese Small and Medium-sized Enterprises Direct Investment in Thailand. 2008.

<sup>5</sup> Gullett and Figgins (1995).

<sup>6</sup> Vareeya Tevutipong. Determinants of Japanese Small and Medium-sized Enterprises Direct Investment in Thailand. 2008.



According to the gravity model for international trade, the amount of trade between two countries is explained by their economic size (GDP), population (openness), geographical distance and a set of variables that capture common institutional characteristics such as languages, culture, trade agreements, and law system. More specifically, the amount of trade between two countries is assumed to increase in their sizes, as measured by their national incomes, and decrease in the cost of transport, as measured by the distance between their capitals or economic centers.

The most simple form of the gravity model of bilateral trade is:

$$F_{ij} = A Y_i Y_j / D_{ij} \quad (1)$$

where:

- $F_{ij}$  represents the flows (i.e. migration, tourism, trade, foreign direct investment) between the home country  $i$  and the host country  $j$ ;
- $A$  is a constant of proportionality.;
- $Y_i$  and  $Y_j$  are the relevant economic sizes (GDP, GDP per capita, population) of country  $i$  and country  $j$ ;
- $D_{ij}$  is the distance between countries' capitals or economic/financial center.

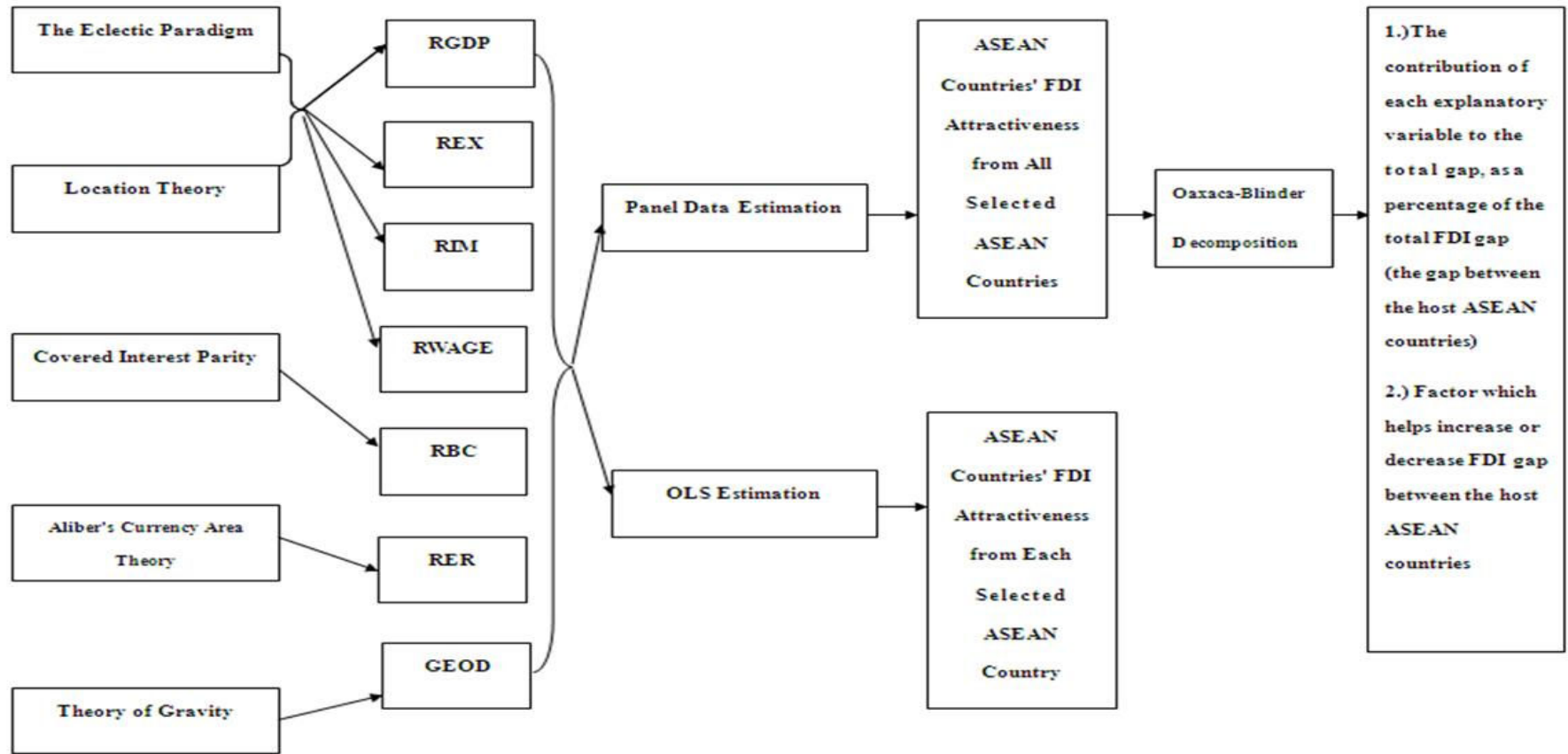
The home country economic size is typically positively related to the trade flow since the bigger size shall increase availability of goods to export. Similarly, the coefficient of the host country economic size is expected to be positive since the size shall indicate demand for imports. However, the coefficient estimated for the home country's per capita income can be either positive or negative. It should be positive if the country export relatively large amount of capital intensive products. The sign should be negative if the country export large amount of labor intensive products. For the host country's per capita income, positive sign should be previewed if its import products are luxury goods. The negative sign is expected if the products are inferior goods. The Gravity Model also describes the influence of the two countries' distance over their trade flows. Volume of trade is negatively related to the distance between the two countries since it shall be a very good proxy for transport costs.<sup>7</sup>

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<sup>7</sup>Pichit Chaisaowong. Inward FDI of East Asian Countries. 2004.

2.2.3 Conceptual Framework

Figure 13: Conceptual Framework



## CHAPTER III

### Intra-ASEAN FDI in Selected ASEAN Countries: An Overview

This chapter presents an overview of intra-ASEAN FDI in selected ASEAN countries which includes FDI Inflows in 4 ASEAN countries and intra-ASEAN FDI outflows.

Foreign direct investment (FDI) has made a major contribution to development in ASEAN. FDI has direct effects through employment, training, and the multiplier effect (i.e., households with increased income from employment spend more for education and health, and also buy more local goods and services). Moreover, FDI generates spill-over of knowledge, quality standards, techniques, and favorable patterns of trade that are favorable to domestic firms.

ASEAN members have eliminated their tariffs to 0% for some of their products since 1 January 2010 under the trade agreement of AFTA<sup>1</sup>. The elimination of tariffs results in reducing product price throughout ASEAN, encouraging higher market competition, helping ASEAN countries' products gain access to a regional market that incorporates many substantial advantages ( e.g., a population of more than 580 million, \$1.5 trillion gross domestic product, convenient transport systems, huge international trade worth \$1.7 trillion a year, and foreign investment of \$60 billion), benefiting the consumers from cheaper prices of goods, attracting more factories due to cheaper imported raw materials, integrating ASEAN into a single market, and generating higher potential of export and investment sectors in the long term<sup>2</sup>.

On the step towards ASEAN Economic Community (AEC) 2015, all ASEAN countries in the AEC have their own potential<sup>3</sup> to share with the others. The countries of the AEC can be classified into three groups, as shown in Table 8.

**Table 8: Classification of Countries' Potential in AEC**

<b>Countries</b>	<b>Potential</b>
CLMV (Cambodia, Lao PDR, Myanmar, and Viet Nam)	Materials and labors
Indonesia, Malaysia, Philippines, Thailand	Production bases
Singapore, Malaysia, Thailand	Technology

<sup>1</sup>The ASEAN Secretariat. Acceleration of AFTA [online]. 2011. Available from : <http://www.aseansec.org/10097.htm> [2012, March 7]

<sup>2</sup>Runckel & Associates. Benefits from ASEAN Free Trade Area (AFTA) Tariff Cuts. [online]. 2010. Available from : [http://www.business-in-asia.com/asia\\_freetrade.html](http://www.business-in-asia.com/asia_freetrade.html) [2012, March 9]

<sup>3</sup>Sittichai Anantarangsi. Thailand and the Inflow of FDI under the ASEAN Economic Community (AEC). 2011.

Therefore, the AEC can be accomplished if ASEAN countries promote and develop their own potentials. Malaysia, Thailand, Indonesia and Vietnam are now likely to be the most preferred ASEAN destinations for Intra-ASEAN FDI owing to the natural resources, markets, technology, industry-clusters and cost savings advantages. Therefore, this study aims to examine the FDI attractiveness of these 4 ASEAN countries.

This section focuses on the overview of FDI in host and home countries as follows:

### **3.1 FDI Inflows**

#### **3.1.1 Thailand**

##### **Economic Overview of Thailand**

Before the crisis in 1997, Thailand had been one of the world's fastest growing economies. After the Asian Financial Crisis in 1997, Thailand was characterized by a significant depreciation of the Baht, a decline in the stock market, and a sharp deterioration of property prices, which led to a major economic downturn. Thailand's real GDP fell by 1.4% in 1997 and declined by 10.3% in 1998. Trade also suffered, i.e., exports fell by 6.7%, and imports plunged by 33.0% in 1998. The unemployment rate during this crisis rose from 3.2% to 7.3%. Moreover, Thailand's per capita GDP on purchasing power parity (PPP) basis which is a common measurement of a nation's living standards, also fell by 12%<sup>4</sup>. Thailand's economy was stabilized by loan from the IMF. After that, real GDP grew by 4.4% in 1999 and by 4.6% in 2000. The country recorded positive GDP growth rates of between 4.6% to 7.14% from 2002 to 2005. In 2002, real GDP increased by 4.8% due to increased exports and higher domestic demand. The unemployment rate (which has gradually fallen since 1998) dropped to 4.1% in 2002. Thailand's per capita GDP in purchasing power parity (PPP) recovered in 2002. Thai exports in 2002 were much higher than 1997 levels, although imports were barely higher. On the other hand, the level of public debt has risen from 12.6% of GDP in 1996 to 60.4% in 2002<sup>5</sup>. In 2003, the Thai economy grew by 3.7% and exports increased by 18.6% according to the increase in prices of agricultural products, increase in employment, more profitable private sector, and consumption expansion. According to Thailand's polarized political situation after 2006, it threatened economic growth and major industries, moreover, Thailand faced lower foreign direct investment because consumer and investor confidence declined. After that, the Thai's economy recovered from a negative GDP growth of -2.33 % in 2009 to positive 7.8 % GDP growth in 2010 according to government's stimulus packages worth \$43.4 billion in order to offset weak external demand and improve confidence<sup>6</sup>. In 2011, growth in Thailand was at 2.4% which was lower than other countries in the region and lower than the average for the developing East Asia Pacific region excluding China. The slower growth in Thailand in 2011 was caused by the global

<sup>4</sup> Bank of Thailand. Preview Thailand-U.S. Economic Relations: An Overview. [online]. 2011. Available from : <http://freedownload.is/pdf/thailand-us-economic-relations-an-overview-174840.html> [2012, March 14]

<sup>5</sup> Bank of Thailand. Preview Thailand-U.S. Economic Relations: An Overview. [online]. 2011. Available from : <http://freedownload.is/pdf/thailand-us-economic-relations-an-overview-174840.html> [2012, March 14]

<sup>6</sup> EconomyWatch. Thailand Economic Structure. 2010.

economic slow-down, the earthquake in Japan, and the recent floods in 26 provinces of Thailand<sup>7</sup>.

Thailand's economy is strongly interlinked with the global economy according to its reliance upon export-oriented manufacturing industries and international tourism. In terms of GDP per capita, Thailand is ranked fourth in ASEAN after Singapore, Brunei, and Malaysia. Thailand serves as an anchor economy for neighboring developing countries which are Laos, Myanmar and Cambodia. Seventy percent of Thailand's GDP is derived from the export sector. Thailand's primary exports commodities are textiles and footwear, fishery products, rice, rubber, jewelry, automobiles, and computers and electrical appliances. Thailand's primary imports commodities are capital goods, intermediate goods and raw materials, consumer goods, and fuels<sup>8</sup>. Exports of Thai goods to ASEAN market could thrive due to utilization of the ASEAN Free Trade Area (AFTA) as ASEAN members have eliminated their tariffs to 0% for some of their products since 1 January 2010<sup>9</sup> under the trade agreement.

On the step towards ASEAN Economic Community (AEC) 2015, the high potential of AEC with about 580 million prospective customers in total would be a very good opportunity for Thai investors to find cheap materials and expand their markets.

#### **FDI in Thailand**

Thailand's economy is heavily dependent on international trade and foreign direct investment. According to the high competition in the global market, therefore, Thailand has to sign several Free Trade Agreements (FTAs) in order to maintain the competitiveness and to attract inflows of foreign direct investment (FDI). Thailand acts as the centre of the AEC, as an important production base for distributing products to the global market, and as a hub for future re-exportation of products into additional markets. Intermediate or semi-finished goods are sent to Thailand for final assembly. Therefore, the role of inwards FDI is important in these forms of production since it is closely associated with the processing of semi-finished goods. Thailand can attract both market-seeking and export-oriented investors because of the big market size, easy access to resources, low production costs<sup>10</sup>, existing infrastructure and the availability of business alliance. Moreover, Thailand was well situated in relation to southern China and CLMV countries (Cambodia, Lao PDR, Myanmar and Vietnam), which would provide some of those cheaper inputs and also represented future markets for manufactured items.

Thailand is the fourth largest source of intra-ASEAN FDI. Outward FDI from Thailand is directed at various countries in ASEAN: 27.4% to Vietnam, 21.8% to Singapore, 13.9% to Myanmar, 13.4% to Malaysia, 10.9% to Laos, and 10.1% to Indonesia. Thailand's outward FDI has not been robust, amounting to only 4% of GDP or US\$10.857 billion during 1980-2008, while Singapore's and Malaysia's was much greater at 103.9% of GDP or US\$189.094 billion

<sup>7</sup> The World Bank. World Bank East Asia and Pacific Economic Update, Volume 2. 2011.

<sup>8</sup> Department of Trade Negotiations. Trade Statistics of Thailand. [online]. 2012. Available from : [http://www.dtn.go.th/index.php?option=com\\_content&view=article&id=7810&Itemid=808&lang=th](http://www.dtn.go.th/index.php?option=com_content&view=article&id=7810&Itemid=808&lang=th) [2012, March 7]

<sup>9</sup> ASEAN Secretariat. The 13th Meeting of the AFTA Council [online]. 1999. Available from : <http://www.aseansec.org/2136.htm> [2012, March 12]

<sup>10</sup> OECD. Foreign Direct Investment and Recovery in Southeast Asia. 2011.

and 30.4% of GDP or US\$67.580 billion, respectively<sup>11</sup>. The low amount of outward FDI from Thailand is caused by a lack of knowledge of investment regulations in the targeted countries, the sturdiness of the baht currency, and the tax collection on dividends and investment overseas. Thailand will lose business opportunities if these problems cannot be solved. However, Thailand's outward FDI will likely increase. The success in utilizing raw materials, labor and markets abroad by investing overseas will flow back to help boost development of industries in Thailand.

Thailand was in the right place at the right time in the late 1980s, and Thailand also had the regulatory environment which helped to attract export-oriented investors. Over 80% of FDI receipts in Thailand result from manufacturing sector (54%), the real estate sector (16%), and mining and quarrying sector (12%). Manufacturing sector which was led by machinery and transport equipment, and the real estate sector caused a tenfold increase in FDI during 2005 to 2009. The rapid expansion of many condominium and housing estates, as well as hotels and other major construction projects around Greater Bangkok and other key economic areas (i.e., Phuket and Chonburi) caused high FDI inflows in Thailand. As of 2010, 60% of the total FDI value is in export markets, led by electric and electronic products (90%), minerals and ceramics (89%) and light industries/textiles (81%)<sup>12</sup>. In 2010, only 8% of the total value of FDI came into Thailand, declining from 16% on average from 2005-2009<sup>13</sup>. Thailand has been losing foreign direct investment (FDI) to other ASEAN countries<sup>14</sup> owing to the recent massive floods in 2011. Thailand remains competitive in 2012 despite the recent wage increased by 15.2% in 2011<sup>15</sup>. Furthermore, Thailand continues to rank higher than China, India and all other ASEAN countries in World Bank's 2011 Ease of Doing Business rankings, with the exception of Singapore<sup>16</sup>.

Thailand now allows wholly-owned foreign businesses to operate investments in basic infrastructure, transportation systems, and public utilities development<sup>17</sup>. The obstacle to new investment in Thailand is the daily minimum wage hike to 300 baht which is higher than in some neighbouring countries (i.e., Myanmar, Vietnam, Laos, Cambodia, Indonesia and Philippines). However, Thailand tends to move away from basic mass manufacturing and pay more attention in developing a higher skilled workforce due to the rising competition in cheaper labour force from some neighbouring countries.

Thai Government aims to reduce corporate income tax rates from 30% to 23% in 2012, and increase the rights of foreign shareholder in Thai company which must not be higher than 70 % in 2015 from 49% at present. Therefore, foreign investors will invest more in Thailand due to these amended regulations.

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<sup>11</sup> The Board of Investment of Thailand. Outward Foreign Direct Investment by Thailand: Crisis, Opportunity and Potential for Thai Investors. The Thailand Investment Review.2010.

<sup>12</sup> Colin Kinghorn.Tracking Thailand's FDI. Business Report Thailand Issue #5, February 2011.

<sup>13</sup> Somruedi Banchongduang.Thailand losing FDI share to neighbouring countries. 2012.

<sup>14</sup> Jeerapong Prasertpolkrang. PM launches community centre in city (22 January 2012).

<sup>15</sup> JETRO Comparative Survey 2011, The Japan External Trade Organization. The 21th Comparative Survey of Investment-Related Costs in 31 Major Cities and Regions in Asia and Oceania. 2011.

<sup>16</sup> Thailand Investment Review 2011, Thailand Board of Investment. Ease of Doing Business 2011: Thailand still among the world's leaders. 2011.

<sup>17</sup> ASEAN Secretariat, 1998a; CCH Asia Limited, 1998.

### **3.1.1.1 FDI from Selected ASEAN Countries in Thailand**

#### **1.) FDI from Indonesia**

Indonesia and Thailand are now increasing their bilateral trade and investment relations as the business climate and opportunities in both countries are fast improving. Indonesia is Thailand's third largest trading partner among ASEAN nations after Malaysia and Singapore and ranks eighth of Thailand's total trade worldwide. Bilateral trade between Indonesia and Thailand reached 13.02 billion US dollars in 2010, increasing by 53.79 % compared to 2009. Thailand exports vehicles and spare parts, sugar, chemical, machinery engine spare parts and livestock to Indonesia. Two-way intra-industry FDI between Indonesia and Thailand has arisen, especially in the food industry where local suppliers have developed.

Thailand acts as an important production base for distributing products to the global market, and as a hub for re-exportation of products into additional markets. Intermediate or semi-finished goods from Indonesia are sent to Thailand for final assembly. For example, Thailand imported original equipment manufacturing from Indonesia at 249.1 million US dollars in 2008, 215.9 million US dollars in 2009, 311 million US dollars in 2010, and 283.7 million US dollars in 2011, and Thailand re-exported vehicles and spare parts to Indonesia at 1,530.4 million US dollars in 2008, 852.1 million US dollars in 2009, 1,784.4 million US dollars in 2010, and 2,039.9 million US dollars in 2011<sup>18</sup>. Indonesia-Thailand trade relations are the type of cooperative economy because both Indonesia and Thailand are Japan car network manufacturers. Nowadays, Indonesia is Thailand's top trading partner in automotive industry. Thailand was ranked first in Indonesia's automotive import (35 %) owing to excess demand in Indonesia. Indonesia imported passenger cars from Thailand for 62.5 % and imported commercial vehicles from Thailand for 22 % (Thailand remained the largest market for commercial vehicles, accounting for 49.6 % of the commercial vehicle segment). In the first three semesters of 2011, Indonesia was ranked first among ASEAN countries in Thailand's automotive export (12.5 %). In 2011, passenger car was ranked first in export from Thailand to Indonesia (38.7 %), and auto part was ranked second in export from Thailand to Indonesia (24.7%).

Indonesia's direct investment in Thailand is less than Thailand's direct investment in Indonesia owing to larger market size and cheaper wage in Indonesia. However, Indonesia still has the main obstacles in lack of skilled labor, lack of spare part for automotive industry, and lack of good domestic transportation as well as export transportation.

According to the ASEAN Free Trade Area (AFTA), Thailand and Indonesia are expected to forge closer cooperation, such as reduction of non-tariff barriers to trade, investment, intellectual property rights protection, and increasing in trade facilitation to boost bilateral trade growth. Indonesia is now offering tax facilities to industries relocating their production facilities from Thailand to Indonesia, according to the devastation of the floods that hit Thailand in 2011. Foreign investors are eyeing Indonesia to replace Thailand as their manufacturing base, therefore, Thai government must pay more serious attention to manage with the flood crisis in the future.

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<sup>18</sup> Information and Communication Technology Bureau, Thai Customs Department, Thailand. Customs Regulations on Imports & Exports of Thailand. 2012.

## 2.) FDI from Malaysia

Since 1980, Malaysia has maintained an open policy towards trade and investment. The big leap in Malaysia's outward direct investment began in the late 1990s according to the impressive economic growth of Malaysia<sup>19</sup> when the domestic firms had built up ownership advantages and expanded their operations abroad<sup>20</sup>. The drastic change from net recipients to net sources of FDI also reflects that Malaysia is no longer an attractive destination for FDI because countries like China, India and Vietnam pose a threat to the country's competitiveness as a host economy due to their relative lower labor cost and larger market size. With competitive pressure from globalization as well as increasing trade openness in the country, the Malaysian firms have to respond to these challenges by relocating their production activities in the host countries so as to gain cost advantage and expand markets<sup>21</sup>. Malaysia's outward direct investment went mainly into the services, utilities, manufacturing, and oil and gas sector, which amounted to 92%. Bank Negara Malaysia (BNM) reported that the services sector includes: investment in the finance, insurance and business services (43%); transport, storage and communications (20%); utilities (20%); and distributive trade, hotels and restaurants (12%). Moreover, Malaysia's manufacturing investments abroad were concentrated in three main industries, i.e., fabricated metal products, machinery and equipment (48%); food, beverages and tobacco (14%); and chemicals and petroleum – related industry (10%).<sup>22</sup> Mohamed Ariff and Gregore Pio Lopez stated that the key push factors of Malaysia's motives to invest overseas are rising wealth in both of individuals and corporations, high domestic savings, the rising cost of labor in Malaysia relative to its regional neighbors, the limits of domestic markets, domestic deregulation in strategic sectors (i.e., health, education, telecommunications and utilities), the promotion of outward direct investment by the government, trade liberalization in general (especially in the ASEAN region), and competition in the services sector in the domestic market. Moreover, the main pull factors that attracted Malaysian outward direct investment were supply of cheap labor, the abundance of raw materials, large and growing domestic markets, geographic proximity, special tax and other incentives, and the development of export markets through preferential treatment. Lopez (2007) argued that Malaysia's inward and outward direct investment flows are converging over time after comparing the performance of outward direct investment versus inward FDI for the period of 1990 to 2005. Malaysia along with Singapore is the leader in outward FDI in ASEAN. Malaysia's outward direct investment helps increase competitiveness to firms and industries of the country, yields external benefits, and diminishes obstacles from higher production costs and higher labour cost in the country.

Thailand and Malaysia are the similar countries. These two countries benefit substantially in terms of a rapidly expanding manufacturing sector. FDI in the manufacturing sector in both Thailand and Malaysia is dominated by projects in electronics with more investment than in any

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<sup>19</sup> Mohamed Ariff & Gregore Pio Lopez, Malaysian Institute of Economic Research (MIER). Outward Foreign Direct Investment: The Malaysian Experience. 2008.

<sup>20</sup> Dunning(1995).

<sup>21</sup> Soo Khoon Goh and Koi Nyen Wong. Malaysia's Outward FDI: The Effects of Host Market Size and Home Government Policy. 2010.

<sup>22</sup> Mohamed Ariff & Gregore Pio Lopez, Malaysian Institute of Economic Research (MIER). Outward Foreign Direct Investment: The Malaysian Experience. 2008.



other manufacturing activity. Thailand and Malaysia have a similar ranking of investors, with roughly two thirds of their investment coming from within the region. Thailand attracted a lower level of FDI than Malaysia in 2011. Furthermore, Thailand and Malaysia were best placed to receive the massive outflow of investment from the rest of Asia in the late 1980s owing to lower wage costs and more competitive currencies exchange rates, but now there has been rising competition in cheaper labor force from some neighboring countries.

Malaysia has experienced continuous economic expansion and stability in political situation, but Malaysia still lacks of skilled labor, raw materials, and marketing potentials in many business sectors. Moreover, Thailand and Malaysia have different expertise in technological field, so it is the reason why these two countries have to share cooperation. Malaysia's high potential industries invested in Thailand are electronics and ICT (Information and Communication Technology), auto parts, rubber and oil palm. Malaysia has advantage in technology while Thailand has advantage in raw material, labor force, and close geographic distance to China. However, Thailand has disadvantages in English proficiency in the Thai workforce and lack of investing information in Thailand.

Thailand ranked in Malaysia's top ten export destinations, top ten import sources, and top ten trading partners<sup>23</sup> in 2011. On the other hand, Malaysia ranked fourth in Thailand's trading partner with total trade of 21,000 million USD. Thailand and Malaysia are most similar with roughly equal inward investments in both manufacturing and non-manufacturing. Malaysia's export was mainly attributed to higher exports to Thailand (0.55 billion USD) in the period January – November 2011. Malaysia's major exports to Thailand are computers, crude oil, electric power machinery and equipment, chemicals, microchip, machinery and equipment, scientific instruments, and petroleum products. Moreover, there is trade barrier between Malaysia and Thailand in frozen chicken meat and float glass. Thailand's major exports to Malaysia are electronic equipment, auto parts & accessories, rubber, petroleum products, rubber products, iron and steel products, motor vehicles and generators, and chemicals. Cross-border trade contributes to 70% of the total trade between Thailand and Malaysia.

Although Thailand has signed a number of Free Trade Agreements, Malaysia is still Thailand's potentially rival country, especially in exports of tin, rubber, readymade garments, microchip, coffee, and tobacco leaf. Two-way intra-industry FDI between Malaysia and Thailand has arisen, especially in the food industry where local suppliers have developed, and also in automobile industry. Hiratsuka (2006) argued by using the gravity model that Malaysia's outward direct investment as a percentage of trade was high in Thailand, therefore, geographical distance and markets play a crucial role in determining outward direct investment from Malaysia to Thailand<sup>24</sup>. Malaysia's consistent direct investment in Thailand is caused by the higher wage in Malaysia increasing by 33.8% for general workers in 2011<sup>25</sup>; good support for public transport with 4,346 km rail links from Thailand to Malaysia<sup>26</sup>; Thailand-Malaysia Joint Development

<sup>23</sup> Department of Statistics, Malaysia.

<sup>24</sup> Hiratsuka, Daisuke. Outward FDI from ASEAN and Intra-regional FDI in ASEAN: Trends and Drivers. Discussion Paper No. 77. Institute of Developing Economies, Japan. November 2006.

<sup>25</sup> JETRO Comparative Survey 2011, The Japan External Trade Organization. The 21th Comparative Survey of Investment-Related Costs in 31 Major Cities and Regions in Asia and Oceania. 2011.

<sup>26</sup> Hirunya Suchinai. Thailand Business Environment and Investment Policies. Thailand Board of Investment. 2011.

Strategy for Border Areas cooperation framework; and a sub-regional cooperation initiative called IMT-GT (Indonesia-Malaysia-Thailand Growth Triangle). In 2010, Thailand Board of Investment (BOI) approved Malaysia's 39 investment projects worth 156 million USD, especially in semiconductor industry, service sector and agricultural sector.

One of the most important Malaysia's investment in Thailand is the Malaysia-Thailand Joint Development Area (JDA) which was located in the lower part of the Gulf of Thailand and governed by the Malaysia-Thailand Joint Authority (MTJA). The MTJA was established by the two governments in 1979 for joint exploration of the once-disputed JDA. The Petroleum Authority of Thailand (PTT) and Petronas of Malaysia share equal interests in this project. PTT and Petronas announced an agreement in 1999 to proceed with development of a gas pipeline from the JDA to processing plant in Songkhla (located in the south of Thailand), and a pipeline linking the Thai and Malaysian gas grids. Malaysia and Thailand each take half of the gas produced. Production from the JDA began in 2002<sup>27</sup>. ASEAN has made the establishment of a trans-ASEAN gas pipeline which is one part of ASEAN's Plan of Action on Energy Cooperation, therefore, the Thai-Malaysian pipeline play a vital role in increasingly becoming the fuel of choice for many countries<sup>28</sup>, and this project would reduce the region's dependence on crude oil and attract multinational companies to invest in gas exploration<sup>29</sup>. Moreover, the Penang-Songkhla Economic Zone which was prepared jointly with industry, business, and government department, helps industrialize the five provinces in the south of Thailand through the utilization of Thailand's natural gas resources by creating new industrial estates, power plants and a new deep-water port.

Thai government aims to reduce corporate income tax rates from 30% to 23% in 2012, and increase the rights of foreign shareholder in Thai company which must not be higher than 70% in 2015 from 49% at present. Therefore, Malaysia tends to invest more in Thailand due to these amended regulations.

### **3.) FDI from Singapore**

The Singapore government's policy on FDI is related to its relentless efforts to secure the international competitiveness of the island state. When the relative factor endowments of Singapore change, its industrial structure has to change as well. Singapore locates production in neighboring countries owing to its small domestic market with a population of 5.18 million, high labor cost and lack of natural resources. The government began to pay explicit attention to outward FDI after the recession in the mid 1980s<sup>30</sup>. In 1988, the International Direct Investment (IDI) program was established and launched the incentives for international direct investment (i.e., an overseas tax incentive, allowing firms to cut their losses through tax write-offs, tax exemptions for foreign income repatriated to Singapore as well as feasibility grants for appointing consultants to evaluate FDI opportunities<sup>31</sup>). In 1993, a committee to promote

<sup>27</sup> Malaysia Business and Investment Opportunities Yearbook 2008. 2008.

<sup>28</sup> Tony Allison. The Trans Thai-Malaysia natural gas project. August 5, 2000, Asia Times.

<sup>29</sup> ASEAN Secretariat. Infrastructure[online]. 2011. Available from : <http://www.aseansec.org/13656.html> [2012, March 7]

<sup>30</sup> Hans C. Blomqvist. Extending The Second Wing: The Outward Direct Investment of Singapore. 2002.

<sup>31</sup> Okposin(1999).

enterprise overseas was set up. At that time, the key principles for Singapore's regionalization strategy was launched by Goh Chok Tong, Singapore's Prime Minister, as follows<sup>32</sup>:

- 3.1) Investment should be spread out;
- 3.2) Investment should build upon strength in the traditional areas;
- 3.3) Investors should go into markets with a long-term view;
- 3.4) Singapore investment must benefit the host countries (e.g., in the form of training or technology transfer);
- 3.5) Singapore companies must be good corporate citizens.

Total overseas investment made by Singapore's corporate sector grew from \$669.0 billion at the end of 2008 to \$736.5 billion at the end of 2009. There are three components of Singapore's investment abroad: direct investment, portfolio investment and other foreign assets. Direct investment contributed around 48.8% or \$359.3 billion to total investment abroad. About 28.3% and 22.9% of total overseas investment were attributed to portfolio investment and other foreign assets respectively. Singapore's stock of direct investment abroad expanded 13.2% to \$359.3 billion at the end of 2009. The bulk of direct investment was in the form of direct equity investment (83.6%) and net lending to overseas affiliates (16.4%). Singapore's overseas direct investment was concentrated in financial & insurance services including investment holding (49.5 % or \$177.9 billion), manufacturing sectors (23.4 % or \$84.1 billion), real estate activities (5.6%), wholesale & retail trade (5.5%), and information & communications (4.7%)<sup>33</sup>. Singapore retained its top position of FDI in ASEAN with about 49% of total FDI in the region in 2011, compared with 41% in 2006<sup>34</sup>.

Singapore is Thailand's notably and potentially rival country. In ASEAN, Singapore and Thailand performed the strongest expansion of FDI receipts at 32-46% in 2009 and 8-16% in 2009, respectively<sup>35</sup>. Singapore and Thailand have forged closer economic relationship with a memorandum of understanding (MOU) on Singapore-Thailand Enhanced Economic Relationship (STEER) since 2002. STEER was organized with the common intention by premiers of both countries to strengthen bilateral economic cooperation and partnership. The MOU was prepared in response to the Thai government's policy which aimed to attract foreign investors and promote Thailand as a regional investment hub. It stated a procedure on investment protection for individuals and corporate entities in Thailand and Singapore. Moreover, Singapore also looks forward to deepening political, economic and cultural ties with Thailand.

Thailand ranked in top 15 investment destinations of Singapore with increasing trend from 2000 to 2009, except the decreasing trend in 2002<sup>36</sup>. Within ASEAN, Singapore is ranked the first biggest investor in Thailand. Singapore's direct investment in Thailand was concentrated in financial and insurance services (14,899.4 million dollars in 2009); wholesale and retail trade (2,968.4 million dollars in 2009); manufacturing (872.3 million dollars in 2009); professional, scientific, technical, administrative, and support services (449.5 million dollars in 2009); construction (76.9 million dollars in 2009); transport and storage (71.7 million dollars in 2009);

<sup>32</sup> Tan(1995).

<sup>33</sup> Department of Statistics, Ministry of Trade & Industry, Singapore. Singapore's Investment Abroad. 2009.

<sup>34</sup> Jeerapong Prasertpolkrang. PM launches community centre in city (22 January 2012).

<sup>35</sup> Colin Kinghorn. Tracking Thailand's FDI. Business Report Thailand Issue #5, February 2011.

<sup>36</sup> Department of Statistics, Ministry of Trade & Industry, Singapore. Singapore's Investment Abroad 2009. 2009.

information and communications (39 million dollars in 2009); and real estate activities (34.9 million dollars in 2009). Thailand is investment destination of Singapore owing to the cheap labour, rich natural resource, sizable domestic market and redistribution center in Thailand. Singapore's wages were observed to be 6.5-14.1% higher in the manufacturing sector in 2010<sup>37</sup>, therefore, Singapore tends to invest more in Thailand and other ASEAN countries.

In terms of trade, Singapore is Thailand's fifth ranked trading partner and Thailand is Singapore's ninth ranked trading partner among Southeast Asian countries<sup>38</sup>. Thailand has enjoyed a trade surplus with Singapore. Total trade between Thailand and Singapore has consistently increased by 12.8% in 2007, 16% in 2008, 22.66% in 2009, and 21.10% in 2010, respectively. Petroleum products (14.49%), computer equipment (12%), electronic integrated circuits (11.63%), machine parts and accessories (6%), aircraft components and aircraft equipment (5.39%), chemicals (3.89%), steel (2.64%), and crude oil (2.50%) were among Singapore's principal imports from Thailand in 2010, with the import value up to 2,639.9 million USD, or an increase of 33.73%, compared to 2009. On the other hand, computer equipment (16.98%), chemicals (16.38%), electronic integrated circuits (12.46%), boat and floating production (8.46%), electric machine (8.12%), machinery (5.93%), petroleum products (3.05%), crops (2.96%), and pulp and paper (2.54%) were among Thailand's principal imports from Singapore in 2010, with the import value up to 2,167.3 million USD, or an increase of 8.61%, compared to 2009.

#### **4.) FDI from Vietnam**

Government of Vietnam began encouraging local companies to invest overseas during 2007-2008, with the aim of purchasing properties or resettling the firms abroad. Vietnam is facing macro-economic difficulties at present, so it's necessary to reassess the feasibility of overseas investment projects. Vietnamese investors invested abroad equaled 60% of the total outflows in 2010. Foreign Investment Agency (FIA) under the Ministry of Planning and Investment of Vietnam revealed that the overseas investments are mainly in energy, rubber plantation and telecommunications projects<sup>39</sup>.

In terms of investment, the value of FDI inflows into Vietnam was not too different from Thailand in the past: the value of FDI inflows into Vietnam was 48,586.8 million US dollars while the value of FDI inflows into Thailand was 56,542 million US dollars in 2005. Vietnam has the comparative advantages in more abundant labor force and cheaper wage comparing with Thailand. Most of Vietnamese investors invest in Thailand's 5 sectors: real estate, hotel and service, agricultural (especially in rubber production and plantation), industrial and cold storage, and tourism sectors. Vietnamese enterprises have also invested US\$305,200 in Thailand, particularly Cuu Long Trading and Transporting Co., Ltd. and Inter Lube Trading Co., Ltd. invested US\$150,000 in a lubricant production project. Moreover, EIS Information Technology Joint Stock Company, which is a totally Vietnamese-invested project, injected US\$155,200 to

<sup>37</sup> JETRO Comparative Survey 2011, The Japan External Trade Organization. The 21th Comparative Survey of Investment-Related Costs in 31 Major Cities and Regions in Asia and Oceania. 2011.

<sup>38</sup> Department of East Asian Affairs, Ministry of Foreign Affairs, Kingdom of Thailand.

<sup>39</sup> Vietnamplus. Overseas investments soar as FDI plunges [online]. 2011. Available from : [http://en.moneyvietnam.com/index.php?option=com\\_news&op1=attbrand&sid=36385](http://en.moneyvietnam.com/index.php?option=com_news&op1=attbrand&sid=36385) [2012, March 7]

design and provide software in Thailand<sup>40</sup>. North-East Thailand is the favorable location for Vietnam's investment. Moreover, Bank for Investment and Development of Vietnam (BIDV) has been able to support the Vietnamese investors to invest in Thailand with the amount of \$200 million starting from 2011.

In terms of trade, Thailand is Vietnam's 9th biggest trading partner as of 2009. Global economic crisis caused decreasing in trading value to 5,900 million US dollars while Thailand gained a trade surplus of 3,000 million US dollars (In 2008, Thailand gained a trade surplus of 3,310.15 million US dollars from the total trading value of 6,463.98 million US dollars.). Vietnam is Thailand's 13<sup>th</sup> biggest trading partner as of 2009 and Vietnam is Thailand's 4<sup>th</sup> biggest trading partner in ASEAN. In 2010, total trade between Vietnam and Thailand reached over US\$7.5 billion, an increase of 21% compared to 2009. Major exports from Thailand to Vietnam are petroleum products, plastic resin, iron, steel, cars and auto components, chemicals, rubber products, internal combustion piston engines, paper & paper products, motorcycle, machine part, plastic products and cement. Major exports from Vietnam to Thailand are computer and equipment, crude oil, electronic machine and component, yarn and fiber, medical equipment, frozen seafood, chemicals, coffee, tea and spices.

Vietnam is a country in transition. Its economy is undergoing rapid change as it moves away from non-market socialism to a market economy with a socialist orientation. Therefore, Vietnam needs the cooperation from Thailand in knowledge exchange and experience sharing, especially in economic development, education, tourism and agricultural sectors<sup>41</sup>.

Obstacles and difficulties in the relationship between Thailand and Vietnam are the similar comparative advantages (i.e., cheap labor, rich natural resource and a sizable domestic market) and similar economic fundamentals (i.e., tourism, service, agricultural and industrial sectors), resulting in high competitiveness between two countries. Moreover, there is also high competitiveness in rice export (Thailand ranks 1<sup>st</sup> and Vietnam ranks 2<sup>nd</sup> in rice export.), rubber export (Thailand ranks 1<sup>st</sup> and Vietnam ranks 4<sup>th</sup> in rubber export.), cassava starch export, and frozen seafood export. However, the governments of these two countries put more effort into dealing with this problem by establishing many bilateral and multilateral co-operations, as follows:

- a) Council on Rice Trade Cooperation;
- b) International Tripartite Rubber Organization;
- c) Vietnam-Thailand Joint Trade Commission;
- d) Thai-Vietnamese Agricultural Cooperation;
- e) Bilateral Labor Cooperation Agreement;
- f) Joint Declaration on Vietnam-Thailand Cooperation Framework<sup>42</sup>;
- g) The East – West Economic Corridor;

<sup>40</sup> Kim Phuong. Vietnam - Thailand Boosting Investment, Trade Ties [online]. 2010. Available from : [http://vccinews.com/news\\_detail.asp?news\\_id=20958](http://vccinews.com/news_detail.asp?news_id=20958) [2012, March 20]

<sup>41</sup> Nguyen Hong Quang. The Vietnam-Siam relationship in the 17 th and 18 th century: a common picture on the two countries' relationship and Vietnamese people's way of looking at Siam. 2010.

<sup>42</sup> A comprehensive cooperation framework in the fields of politics, economics, trade, investment, culture and society, education, training, sports, tourism, defence and security, formal diplomacy and people-to-people diplomacy.

- h) The trans-Asia road project;
- i) The Greater Mekong Sub-region and the Ayeyarwady – Chao Phraya – Mekong Economic Cooperation Strategy.

Other aspects which have an impact on FDI between Thailand and Vietnam can be explained as follows:

Local electronics industry in Vietnam is reliant on outdated technology and equipment. Vietnam is still in phase 1 (import of components and assembly for domestic demand) while Thailand is in phase 3 (R&D, high technology, export oriented). Vietnam's industry capability is limited mainly in assembly, lack of support sector that would provide components, and difficulty to achieve cost-competitiveness with foreign brands<sup>43</sup>.

Vietnam and Thailand are both garment manufacturers. To increase minimum wages of Thailand by 25% in 2012 is certain to reduce garment industry competitiveness. Rising local production costs have pushed five major Thai garment manufacturers (i.e., Hong Seng Knitting Company, Hi-Tech Apparel Company, Nice Apparel Company, Liberty Garment Company, and Golden Thai Industry Company) to relocate to Vietnam.

The imported pharmaceutical products in Vietnam originate mainly from Thailand. Vietnam's pharmaceutical raw material imports are increasing at a higher speed than finished drugs.

Vietnam has been working hard to exploit its reserves of oil and gas outside the original block and Vietnam is now the third-largest hydrocarbon producer in south-east Asia<sup>44</sup>. In 2010, PetroVietnam Gas has signed a milestone \$1billion business co-operation contract with Thailand's PTT to build and operate a pipeline running from the gas fields off Vietnam's southern coast to the Mekong Delta. This project will help Vietnam reduce its dependence on energy imports.

Under the framework of the trans-Asia railway project (Singapore-Kunming Rail Link), there is a plan to connect the Vietnam railway system to a new line from Thailand by 2015 which will promote FDI between these two countries<sup>45</sup>.

Agreement on Tourism Cooperation between Thailand and Vietnam was established in 1994 with the aim to boost tourism cooperation between the two countries. In 2010, the number of Thai tourists to Vietnam reached 161,000 people, an increase of 39.5% compared to 2009. Moreover, there is the implementation of a program, "One million tourists between Vietnam and Thailand by 2015".

### **3.1.1.2 Host Country's FDI Policy & Incentives**

#### **1.) FDI Incentive Policies in Thailand**

Thailand's economy has been transformed from import substituting to export-led economy since 1972 when the Industrial Promotion Act came into force<sup>46</sup>. Thailand's investment promotion policy has focused on two major areas since 2011: encouraging foreign investors to invest more in Thailand and facilitating more Thai investments overseas. There is no

<sup>43</sup> Green Book 2011-EU Commercial Counsellor Report on Vietnam. 2011.

<sup>44</sup> Tim Johnston. PetroVietnam secures \$1bn pipeline [online]. 2010. Available from : <http://www.ft.com/cms/s/0/9a7b53d8-2e40-11df-85c0-00144feabdc0.html#axzz1oPj4XTzh> [2012, March 7]

<sup>45</sup> European Union. Green Book 2011 - EU Commercial Counsellor Report on Vietnam. 2011.

<sup>46</sup> Pawin Talemsri, Pimchanok Vonkhorporn. Trade policy in Thailand: pursuing a dual track approach. 2005.

foreign equity restriction in the manufacturing sector, local content requirement, and export requirement, because Thailand's investment regime is in total compliance with WTO regulations<sup>47</sup>. Institutions that provide FDI support in Thailand include: the Board of Investment (BOI), EXIM Bank of Thailand, the Federation of Thai Industries, the Thailand Board of Trade, the Ministry of Finance, and the Ministry of Foreign Affairs<sup>48</sup>. Since 2011, Thailand has continued to promote investment in various sectors (i.e., alternative energy, automotive manufacturing, green production, creative-related industries, and research and development). Owing to weakening confidence of foreign investors in Thailand after the flood in 2011, the government's flood management plan would help to restore confidence among those foreign investors.

FDI incentive policies in Thailand are as follows:

### **1.1) Criteria Set by the Board of Investment of Thailand (BOI)**

The Board of Investment of Thailand (BOI) sets criteria for granting tax and duty privileges as investment zones<sup>49</sup>, as follows:

#### **Corporate Income Tax**

##### **Zone 1**

Zone 1 consists of 6 central provinces with high income and good infrastructure: Bangkok, Nakhon Pathom, Nonthaburi, Pathum Thani, Samut Prakan, and Samut Sakhon.

BOI offers 3 years exemption for projects located within industrial estates or promoted industrial zones, provided that such projects with capital investment of 10 million baht or more (excluding cost of land and working capital) obtain ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year.

##### **Zone 2**

Zone 2 consists of 12 provinces: Ang Thong, Ayutthaya, Chachoengsao, Chon Buri, Kanchanaburi, Nakhon Nayok, Ratchaburi, Samut Songkhram, Saraburi, Suphan Buri, Phuket, and Rayong.

BOI offers 3 years exemption, increased to 5 years for projects located within industrial estates or promoted industrial zones, provided that such projects with capital investment of 10 million baht or more (excluding cost of land and working capital) obtain ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year.

##### **Zone 3**

Zone 3 consists of the remaining 58 provinces which are designated as Investment Promotion Zones as follows: Chai Nat, Chaiyaphum, Chanthaburi, Chiang Mai, Chiang Rai, Chumphon, Kamphaeng Phet, Khon Kaen, Krabi, Lamphang, Lamphun, Loei, Lop Buri, Mae Hong Son, Mukdahan, Nakhon Ratchasima, Nakhon Sawan, Nakhon Si Thammarat, Nong Khai, Phangnga, Phattalung, Phetchabun, Phetchaburi, Phitsanulok, Pichit, Prachin Buri, Prachuab

<sup>47</sup> The Board of Investment of Thailand. Why Thailand : An Investor's Paradise [online]. 2010. Available from : <http://www.boi.go.th> [2012, March 9]

<sup>48</sup> Kee Hwee Wee. Outward foreign direct investment by enterprises from Thailand. 2007.

<sup>49</sup> ASEAN Secretariat. ASEAN Investment Guidebook 2009. 2010.

Khiri Khan, Ranong, Sa Kaew, Sing Buri, Songkhla, Sukhothai, Surat Thani, Tak, Trang, Trat, Udon Thani, Ubon Ratchathani, Uthai Thani, Uttaradit, Amnat Charoen, Buri Ram, Kalasin, Maha Sarakham, Nakhon Phanom, Nan, Narathiwat, Nong Bualamphu, Pattani, Phayao, Phrae, Roi Et, Sakhon Nakhon, Sathun, Si Sa Ket, Surin, Yasothon, and Yala.

BOI offers 8 years exemption, provided that such projects with capital investment of 10 million baht or more (excluding cost of land and working capital) obtain ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year.

#### **Exemption From or Reduction of Taxes on Imported Capital Goods**

##### **Zone 1**

BOI offers 50% reduction of import duty on machinery that is subject to import duty of not less than 10%.

##### **Zone 2**

BOI offers 50% reduction of import duty on machinery that is subject to import duty of not less than 10%.

##### **Zone 3**

BOI offers 100% exemption.

#### **Exemption From or Reduction of Taxes on Imported Raw Materials**

##### **Zone 1**

BOI offers 1 year exemption of import duty on raw or essential materials used in the manufacturing of export products.

##### **Zone 2**

BOI offers 1 year exemption of import duty on raw or essential materials used in the manufacturing of export products.

##### **Zone 3**

BOI offers 5 years exemption of import duty on raw or essential materials used in the manufacturing of export products.

#### **1.2) Participating in Economic Cooperations**

Thailand is a member of a number multilateral and regional organizations, whose goal is to promote trade, increase competitiveness, gain institutional support and reduce tariff barriers among the member countries, including the World Trade Organization (WTO), the Association of South East Asian Nations (ASEAN), and the Asia-Pacific Economic Cooperation (APEC). As a member of ASEAN, Thailand is implementing trade and investment liberalization measures (towards other ASEAN members) under the ASEAN Free Trade Area (AFTA) initiative<sup>50</sup>.

Thailand has signed a number of bilateral and multilateral FTAs in order to respond to the higher competition, including the ASEAN Free Trade Area (AFTA), Japan-Thailand Economic Partnership Agreement (JTEPA), Thai-Peru Free Trade Agreement, Thailand-Australia Free Trade Agreement (TAFTA), Thailand-India Free Trade Agreement, European Free Trade Association (EFTA), and the Greater Mekong Sub-region and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). On January 1st, 2010, the ASEAN 6 (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand) reduced

<sup>50</sup> Aishwarya Gupta - Sun. ASEAN is now Thailand's top trade partner. 2010.



tariff barriers to zero in a total of 98.6% of all merchandise exports traded under the Common Effective Preferential Tariff Scheme for the ASEAN Free Trade Area (CEPT-AFTA)<sup>51</sup>.

Owing to being a successful middle-income country, Thailand has been following a policy of “Prosper Thy Neighbour” realizing that its neighbours must not be left behind and regional cooperation is crucial to support their development efforts. Therefore, Thailand is playing a major role in assisting its neighbours to achieve sustainable growth. Thailand has helped to establish bilateral and sub-regional cooperation frameworks and trade agreements as follows<sup>52</sup>:

#### 1.2.1.) Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS)

This cooperation includes Thailand’s immediate neighbours (i.e., Cambodia, Lao PDR, Myanmar, and Vietnam), aims to reduce economic disparities and to bring faster and sustainable development on the principles of partnership and self-help. Thailand shares the development experience with these neighbouring countries.

#### 1.2.2.) The Mekong-Ganga Cooperation (MGC)

This cooperation was established in 2000. It is a scheme of cooperation among six neighbouring countries, namely Cambodia, India, Lao PDR, Myanmar, Thailand, and Vietnam. The cooperation focuses on 4 areas of cooperation, i.e., tourism, culture, education, and transport and communication. The leading area of cooperation at present is transport linkages (India-Myanmar-Thailand Trilateral Highway Project).

#### 1.2.3.) The Greater Mekong Sub-region (GMS)

This cooperation was established in 1992 with the assistance of the Asian Development Bank. It consists of Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam, and Yunan (the province of the People’s Republic of China). It emphasizes on economic development, higher connectivity, increased competitiveness, and a closer community. The GMS Programme has identified 9 sectors of cooperation, i.e., transport, energy, telecommunications, the environment, human resource development, tourism, trade, investment and agriculture.

#### 1.2.4.) Indonesia-Malaysia- Thailand Growth Triangle (IMT-GT)

This cooperation was established in 1993. It promotes investment, technology transfer, production cooperation, and the use of natural resources (in southern Thailand, northern Malaysia and most of Sumatra Island). It also seeks to promote development of infrastructure and transportation linkages in the triangular area. The leading area of cooperation is the Seamless Songkhla-Penang-Medan Economic Corridor.

#### 1.2.5.) The East-West Economic Corridor

It has launched the project “The Mae Sot-Myawaddy-Kawkaeik Road (58 kilometres)” which will be one of the last missing links of EWEC connecting the port of Mawlamyine, Myanmar and the port of Danang in Viet Nam, via Thailand and Lao PDR. Thailand is providing a grant to Myanmar for the construction of the first 18 kilometres of the road and is considering assistance for a further 40-kilometer section.

#### 1.2.6.) The ASEAN Integrated System of Preference (AISP)

<sup>51</sup> Sittichai Anantarangsi. Thailand and the Inflow of FDI under the ASEAN Economic Community (AEC). 2011.

<sup>52</sup> Ministry of Foreign Affairs of Thailand & United Nations Country Team in Thailand. Global Partnership for Development. Thailand’s Contribution to Millennium Development Goal 8, Bangkok, Thailand. 2005.

It provides trade preference to new ASEAN members which are Cambodia, Lao PDR, Myanmar and Viet Nam. In 2004, Thailand provided AISP preferences with tariff rates of 0%-5% on multiple exports from Cambodia, Lao PDR, Myanmar, and Viet Nam, including some products that are not on the AFTA Inclusion List lists of these CLMV countries.

### **3.1.1.3 Comparative Basic Indicators**

Thailand is an attractive market because of its location and resource abundance (e.g., cheap labour and materials). Various factors have reduced the attractiveness of Thailand, for example, the political instability following the military coup of 2006 and the violent crackdown on pro-democracy demonstrators in 2010; unskilled labour and labour with poor language skills; and the catastrophic flood in 2011. It has been reported that Thailand's flood crisis management has seriously eroded investor confidence.<sup>53</sup>

Under the CEPT-AFTA schedule for tariff reduction starting since the first day of 2010, Indonesia, Malaysia, Singapore and Thailand have imported and exported almost goods across their borders at no tariff, but the tariff of Vietnam will be reduced to zero by 2015<sup>54</sup>.

The patterns of trade between Thailand and the neighbouring countries are diverse<sup>55</sup> as follows:

The survey by Vietnam Development Forum 2010<sup>56</sup> found that the post second oil shock recession of the early 1980s, the Asian Financial Crisis of 1997-98, the semi-conductor recession of the early 2000s, and the Global Financial Crisis of 2008-09 negatively affected the macroeconomic performance of Malaysia and Thailand. But after that, new policy directions were often set and existing policies were further strengthened. Nowadays, Malaysia is seriously worried about having been trapped in middle income, which is a chronic crisis. Vietnamese leaders have also begun to take note of the possibility of the middle income trap in the future. Thailand and Malaysia have the common feature of supporting automotive and electrical and electronics (E&E) industries. Policy capability is highly developed in both Malaysia and Thailand, which includes supporting laws; master plans and action plans; university education; technical training; management consultation; incentives; tax and tariff structure; finance; matching and linkage; business associations; public private partnership; international and regional cooperation; and constant organizational reform for effective policy design and implementation. Vietnam also has the similar action plan matrix proposed by Japanese businesses, experts and officials. Malaysia uses explicit and well structured procedures, while policy making of Thailand is less formal and more flexible. Thailand fully embraces markets and globalization, tries to build an open and liberal business environment, welcomes foreign MNCs to form the industrial base, and does not have a strong desire to create national brands like Malaysia does. Lastly, this survey also found that Malaysia is betting on leapfrogging while

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<sup>53</sup> Enjoji (2011).

<sup>54</sup> ASEAN Secretariat. The 13th Meeting of the AFTA Council [online]. 1999. Available from : <http://www.aseansec.org/2136.htm> [2012, March 12]

<sup>55</sup> Thanakorn Keeta. The Benefits from the Government's Policy Support and the Impact from the Opening Thai-Laos Friendship Bridges to Thai Local Traders. 2006.

<sup>56</sup> Vietnam Development Forum, Hanoi. Survey on Comparison of Backgrounds, Policy Measures and Outcomes for Development of Supporting Industries in Asean (Malaysia and Thailand in Comparison with Vietnam) 2010.

Thailand is staying on the old incremental path. Moreover, local purchasing power in Malaysia is 144.53% higher than in Thailand.

Runckel & Associates 2010<sup>57</sup> found that Thailand and Vietnam can be very cost competitive locations to manufacture or locate a business. Thailand looks like a very good choice for foreign investors when foreign investors focus on factors such as pro-business policies, rule of law, right to own land, mandated additional personnel benefits, tax incentives and quality of life for company executives sent to manage operation. Vietnam is thought of as a low-cost option for some operations and it continues to be a top choice because of the work ethic of its people, the relatively low labor and other costs, highly attractive government incentives, an improving legal, and business environment. However, foreign investors have recently concerned by the high rate of inflation in Vietnam. As Vietnam is one of the CLMV countries, Sittichai Anantarangsi (2011)<sup>58</sup> found that Thai Baht is well-established as an acceptable currency in the CLMV countries and it facilitates international exchanges. He also stated that Thailand would be better advised to position itself as a trade centre and gateway for distributing products in the region and acquiring materials from CLMV countries for subsequent assembly, value-adding activities and re-exporting. CLMV countries are full of natural resources, but the people in CLMV countries tend to suffer from lack of knowledge and technical capacity, as well as connections to local and international markets.

Nana Yuliana (2009)<sup>59</sup> found that Indonesia and Thailand share similar views on the need to develop ethanol and biodiesel as alternative energy sources. Nowadays, Indonesia is the biggest palm oil exporter in the world. Indonesia and Thailand have abundant fishery and marine resources, moreover, they also have the common concern over the problem of illegal fishing resulting in negotiating a new MoU on Fishery Cooperation. Indonesia and Thailand share common view about promoting the agricultural sector can be able to alleviate poverty and prevent food insecurity, therefore, Indonesia and Thailand have developed agricultural and agro-industry sectors. Indonesia has reached self-sufficiency in rice in 2008 and Thailand is the biggest world exporter of rice. Moreover, both Indonesia and Thailand need to increase more cooperation in maintaining food security and preventing the recurrence of food crises in the region.

Although Singapore is only a small island with less population and less natural resources comparing with Thailand, nevertheless, Singapore is capable of attracting large amounts of inward FDI by developing a skilled labour force, sustaining high-quality production and high-technology goods and services<sup>60</sup>.

### **3.1.2 Malaysia**

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<sup>57</sup>Runckel & Associates. Investment Cost Comparison for Vietnam, China, Thailand, Cambodia, Philippines, Malaysia and Laos, Business-in-Asia [online]. 2010. Available from : [http://www.business-in-asia.com/investment\\_comparison.html](http://www.business-in-asia.com/investment_comparison.html) [2012, March 9]

<sup>58</sup>Sittichai Anantarangsi. Thailand and the Inflow of FDI under the ASEAN Economic Community (AEC). 2011.

<sup>59</sup>Nana Yuliana. Head of Economic Affairs, The Embassy of the Republic of Indonesia in Bangkok. Overview of Indonesia-Thailand Economic Relations. 2009.

<sup>60</sup>Runckel & Associates. Investment Cost Comparison for Vietnam, China, Thailand, Cambodia, Philippines, Malaysia and Laos, Business-in-Asia [online]. 2010. Available from : [http://www.business-in-asia.com/investment\\_comparison.html](http://www.business-in-asia.com/investment_comparison.html) [2012, March 9]

### **Economic overview of Malaysia**

Since independence from British colonial rule in 1957, Malaysia has been transformed from a commodity-based economy, focusing on rubber and tin, to one of the world's largest producers of electronic and electrical products. Malaysia is measured by trade due to its goods and services exports amounting to around 100% of GDP. Manufactured goods, electronic and electrical products take a large portion of Malaysia's exports. Malaysia is the world's leading exporter of palm oil and also one of the region's major oil and gas exporters.

Malaysia is a middle-income, export-oriented economy. Its per capita GDP (in current prices) was at around USD7,000 as of 2009 and gross primary school enrolment accounts for 100% of the school age population. Malaysia is the third largest economy in ASEAN behind Indonesia and Thailand. It has grown steadily since recovering from the Asian financial crisis in 1997 with a large trade surplus. After that, its GDP declined in the global economic crisis in 2009 by 1.7%. Malaysian government reported economic growth of 7.2% in 2010.

Malaysia's annual inflation grew rapidly in 2008 due to rising global food and fuel prices, from 2% in 2007 to 5.4% in 2008, but fell to 0.6% in 2009 owing to the impact of the global economic crisis. Its inflation was 2.2% in 2010.

Malaysia has run a fiscal deficit since 1998. After a \$25 billion stimulus package in response to the global economic crisis, Malaysia's budget deficit increased to 7.4% of GDP in 2009 and 5.4% of GDP in 2011<sup>61</sup>.

### **FDI in Malaysia**

FDI has played a crucial role in Malaysia's development. Since 1980, Malaysia has maintained an open policy towards trade and investment. The Malaysian financial sector did not shoulder such large non-performance loans in the economic crisis in 1997, which led to the expansion of mergers and acquisitions that drew in FDI flows. The Malaysia's controversial capital control was implemented in 1998, with the objective of stemming the flow of short-term volatile portfolio investments. The Malaysian government has tried to channel investment into export-oriented manufacturing and capital-intensive and high technology industries<sup>62</sup>. FDI stock in Malaysia rose from USD 42.91 billion in 2001 to USD 103.89 billion in 2010, or a substantial growth of 142.1%. Equity capital & reinvested earnings component formed the largest portion (94%). The manufacturing sector maintained its position as leading FDI stock recipient (46.8%), followed by financial & insurance sector (23.1%) and wholesale & retail trade sector (8.2%). The top three sources of FDI in Malaysia were from Singapore, Japan and USA. During 2001-2010, Malaysia's stock of portfolio investment assets grew from USD 2.06 billion to USD 36.8 billion.

#### **3.1.2.1 FDI from Selected ASEAN Countries in Malaysia**

##### **1.) FDI from Indonesia**

Indonesia was the third largest source of Intra-ASEAN FDI or at 13.2%. Two-way intra-industry FDI has developed well in the food industry where local suppliers have developed like

<sup>61</sup> Department of Foreign Affairs and Trade. [Malaysia country brief](http://www.dfat.gov.au/geo/malaysia/malaysia_brief.html) [online]. 2011. Available from : [http://www.dfat.gov.au/geo/malaysia/malaysia\\_brief.html](http://www.dfat.gov.au/geo/malaysia/malaysia_brief.html) [2012, March 9]

<sup>62</sup> Department of Foreign Affairs and Trade. [Malaysia country brief](http://www.dfat.gov.au/geo/malaysia/malaysia_brief.html) [online]. 2011. Available from : [http://www.dfat.gov.au/geo/malaysia/malaysia\\_brief.html](http://www.dfat.gov.au/geo/malaysia/malaysia_brief.html) [2012, March 9]

Indonesia and Malaysia. Between 2007 and 2009, Indonesia's investments in Malaysia amounted to only US\$241 million, while Malaysia's investments in Indonesia totalled US\$3.6 billion. Malaysian Investment Development Authority (MIDA) revealed projects involving Indonesian investments in Malaysia in the manufacturing sector totalled US\$0.64 million (two projects in 2009) and US\$4.1 million (nine projects in 2010). Indonesian investors invest in Malaysia primarily in chemistry, plastic, transportation, hotels and restaurants<sup>63</sup>. In 2011, there were some foreign firms (i.e., The Canadian producer of the BlackBerry smartphone) shifting investment from Indonesia to Malaysia owing to a tax dispute with the nation<sup>64</sup>. Most of the Indonesian workers work in informal sectors in Malaysia and maritime border issue. A more comprehensive and clear memorandum of understanding (MOU) with regard to employer-employee protection is in the process of preparation owing to the negotiations on sending Indonesian maids to Malaysia.

Indonesia ranked seventh in Malaysia's top 10 trading partners, with the total value of USD 15.64 billion, or 4.1% share of Malaysia's total trade in 2010<sup>65</sup>. Indonesia ranked sixth in Malaysia's top import origins, with the total value of USD 9.68 billion, or 5.6% share of Malaysia's total import in 2010<sup>66</sup>. Bilateral trade between Indonesia -Malaysia tends to grow significantly. Since 2006 until 2010, the total bilateral trade between Indonesia and Malaysia has grown on average about 20% per annum and the total bilateral trade volume per December 2010 is US\$ 18 billion<sup>67</sup>. Moreover, Indonesia and Malaysia are the top producers in the automotive industry in ASEAN. Indonesia remains the largest producer of palm oil while Malaysia is the largest exporter of palm oil<sup>68</sup>.

## **2.) FDI from Singapore**

Singapore was ranked the second in Malaysia's top export destinations, Malaysia's top import sources, and Malaysia's top trading partners. Malaysia's exports to ASEAN amounted to USD 52.12 billion (24.7 %) in the period January – November 2011 which increased by 6.6% over the previous year. The rise of 6.6% (USD 3.22 billion) was mainly attributed to higher exports to the Republic of Singapore (USD 0.99 billion) and the other countries which are Indonesia and Thailand<sup>69</sup>.

Saw Swee Hock (2005) found that during 1980-2008, outward FDI of Singapore was at 103.9% of GDP or USD 189.094 billion. More active flows of foreign investment between Malaysia and Singapore are caused by the rising profile of businesses on both sides of the Causeway and the growing role of the private sectors as well as the increasing intensity of people-to-people exchanges. Trade volumes from Malaysia-Singapore relations would show the

<sup>63</sup> Ahmad Fuad Yahya. Indonesian Chinese Business Leaders Coming To Malaysia To Explore Investment Prospect [online]. 2012. Available from : <http://greaterkl.bernama.com/news.php?id=562272> [2012, March 12]

<sup>64</sup> Randall Mah. RIM shifts investment from Indonesia to Malaysia [online]. 2011. Available from : <http://emergingmoney.com/technology/rim-shifts-investment-from-indonesia-to-malaysia> [2012, March 12]

<sup>65</sup> Malaysia External Trade Development Corporation, Malaysia. Top 10 Trading Partners. 2010.

<sup>66</sup> Malaysia External Trade Development Corporation, Malaysia. Top 10 Trading Partners. 2010.

<sup>67</sup> Farouk Abdullah Alwyni. Indonesia-Malaysia: Cross-border Linkages Through Islamic Finance. Joint High Level Conference in Islamic Finance Organized by Bank Indonesia & Bank Negara Malaysia, Jakarta, Indonesia. 2011.

<sup>68</sup> Malaysian Investment Development Authority (MIDA), Malaysia. Malaysia: Performance of the Manufacturing and Services Sectors 2009. 2009.

<sup>69</sup> Department of Statistics, Malaysia. Malaysia External Trade Statistics November 2011. 2011.

up-trend in cross border investments. At the same time, it would be reasonable to expect more Singapore investments into Malaysia owing to a slowdown in the pace of increased interest rate, ringgit appreciation and flush liquidity conditions. Sabah, as the largest palm oil producing state in Malaysia, has been setting up a Palm Oil Industrial Cluster (POIC). This could be a potential sector providing new investment opportunities for Singapore.

However, there is difference in both income as well as structure between Malaysia and Singapore. Service sector accounts for 65% in Singapore's GDP comparing to 42% in Malaysia. Conversely, the industry share in GDP was higher in Malaysia (49%) than in Singapore (35 %). These are the reasons why significant trade and investment opportunities exist due to the different comparative advantages of these two economies<sup>70</sup>.

### **3.) FDI from Thailand**

Thailand's industries investing in Malaysia which play most important role are agricultural processing (especially in Halal products), Thai restaurant and tourism business. There are many market opportunities for Halal products from Thailand because Malaysia is a multiracial country with Islam being the largest practiced religion, comprising approximately 61.4% Muslim adherents, or around 17 million people, as of 2010. Malaysia shares a border with Thailand, so a large number of Malaysian tourists have visited Thailand in recent decades, or around 10% of all tourists travelling in Thailand. Moreover, Malaysia could benefit from Thailand's expertise, especially in the Halal industry and other sectors including agriculture, automotive, tourism and biofuel<sup>71</sup>. Malaysian Industrial Development Authority (MIDA) approved 6 Thailand's investment projects in Malaysia with the total value of USD 47.80 million in 2008 and also approved one more Thailand's investment project with the total value of USD 0.19 million in 2009<sup>72</sup>.

Total trade between Thailand and Malaysia decreased by 1.52% in 2007, increased by 13.8% in 2008, and decreased by 14.2 % in 2009. Major exports from Thailand to Malaysia are computer and equipment, rubber, car and auto part, petroleum product, and rubber product. Exports from Thailand to Malaysia increased by 7% in 2007, increased by 20.7% in 2008, decreased by 19.8% in 2009, and increased by 63.3% in 2010. On the other hand, major exports from Malaysia to Thailand are computer and equipment, crude oil, electrical machine and part, chemicals, and boat and floating house. Exports from Malaysia to Thailand decreased by 7.8% in 2007, increased by 7.7% in 2008, decreased by 8.6% in 2009, and increased by 46.5% in 2010.

#### **3.1.2.2 Host Country's FDI Policy & Incentives**

Investment incentives, national economic strategy and participating in economic cooperation help improve the FDI climate in Malaysia.

##### **1.) Investment incentives in Malaysia<sup>73</sup>**

<sup>70</sup> Saw Swee Hock. Roundtable on Singapore-Malaysia Relations: Mending Fences & Making Good Neighbours. 2005.

<sup>71</sup> Boris Sullivan. Thailand expected to invest more in Malaysia. Thailand-Business-News (31 March 2010).

<sup>72</sup> Department of East Asian Affairs, Ministry of Foreign Affairs, Thailand.

<sup>73</sup> Malaysian Investment Development Authority Malaysian Investment Development Authority , Malaysia. Invest in Malaysia. 2012.

1.1) Incentives for the manufacturing sector

1.1.1) Main incentives for manufacturing companies which include pioneer status and investment tax allowance.

1.1.2) Incentives for relocating manufacturing activities to promoted areas

1.1.3) Incentives for high technology companies

1.1.4) Incentives for strategic projects

1.1.5) Incentives for small and medium companies

1.1.6) Incentives to strengthen industrial linkages

1.1.7) Incentives for the machinery and equipment industry which include incentives for the production of specialized machinery and equipment; additional incentives for the production of heavy machinery; and additional incentives for the production of machinery and equipment.

1.1.8) Incentives for automotive component modules which include incentives for the manufacture of critical and high value-added parts and components for the automotive industry.

1.1.9) Enhanced incentives for the utilization of oil palm biomass which include new companies and existing companies that reinvest.

1.1.10) Additional incentives for the manufacturing sector which include reinvestment allowance; accelerated capital allowance; accelerated capital allowance on equipment to maintain quality of power supply; accelerated capital allowance on security control equipment; incentive for industrialized building system; tax exemption on the value of increased exports; and group relief.

1.2) Incentives for the agricultural sector

1.2.1) Main incentives for the agricultural sector which include pioneer status; investment tax allowance; incentives for food production; and incentive for reinvestment in food processing activities.

1.2.2) Additional incentives for the agricultural sector which include reinvestment allowance; incentive for reinvestment in resource-based industries; incentives for modernizing chicken and duck rearing; accelerated capital allowance; agricultural allowance; accelerated agriculture allowance for the planting of rubberwood trees; 100% allowance on capital expenditure for approved agricultural projects; tax exemption on the value of increased exports; incentives for companies providing cold chain facilities and services for food products; double deduction for expenses to obtain "halal" certification and quality systems and standards certification; and double deduction on freight charges for export of rattan and wood-based products.

1.3) Incentives for the aerospace industry

1.4) Incentives for the biotechnology industry

1.4.1) Main incentives for the biotechnology industry

1.4.2) Incentives for investment in a Bionexus status company which include investment by a company or individual in a BioNexus status company, and tax incentives for mergers and acquisitions with a biotechnology company.

1.4.3) Biotechnology funding for Bionexus status companies

1.5) Incentives for the tourism industry

1.5.1) Incentives for the hotel and tourism industry which include pioneer status; investment tax allowance; enhanced incentives for undertaking new investments; incentives for reinvestment in hotels and tourism projects; incentive for healthcare travel; additional incentives for healthcare travel; and incentives for the luxury yacht industry.

1.5.2) Additional incentives for the tourism industry which include double deduction on overseas promotion; double deduction on approved trade fairs; tax exemption for tour operators; tax exemption for promoting international conference and trade exhibitions; deduction on cultural performance; incentive for car rental operators; and tax exemption on the value increased exports.

1.6) Incentives for environmental management

1.6.1) Incentives for forest plantation project

1.6.2) Incentives for the storage, treatment and disposal of toxic and hazardous wastes

1.6.3) Incentives for waste recycling activities

1.6.4) Incentives for energy conservation which include companies providing energy conservation services and companies undertaking conservation of energy for own consumption.

1.6.5) Incentives for energy generation activities using renewable energy resources

1.6.6) Accelerated capital allowance for environmental management

1.6.7) Tax incentives for buildings obtaining green building index certificate

1.6.8) Accelerated capital allowance for environmental management

1.7) Incentives for research and development

1.7.1) Main incentives for research and development which include contract R&D company; R&D company; in-house research; second round incentives; and incentives for commercialization of public sector R&D.

1.7.2) Additional incentives for research and development which include double deduction for research and development, and incentives for researchers to commercialize research findings.

1.8) Incentives for the medical devices industry

1.8.1) Incentives for medical devices testing laboratories which include companies investing in new testing laboratories for medical device, and companies upgrading existing testing laboratories for testing medical devices.

1.9) Incentives for training

1.9.1) Main incentives for training

1.9.2) Additional incentives for training which include deduction for cost of recruitment of workers; deduction for pre-employment training; deduction for cash contribution; special industrial building allowance; tax exemption on educational equipment; tax exemption on royalty payments; double deduction for approved training; and human resource development fund.

1.10) Incentives for approved service projects



1.10.1) Main incentives for ASPs which include exemption under section 127 of the Income Tax 1967, and Investment Allowance (1A) under schedule 7B of the Income Tax Act 1967.

1.10.2) Additional incentives for ASPs

1.11) Incentives for the Shipping and the Transportation Industry

1.11.1) Tax exemption for shipping operation

1.11.2) Exemption from import duty and sales tax on prime movers and trailers

1.12) Incentives for MSC Malaysia

1.12.1) Main incentives for MSC Malaysia status company

1.13) Incentives for information and communication technology (ICT)

1.13.1) Incentives for the use of ICT

1.14) Incentives for a knowledge-based economy

1.15) Incentives for manufacturing related services

1.16) Incentives for operational headquarters

1.16.1) Approvals for OHQ status, incentives and other facilities

1.16.2) Equity requirements

1.16.3) Incentives

1.16.4) Foreign Exchange Administration (FEA) flexibilities accorded to resident companies with approved Operational Headquarters Status (OHQ)

1.16.5) Others FEA flexibilities

1.16.6) Other facilities

1.16.7) Expatriate employment

1.17) Incentives for international procurement centres/regional distribution centres

1.17.1) Approvals for IPC/RDC status

1.17.2) Equity requirements

1.17.3) Incentives

1.17.4) Foreign Exchange Administration (FEA) flexibilities accorded to resident companies with International Procurement Centre (IPC) and Regional Distribution Centres (RDC) Status

1.17.5) Others FEA flexibilities

1.17.6) Other facilities

1.17.7) Expatriate employment

1.18) Representative offices and regional offices

1.18.1) Activities allowed

1.18.2) Activities not allowed

1.18.3) Equity requirements

1.18.4) Incentives

1.18.5) Expatriate employment

1.19) Other incentives

- 1.19.1) Industrial building allowance
- 1.19.2) Industrial building allowance for buildings in MSC Malaysia
- 1.19.3) Infrastructure allowance
- 1.19.4) Deduction of audit fees
- 1.19.5) Tax incentives for venture capital industry
- 1.19.6) Tax incentive on costs of dismantling and removing assets
- 1.19.7) Incentive for acquiring proprietary rights
- 1.19.8) Tax incentives for small scale and medium enterprises to register patents and trademarks
- 1.19.9) Tariff related incentives which include exemption from import duty on raw materials/components; exemption from import duty on imported medical devices for purpose of kitting; exemption from import duty and sales tax on machinery and equipment; exemption from import duty and sales tax on spares and consumables; exemption from import duty and sales tax for outsourcing manufacturing activities; exemption from import duty and sales tax for Maintenance, Repair and Overhaul (MRO) activities; exemption from import duty and sales tax on solar Photovoltaic system equipment; exemption from import duty and sales tax on energy efficiency equipment; exemption from import duty and excise duty on hybrid cars, sales tax exemption; and drawback on import duty, sales tax and excise duty.
- 1.19.10) Incentives for export which include single deduction for the promotion of exports; double deduction for the promotion of exports; double deduction on export credit insurance premiums; double deduction on freight charges; double deduction for the promotion of Malaysian brand names; special industrial building allowance for warehouses; and incentive for the implementation of RosettaNet.
- 1.19.11) Incentive for the use of environmental protection equipment
- 1.19.12) Donations for environmental protection
- 1.19.13) Incentives for employees' accommodation
- 1.19.14) Incentives for employees' child care facilities

## 2.) National economic strategy

Malaysia plan to achieve developed economy status by the year 2020 under the Vision 2020 which was launched in 1991. The Vision 2020 was built on previous policies including the National Vision Policy (introduced in 2001), the National Development Policy (introduced in 1991) and the New Economic Policy (introduced in 1970). Its targets include increasing real GDP eightfold between 1990 and 2020, and increasing per capita income. Investment will be emphasized on R&D and high technology in order to develop the knowledge-based economy and knowledge-based society. Moreover, Malaysia Government Transformation Programme (GTP) has launched a more solid action plan on how to achieve Vision 2020 in time.

The Tenth Malaysia Plan (2011-2015) is the Malaysian Government's economic blueprint to become a high-income nation, inclusiveness and sustainability<sup>74</sup>.

## 3.) Economic cooperation participating

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<sup>74</sup> Department of Foreign Affairs and Trade. Malaysia country brief [online]. 2011. Available from : [http://www.dfat.gov.au/geo/malaysia/malaysia\\_brief.html](http://www.dfat.gov.au/geo/malaysia/malaysia_brief.html) [2012, March 9]

Malaysia participates in global economic cooperation which is World Trade Organization, and regional economic cooperations such as the ASEAN Free Trade Area (AFTA) emphasizing on Preferential Trading Arrangements (PTA) and Common Effective Preferential Tariff Scheme (CEPT); Indonesian-Malaysian-Thailand Growth Triangle (IMT-GT) emphasizing on accelerating private sector-led economic growth in the IMT-GT region; and the Asia-Pacific Economic Cooperation (APEC) emphasizing on free and open trade, and investment. Malaysia is also a member of the Cairns Group which advocates more liberalized global trade in agriculture. Malaysia and Australia are negotiating the Trans-Pacific Partnership, along with the United States, New Zealand, Singapore, Brunei, Peru, Vietnam and Chile. Therefore, Malaysia benefits from these economic cooperations by becoming more aware of the opportunities for trade and investment.

### 3.1.2.3 Comparative Basic Indicators

Malaysia is one of the fastest growing countries in ASEAN and presents a huge market in and out of itself. Malaysia is also a gateway into the ASEAN market<sup>75</sup>. Export-oriented manufacturing, good infrastructure and the presence of relatively high-skilled workers have made Malaysia an attractive destination for efficiency-seeking FDI. Manufacturing sector has been the key destination sector in Malaysia, with the recipient of 50% of FDI inflows in Malaysia. The main industries for foreign investor are base metal products, electronics and electrical products, petroleum, chemicals and food processing. In terms of the financial intermediation sector, especially banking and insurance, has received around 16 % of FDI and the Mining (oil and gas) sector received around 15%<sup>76</sup>. Moreover, a high level of political stability in Malaysia creates a favorable investment climate leading to higher investment in Malaysia.

Malaysia and some ASEAN countries have the same comparative advantages resulting in two-way intra-industry FDI, for example, Malaysia has two-way intra-industry FDI in the food industry with Thailand and Indonesia; and Malaysia has two-way intra-industry FDI in the automobile industry with Thailand.

World Bank released the Doing Business ranking in 2011 as follows:

In the ease of doing business as of 2011<sup>77</sup>, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 18<sup>th</sup>, and Indonesia was ranked 129<sup>th</sup>.

In the ease of starting a business as of 2011, Singapore was ranked 4<sup>th</sup>, Malaysia was ranked 50<sup>th</sup>, Thailand was ranked 78<sup>th</sup>, and Indonesia was ranked 155<sup>th</sup>.

In the ease of getting electricity as of 2011, Singapore was ranked 5<sup>th</sup>, Thailand was ranked 9<sup>th</sup>, Malaysia was ranked 59<sup>th</sup>, and Indonesia was ranked 161<sup>th</sup>.

In the ease of registering property as of 2011, Singapore was ranked 14<sup>th</sup>, Thailand was ranked 28<sup>th</sup>, Malaysia was ranked 59<sup>th</sup>, and Indonesia was ranked 99<sup>th</sup>.

<sup>75</sup> Runckel & Associates. Investment Cost Comparison for Vietnam, China, Thailand, Cambodia, Philippines, Malaysia and Laos, Business-in-Asia [online]. 2010. Available from : [http://www.business-in-asia.com/investment\\_comparison.html](http://www.business-in-asia.com/investment_comparison.html) [2012, March 9]

<sup>76</sup> Summit Level Group of Developing Countries Group of Fifteen, The Group of Fifteen. A Survey of Foreign Direct Investment in G-15 Countries. Working Paper Series, Volume 7. 2010.

<sup>77</sup> World Bank (2011).

In the aspect of protecting investors as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 4<sup>th</sup>, Thailand was ranked 13<sup>th</sup>, and Indonesia was ranked 46<sup>th</sup>.

In the aspect of resolving insolvency as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 47<sup>th</sup>, Thailand was ranked 51<sup>th</sup>, and Indonesia was ranked 146<sup>th</sup>.

In the ease of trading across borders as of 2011, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 29<sup>th</sup>, and Indonesia was ranked 39<sup>th</sup>.

In terms of Malaysia-Singapore relations, the more active flows of foreign investment between these two countries are caused by the growing role of the private sectors; the increasing intensity of people-to-people exchanges; and the rising profile of businesses on both sides of the Causeway. There was both income as well as structural difference between Malaysia and Singapore economies. Service sector share in GDP is higher in Singapore (65%) than Malaysia (42%). On the other hand, the industry share in GDP was higher in Malaysia (4%) than Singapore (35%). As a result, significant trade and investment opportunities exist due to the different comparative advantages and wage levels of Malaysia and Singapore. This could be seen in the levels of cross border investment as well as in the large flow of human capital from Malaysia to Singapore. Further ringgit appreciation and flush liquidity conditions result in higher returns to investments as well as higher investment inflows in Malaysia. Malaysia and Singapore also have the same investment strategy, for example, Banks in Malaysia and Singapore have gained business benefits overseas by combining with local banks in targeted countries<sup>78</sup>.

In terms of Malaysia-Thailand relations, Thailand always gain the trade surplus from border trade between Malaysia and Thailand accounting for 2,480.54 million USD in 2007, 3,332.46 million USD in 2008, 2,165.96 million USD in 2009, and 1,100.67 million USD in 2010. In terms of tariff measure, low Malaysia's import duty results in higher bilateral trade between Thailand and Malaysia; higher trade competitiveness; better investment climate; and better resource allocation. Thailand gains benefits from Malaysia in textile product, jewel and decorations, glass, mirror, leather, furniture, cement, construction materials, fertilizer, paper pulp, vegetable and fruit (i.e., durian, mango, lychee and longan), food products, and labor force. In terms of non-tariff measure, there is restriction in wire rod owing to Malaysia's industry protection policy. Moreover, there is no complicated custom clearance in Malaysia. Furthermore, Thailand remains one of the easiest and most comfortable locations in ASEAN for manufacturing and other investment. Thailand's banking reform and efforts to privatize more government functions should lead to more supportive treatment for new investment projects from Malaysia<sup>79</sup>.

In terms of Malaysia-Indonesia relations, several Indonesian firms have a commercial presence in Malaysia, especially in the real estate sector. Moreover, Malaysia also invests in Indonesia in various sectors, i.e., plantations, banking, telecommunications and infrastructure<sup>80</sup>.

<sup>78</sup> Saw Swee Hock. Roundtable on Singapore-Malaysia Relations: Mending Fences & Making Good Neighbours. 2005.

<sup>79</sup> Runckel & Associates. Investment Cost Comparison for Vietnam, China, Thailand, Cambodia, Philippines, Malaysia and Laos, Business-in-Asia [online]. 2010. Available from : [http://www.business-in-asia.com/investment\\_comparison.html](http://www.business-in-asia.com/investment_comparison.html) [2012, March 9]

<sup>80</sup> Summit Level Group of Developing Countries Group of Fifteen, The Group of Fifteen. A Survey of Foreign Direct Investment in G-15 Countries. Working Paper Series, Volume 7. 2010.

### 3.1.3 Indonesia

#### Economic overview of Indonesia

Indonesia is a rich, ethnically diverse island state with a very large population (237 million people)<sup>81</sup>. Indonesia has a large and well developed petroleum industry which adds wealth to the nation. Indonesia's GDP per capita falls below the average for ASEAN region, and ranks fifth after Singapore, Brunei, Malaysia, and Thailand. The fundamentals of Indonesia's financial sector are very vulnerable<sup>82</sup> owing to weak supervision of the financial sector; large external deficit especially in short term maturity; slugging exports; a decline in investment quality; and excessive expansion of certain sectors (i.e., real estate and banking)<sup>83</sup>. Moreover, the wage rates in Indonesia are relatively low.

Indonesia was hit hard by 1997-1998 financial and economic crisis and Indonesian economy has recovered from the economic crisis in 2004<sup>84</sup>. Before the economic crisis, Indonesia's high economic growth was attributed to high investment growth (14% in 1995 and 14.5% in 1996), consumption growth (11.1% in 1995 and 8.9% in 1996), and exports growth (7.7% in 1995 and 7.6% in 1996). After the economic crisis, average economic growth from 2000 to 2007 was 5% per year which is lower than before the economic crisis (1989-1996) owing to the weak aggregate demand<sup>85</sup>. In 2007, economic growth reached 6.3% which is the largest growth rate for the Indonesian economy since 1996. The main causes of the economic growth were private consumption, investment and total exports. The growth of fixed capital formation rose to 9.2 % in 2007, while fixed capital investment-to-GDP ratio reached 24.9% during the same period. Investment growth has been driven by an increase in domestic credit, falling inflation, and interest rate. Low inflation and interest rate have promoted consumption expenditure rising by 5 % in 2007, which is the largest contributor to the country's GDP growth. The contribution of net exports to GDP reflects export expansion which was largely caused by high commodity prices on the world market<sup>86</sup>. After the 1997-1998 economic crisis, non tradable sectors such as transportation and communications as well as electricity sector, gas, and water supply experienced rapid growth, while the manufacturing sector had slow growth which led to a drop in its contribution to the economy from 28.07 % in 2004 to 27.01 % in 2007.

In terms of gross fixed capital formation, the growth in gross capital formation decreased to 8.57% during the crisis in 1997, and moved into negative territory during 1998-1999 period with -33.01% and -18.20%, respectively. After the crisis, gross fixed capital formation in Indonesia has gradually experienced growth despite the wide variation since the year 2000. In

<sup>81</sup> Runckel & Associates. Investment Cost Comparison for Vietnam, China, Thailand, Cambodia, Philippines, Malaysia and Laos, Business-in-Asia [online]. 2010. Available from : [http://www.business-in-asia.com/investment\\_comparison.html](http://www.business-in-asia.com/investment_comparison.html) [2012, March 9]

<sup>82</sup> Sri Adiningsih, A. Ika Rahutami, Murti Lestari & Laksmi Yustika Devi. The Analysis on Trade and Foreign Direct Investment in East Asia, and Its Policy Implication Before and After Crisis (Case Study: South Korea, Indonesia and Thailand). 2008.

<sup>83</sup> Adiningsih, et.al., 2008

<sup>84</sup> Sri Adiningsih, A. Ika Rahutami, Murti Lestari & Laksmi Yustika Devi. The Analysis on Trade and Foreign Direct Investment in East Asia, and Its Policy Implication Before and After Crisis (Case Study: South Korea, Indonesia and Thailand). 2008.

<sup>85</sup> Bank Indonesia (2008).

<sup>86</sup> Asian Development Outlook (2008).

2000 and 2004, growth of gross domestic fixed capital formation was 16.74% and 14.09%, respectively. The growth in gross domestic capital formation decreased to 10.9% in 2005 and 2.90% in 2006, then it reached at 9.2% in 2007, and increased in the first half of 2008 at 13.3%<sup>87</sup>.

Indonesia is now a top regional FDI target. The rich and diverse natural resources in Indonesia are the reason for attracting significant levels of foreign investment into the country. FDI inflows to Indonesia have increased significantly<sup>88</sup>. In terms of pull factors, growth is strong, labor costs are low and economic stability is improving, but the structural obstacles still remain in Indonesia. Forty percent of FDI into Indonesia has been found in the manufacturing sector owing to the low wage in Indonesia, especially in the export-oriented manufacturing sector such as automobiles, electronics, textiles and garments. Foreign investors also invest in oil, gas and mining. Another 17 % of FDI has been found in the banking and insurance sector, 6% in transportation and communications, and 5% in wholesale and retail trade. There is also significant FDI in the plantations sector of Indonesia (i.e., timber and palm oil). Based on The Indonesian Investment Coordinating Board (BKPM)'s data of FDI inflows in 2005-2009, the leading countries investing in Indonesia were Singapore, England, Japan, South Korea, the Netherlands and Malaysia<sup>89</sup>. In 2007, the net FDI inflows in Indonesia from ASEAN countries decreased by 22.32% (year-over-year). Foreign Direct Investment (FDI) in Indonesia for 2008 registered a net surplus of USD7.92 billion, increased by 14.3% from the previous year. This increase was mainly supported by the growing direct investment inflows into non oil and gas sector which recorded USD12.90 billion or an increase of 55.31% (year-over-year). In 2008, direct investment in Indonesia from ASEAN countries was recorded a net inflow of USD2.96 billion (37% from total net inflows of FDI in Indonesia) or increasing sharply by 167% from previous year which was recorded USD1.1 billion. The increase of FDI inflows from ASEAN was due to the inflows of direct investment from Malaysia and Singapore relating to the acquisitions of several companies in Indonesia. Moreover, the increase in FDI inflows since global recovery in 2009 has been found in many sectors, for example, mining, manufacturing, and services sectors (i.e., wholesale & retail trade and transport & communication)<sup>90</sup>. In 2010, Indonesia's FDI increased to 17% from average of 13%. In 2012, more FDI has been shifting to Indonesia, increasing from 11% to 23% which is a historic high for the country in terms of investment value.

**Table 9: Top 14 Investors Investing in Indonesia from 2005 to February 2009**

Ranking	Country	Project	Investment Value (Million USD)
1	Singapore	522	7,944.70

<sup>87</sup> Adiningsih, et.al. (2008).

<sup>88</sup> DBS Group Research, Singapore. *Indonesia FDI : more coming, more needed*. 2011.

<sup>89</sup> Summit Level Group of Developing Countries Group of Fifteen, The Group of Fifteen. *A Survey of Foreign Direct Investment in G-15 Countries*. Working Paper Series, Volume 7. 2010.

The Indonesian Investment Coordinating Board (BKPM).

<sup>90</sup> DBS Group Research, Singapore. *Indonesia FDI : more coming, more needed*. 2011.

2	England	246	4,254.90
3	Japan	519	4,097.60
4	South Korea	618	2,047.50
5	Netherlands	135	1,254.50
6	Malaysia	218	1,087.80
7	Hong Kong	63	873.6
8	Taiwan	138	652.4
9	U.S.A.	148	452.5
10	France	65	289.1
11	Australia	115	286.8
12	China	78	253.4
13	Germany	79	252.1
14	India	63	121.2

Source: Indonesia Investment Coordinating Board (BKPM)

**Table 10: Important Sectors Attracting More Foreign Direct Investments into Indonesia**

Ranking	Sector	Investment Value (Million USD)		
		2006	2007	2008
1	Transportation, Storage and Communication	646.9	3,305.2	8,529.9
2	Electronics Industry, Machinery and Metal	0.2	714.1	1,281.4
3	Motor Vehicle Industry and Transport Equipment	117.1	412.3	756.2
4	Chemical and Drug Industry	112.7	1,611.7	627.8
5	Trade	434.3	482.9	582.2
6	Food Industry	354.4	704.1	491.4
7	Construction	144.2	448.2	426.7

8	Printing and Paper Industry	264.6	672.5	294.7
9	Plastic and Rubber Industry	94.8	157.9	271.6
10	Textile Industry	51.8	131.7	210.2
11	Mining Industry	98.5	309.8	181.4

Source: Indonesia Investment Coordinating Board (BKPM)

### 3.1.3.1 FDI from Selected ASEAN Countries in Indonesia

#### 1.) FDI from Malaysia

Malaysia has started its outward FDI since 1990s due to the economic reform in Malaysia. The Malaysian entrepreneurs still lacked of experience in investing abroad at that time, so most of the Malaysia's outward FDI was accomplished by the state enterprises or by business related government, but the Malaysia's private firms tend to invest abroad much more than before<sup>91</sup>. Malaysia's outward FDI aims to seek long-term access to natural resources, i.e., natural gas and oil.

Potential of bilateral cooperation in economic field between Malaysia and Indonesia is very large. Total investment of Malaysia in Indonesia during 2001-2009 accounted for about US \$ 1.5 billion including 285 projects or business licenses in various sectors where the plantation (especially palm) sector occupied the highest position<sup>92</sup>. Malaysia's investors participated in Indonesia's manufacturing sector totaled US\$129.3 million including 75 projects in 2009 and US\$604 million including 172 projects in 2010<sup>93</sup>.

Malaysia's investors invest in Indonesia in plantations, banking, telecommunications and infrastructure. Most of the Malaysian companies (i.e., IJM Plantations Bhd., United Plantations Bhd., Asiatic Development Bhd., Sime Darby Bhd., Kuala Lumpur Kepong Bhd. and IOI Corp Bhd.) control about 50% of Indonesia's oil palm plantations.

In terms of banking, the Malaysian banks invested in Indonesia include Bumiputra-Commerce Holdings Bhd. through CIMB Niaga; and Malayan Banking Bhd. (Maybank) through PT Bank Internasional Indonesia.

In terms of telecommunications, Telekom Malaysia (now Axiata) owns most of Excelcomindo which is Indonesia's third largest mobile operator, while Maxis owns 44% in PT Natrindo Telepon Seluler.

In terms of infrastructure sector, the Malaysian firm called YTL has a 35% stake in Jawa Power which is Indonesia's second largest thermal power plant located in east Java, while

<sup>91</sup> Sunti Tongkaew, The Push and Pull Factors of Outward Foreign Direct Investment of Singapore Malaysia Thailand in Cambodia Lao and Vietnam. 2010.

<sup>92</sup> Farouk Abdullah Alwyni. Indonesia-Malaysia: Cross-border Linkages Through Islamic Finance. Joint High Level Conference in Islamic Finance Organized by Bank Indonesia & Bank Negara Malaysia, Jakarta, Indonesia. 2011.

<sup>93</sup> Ahmad Fuad Yahya. Indonesian Chinese Business Leaders Coming To Malaysia To Explore Investment Prospect [online]. 2012. Available from : <http://greaterkl.bernama.com/news.php?id=562272> [2012, March 12]



Malaysian national oil company called Petronas is involved in both upstream and downstream activities of the oil sector in Indonesia<sup>94</sup>.

In terms of trade, bilateral trade between Indonesia-Malaysia tends to grow significantly. Since 2006 until 2010, the total bilateral trade has grown on average at 20% per annum and the total bilateral trade volume per December 2010 is US\$ 18 billion<sup>95</sup>.

**Figure 14: Trade Balance between Malaysia and Indonesia (in Thousand USD)**

Remarks	2006	2007	2008	2009	2010	Trend%) 2006-2010	Jan-Apr		Change%) 2011/2010
							2010	2011	
Total Trade	7.304.091,1	11.507.990,8	15.354.841,1	12.500.255,0	18.011.053,6	20,78	5.775.894,9	6.820.344,1	18,08
Oil & Gas	1.909.749,5	4.764.982,7	5.439.125,8	3.679.653,2	5.735.614,6	21,42	2.045.374,0	1.878.743,5	-8,15
Non Oil & Gas	5.394.341,6	6.743.008,1	9.915.715,3	8.820.601,8	12.275.439,0	21,08	3.730.520,9	4.941.600,7	32,46
Exports	4.110.757,5	5.096.063,5	6.432.551,9	6.811.823,5	9.362.332,5	21,37	2.808.714,5	3.769.427,5	34,20
Oil & Gas	321.162,8	502.946,0	448.061,5	1.175.451,8	1.608.741,0	50,25	491.479,6	580.149,3	18,04
Non Oil & Gas	3.789.594,7	4.593.117,5	5.984.490,4	5.636.371,8	7.753.591,4	17,78	2.317.234,9	3.189.278,2	37,63
Impor	3.193.333,6	6.411.927,3	8.922.289,2	5.688.431,5	8.648.721,1	20,60	2.967.180,4	3.050.916,6	2,82
Oil & Gas	1.588.586,7	4.262.036,7	4.991.064,3	2.504.201,5	4.126.873,6	14,77	1.553.894,4	1.298.594,1	-16,43
Non Oil & Gas	1.604.746,9	2.149.890,6	3.931.224,9	3.184.230,0	4.521.847,6	27,95	1.413.286,0	1.752.322,5	23,99
Trade balance	917.423,9	-1.315.863,8	-2.489.737,3	1.123.392,1	713.611,3	0,00	-158.465,9	718.510,9	-553,42
Oil & Gas	-1.267.423,9	-3.759.090,7	-4.543.002,8	-1.328.749,7	-2.518.132,5	0,00	-1.062.414,7	-718.444,8	-32,38
Non Oil & Gas	2.184.847,8	2.443.226,9	2.053.265,6	2.452.141,8	3.231.743,9	8,18	903.948,8	1.436.955,7	58,96

Source: <http://www.kemendag.go.id>

## 2.) FDI from Singapore

Indonesia and Singapore have been among each other's top five trading partners for many years, with strong bilateral investment between the two nations. Singapore is as Indonesia's international financial hub which helps promote investment opportunities to investors in Indonesia.

According to data from Indonesia Investment Coordinating Board (BKPM), the number

<sup>94</sup> Mohamed Ariff & Gregore Pio Lopez, Malaysian Institute of Economic Research (MIER). Outward Foreign Direct Investment: The Malaysian Experience. 2008.

<sup>95</sup> Farouk Abdullah Alwyni. Indonesia-Malaysia: Cross-border Linkages Through Islamic Finance, Joint High Level Conference in Islamic Finance Organized by Bank Indonesia & Bank Negara Malaysia, Jakarta, Indonesia. 2011.

of Singapore companies investing in Batam and the surrounding islands has increased 97% since Indonesia introduced a free-trade zone in 2009<sup>96</sup>. BKPM also revealed that Singapore was ranked first in Indonesia's top investors in 2011 with the total investment of 771 million USD, or at 16.1% of the total investment in Indonesia. Investment from Singapore increased 50% in 2011<sup>97</sup>.

The Government of Singapore Investment Corp (GIC), which is one of Singapore's two sovereign wealth funds, has increased more Singapore's investment in Indonesia, particularly in infrastructure, owing to Indonesia's good fundamentals and obvious need for infrastructure investment. The potential areas of infrastructure investment in Indonesia are a cruise terminal in the popular resort island of Bali, and a railway line to link Jakarta and the main airport<sup>98</sup>. Moreover, a unit of Singapore Telecommunications, which is Southeast Asia's biggest telecom, holds a 35% stake in the leading operator of cellular telecommunications services in Indonesia called Telkomsel. Therefore, Indonesia has to increase investment incentives, so it can become an attractive investment destination in ASEAN.

### **3.) FDI from Thailand**

Indonesia is as an emerging economy with the world's fourth-largest population (237.5 million people) implying the large market size, therefore, the closer cooperation with Indonesia should increase trade and investment opportunities for Thai investors. Indonesia is Thailand's sources of energy and important resources, especially oil, natural gas and coal. A connected ASEAN power grid was a crucial step for energy security in the region and it would increase investment potential and Thai-Indonesian energy security cooperation. Indonesia is also Thailand's source of fishery resources, and more than 50% of Thailand's fishery products are from Indonesia with the estimated value of 5,000 million USD. Thailand was ranked 10<sup>th</sup> of Indonesia's major investor with the investment value of 2,000 million USD during 1976-2008<sup>99</sup>. The key sectors invested by Thai investors in Indonesia are as follows:

#### **Manufacturing sector**

The key investors from Thailand are Siam Cement Group (construction materials); Sri Trang Agro-Industry Public Company Limited (block rubber); Charoen Pokphand Group Indonesia (chicken product and animal feed meal); PT. Indonesia Thai Summit Auto Company (motorcycle parts); PT. Surya Siam Keramik (ceramic tiles); PT. Siam Indo Gypsum Industry (gypsum); PT. Siam Indo Concrete Products (concrete); PT. Jui Fa Manufacturing Co., Ltd. (canned fish); PT. TPC Indo Plastic and Chemicals (PVC); PT. Trans Pacific Petrochemical Indotama (petrochemical & chemical products); PT. Winnersumbiri Knitting Factory (textile &

<sup>96</sup>Kanya Stira Sjahrir & Antara. Indonesia Expects 50% Rise in Investment From Singapore [online]. 2011. Available from:<http://www.thejakartaglobe.com/business/indonesia-expects-50-rise-in-investment-from-singapore/415295> [2012, January 5]

<sup>97</sup> Kanya Stira Sjahrir & Antara. Indonesia Expects 50% Rise in Investment From Singapore [online]. 2011. Available from:<http://www.thejakartaglobe.com/business/indonesia-expects-50-rise-in-investment-from-singapore/415295> [2012, January 5]

<sup>98</sup>Channel News. Singapore eyes more investment in Indonesia [online]. 2011. Available from:<http://www.thejakartaglobe.com/business/indonesia-expects-50-rise-in-investment-from-singapore/415295> [2012, March 12]

<sup>99</sup>The Federation of Thai Industries, Thailand.

garment); PT. Mingala Garment (textile & garment); and PT. Sumber Bintang Rejeki (textile & garment).

#### **Mining Sector**

The key investors from Thailand are PT. Indo Tambangraya Megah investing in coal mining business; Lanna Resources Plc. investing in development and mining of coal properties; PT. Nusantara Thai Mining Services; PT. Trubaindo Coal Mining; and PT. Indominco Mandiri.

#### **Energy sector**

The key investor from Thailand is PTT Green Energy investing in palm oil plantation and production.

#### **Trading sector**

The key investors from Thailand are PT. M-150 Indonesia (energy drink); SCT Co., Ltd. (various products-coal, tapioca starch, glass wool, part board, etc.); PT. Kemio Jajucitra/PT. Kemici Indonesia (chemical product); and Thai Martin Group (garment)<sup>100</sup>.

#### **Franchise sector**

The key investor from Thailand is Thai Martin Group investing in coffee, desserts and ice cream businesses<sup>101</sup>.

#### **Banking sector**

The key investor from Thailand is Bangkok Bank Public Co.,Ltd. investing in Jakarta branch.

#### **Fisheries sector**

Thailand benefits from using Indonesia's territorial waters for fishing owing to its large area. Important locations for fishing in Indonesia's territorial waters are South China Sea (Natuna Islands), Arafura Sea (Irian Jaya area). There are restrictions on fishing activities within Indonesia's territorial waters owing to the terrorism, piracy, illegal fishing, natural disasters, people and drug trafficking, and other non-traditional and trans-national security threats<sup>102</sup>. Moreover, these Indonesia's restrictions have forced the Thailand's private sectors to have the joint venture in fisheries sector in Indonesia since 2006.

The severe flooding over Thailand in 2011 has not only had a major effect on local automotive production and supply chain disturbances but is also likely to have short term effect on regional and global supply of automotive parts and vehicle exports<sup>103</sup>, moreover, the Thai government expected to raise minimum wage to 300 baht per day in 2012. Therefore, the foreign investors are seeking the new location for industry relocation from recent flooding disaster and higher wages in Thailand, especially Indonesia owing to its stable macro economic conditions in recent years, larger market size, and lower wage rate compared to Thailand.

### **3.1.3.2 Host Country's FDI Policy & Incentives**

#### **1) Government's policies**

<sup>100</sup> Rizal Sukma. Indonesia's Security Outlook, Defence Policy and Regional Cooperation. 2004.

<sup>101</sup> Rizal Sukma. Indonesia's Security Outlook, Defence Policy and Regional Cooperation. 2004.

<sup>102</sup> Rizal Sukma. Indonesia's Security Outlook, Defence Policy and Regional Cooperation. 2004.

<sup>103</sup> Macroeconomic Analysis Group: Fiscal Policy Office, Ministry of Finance, Royal Thai Government. 2012.

Indonesia has reformed the policy to enhance investor confidence and increase the FDI inflows into the country after the Asian crisis in 1997 as follows<sup>104</sup>:

1.1) Government creates a more transparent and predictable policy with more institutionalized public consultation on the government's new policies as well as a strengthened appeal process for investors, for example, import duty reduction, tax facility, duty refund/exemption for value added tax on exports, special treatments for industries in Bonded Zone, special treatments for industries in Integrated Economic Development Zones, and better tax incentives for clean energy projects.

1.2) Government encourages private sector development by further reviewing existing restrictions. Indonesia has published a so-called Negative List of Sectors for Investment listing sectors where private investment is either prohibited, reserved to micro, small and medium-sized enterprises, or subject to special requirements or where foreign investors face certain restrictions. The examples of this measure are the joint venture requirements and limits on foreign holdings of company shares.

1.3) Government has continued cutting red tape for investors at both local and central levels. Investment promotion and facilitation is the responsibility of the Indonesian Investment Co-ordination Board (BKPM) which registers both domestic and foreign investment projects as well as acting as the country's investment promotion agency (IPA).

1.4) Government maintains investment incentives to be non-distorting, transparent and broad-based.

Moreover, trade and investment barriers in Indonesia are underdeveloped infrastructure, outdated labor laws, and corruption.

## **2.) Participating in Economic Co-operations**

In order to attract foreign investment, Indonesia has participated in many economic co-operations, both bilateral and multilateral co-operations. The multilateral cooperation which plays an important role in Indonesia is ASEAN+3 cooperation framework. With the increasing integration of ASEAN region, ASEAN+3 will make the trade and investment between member countries easier. Implementing bilateral FTA in ASEAN+3 will benefit all member countries because FTA will provide security to the business.

Indonesia is a recipient of FDI inflows from ASEAN+3 members. In terms of trade, the ASEAN+3 region is the largest major target in non-oil export market and the main source of non-oil import market of Indonesia. Regarding free and open trade by 2010 for developed member economies and 2020 for developing ones, Indonesia progressively reduces tariffs and enhances the transparency of the tariff regimes. Indonesia also introduces Tariff Harmonization Program for all products in order to simplify procedure of import and export facilitation, resulting in increased foreign trade of Indonesia<sup>105</sup>.

### **3.1.3.3 Comparative Basic Indicators**

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<sup>104</sup> Misuzu Otsuka, Stephen Thomsen and Andrea Goldstein. Improving Indonesia's Investment Climate. Issue1. 2011.

<sup>105</sup> Sri Adiningsih, A. Ika Rahutami, Murti Lestari & Laksmi Yustika Devi. The Analysis on Trade and Foreign Direct Investment in East Asia, and Its Policy Implication Before and After Crisis (Case Study: South Korea, Indonesia and Thailand). 2008.

Indonesia is attractive to foreign firms in terms of the growth and the size of domestic consumer market. Its population base is the world's fourth largest. Indonesia has a cost advantage owing to a large population base and a favorable demographic trend which allow Indonesia to continue to supply abundant and affordable labor forces in the future<sup>106</sup>. Indonesia's macroeconomic stability has improved and the sovereign credit rating outlook has turned positive, therefore, this should bring back investor confidence. The petroleum industry in Indonesia helps increase the government wealth and manufacturing investments tends to be in resource-based activities (i.e., chemicals and paper). There are still structural barriers against doing business in Indonesia, for example, the infrastructure poorness, labor market rigidity, legal and administrative uncertainties. However, the government's reform agenda in 2011 has been focused on improving infrastructures. Indonesia has liberalized more industries and improved its FDI-related administrative procedures since 2010<sup>107</sup>. In terms of fundamentals of the country's financial sector, they are very vulnerable due to weak supervision of the financial sector, large external deficit especially in short term maturity<sup>108</sup>.

In comparison between Indonesia and Thailand, Indonesia's market size is three times larger than Thailand's market size, and the wage in Indonesia is lower than the wage in Thailand. Indonesia is now offering tax facilities to industries relocating their production facilities from Thailand to Indonesia, following the devastation of the floods that hit Thailand in 2011.

In comparison between Indonesia and Malaysia, Indonesia and Malaysia are also endowed with natural resources such as oil and minerals. Malaysia's performance also pales in comparison with Indonesia whose FDI figures did not contract severely, despite the global financial crisis. Malaysia has 300 to 400 science and technology workers for every 100,000 persons, which made the transition from middle to high income status.

In comparison between Indonesia and Singapore, Singapore can attract more FDI inflows owing to its stable macroeconomic conditions, high quality infrastructures, and the availability of skilled labor. Moreover, Singapore was the largest recipient of FDI inflows in absolute terms in Southeast Asia in 2010, followed by Indonesia. Singapore located in the heart of Southeast Asia and it has been a bridge between the East and the West, therefore, it has comparative advantage in investing with the nearby countries. Singapore's manufacturers tend to invest more in Indonesia in order to take advantage of Indonesia's large population and robust growth. Singapore's manufacturers were interested in investing in Indonesia's small and medium-sized enterprise sector owing to its rapid growth. Singapore's investors were particularly interested in chemicals, the food industry, storage and the energy sector in Indonesia.

Moreover, World Bank released the Doing Business ranking in 2011 as follows:

In the ease of doing business as of 2011<sup>109</sup>, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 18<sup>th</sup>, and Indonesia was ranked 129<sup>th</sup>.

<sup>106</sup> DBS Group Research, Singapore. Indonesia FDI : more coming, more needed. 2011.

<sup>107</sup> G.Sivalingam. FDI Inflows into Malaysia in comparative perspective [online]. 2011. Malaysian Business. 16 Aug 2011. Available from : <http://web1.iseas.edu.sg/?p=4901> [2012, March 14]

<sup>108</sup> Sri Adiningsih, A. Ika Rahutami, Murti Lestari & Laksmi Yustika Devi. The Analysis on Trade and Foreign Direct Investment in East Asia, and Its Policy Implication Before and After Crisis (Case Study: South Korea, Indonesia and Thailand). 2008.

<sup>109</sup> World Bank (2011).

In the ease of starting a business as of 2011, Singapore was ranked 4<sup>th</sup>, Malaysia was ranked 50<sup>th</sup>, Thailand was ranked 78<sup>th</sup>, and Indonesia was ranked 155<sup>th</sup>.

In the ease of getting electricity as of 2011, Singapore was ranked 5<sup>th</sup>, Thailand was ranked 9<sup>th</sup>, Malaysia was ranked 59<sup>th</sup>, and Indonesia was ranked 161<sup>th</sup>.

In the ease of registering property as of 2011, Singapore was ranked 14<sup>th</sup>, Thailand was ranked 28<sup>th</sup>, Malaysia was ranked 59<sup>th</sup>, and Indonesia was ranked 99<sup>th</sup>.

In the aspect of protecting investors as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 4<sup>th</sup>, Thailand was ranked 13<sup>th</sup>, and Indonesia was ranked 46<sup>th</sup>.

In the aspect of resolving insolvency as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 47<sup>th</sup>, Thailand was ranked 51<sup>th</sup>, and Indonesia was ranked 146<sup>th</sup>.

In the ease of trading across borders as of 2011, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 29<sup>th</sup>, and Indonesia was ranked 39<sup>th</sup>.

### **3.1.4 Vietnam**

#### **Economic Overview of Vietnam**

Vietnam is a densely-populated developing country. Vietnam had recovered from the ravages of war in the last 30 years with the loss of financial support from the old Soviet Bloc, and the rigidities of a centrally-planned economy. Vietnam's economy remains dominated by state-owned enterprises (SOEs), which produce about 40% of GDP. Vietnam has implemented the structural reforms since 1986 under the “Doi Moi” (Renovation) policy, focusing on modernizing the economy and producing more competitive export-driven industries. This policy has included: restructuring to build a multi-sector economy; financial, monetary and administrative reform; and the development of external economic relations. One of the most important aspects of economic reform in Vietnam has been the encouragement of domestic and foreign private investment<sup>110</sup>.

In terms of economic sectors, agriculture's share of economic output has continued to shrink from about 25% in 2000 to about 20% in 2010, while industry's share increased from 36% in 2000 to 41% in 2010. Deep poverty has declined significantly and Vietnam tries to create jobs to meet the challenge of a labor force that is growing by more than one million people every year. The global recession has hurt Vietnam's export-oriented economy, with GDP in 2009-10 growing less than the 7% per year on average. Exports increased by more than 25% in 2010, year-on-year, but the trade deficit remained high. Vietnam's managed currency continues to face downward pressure due to a persistent trade imbalance, and the government has devalued it through a series of small devaluations since 2008. The government has struggled to control the region's highest inflation rates, which reached 11.8% in 2010 by implementing strong growth-oriented economic policies. Vietnam also faces challenges from falling foreign exchange reserves, an undercapitalized banking sector, and high borrowing costs. The near-bankruptcy and subsequent default of the SOE Vinashin, a leading shipbuilder, led to a ratings downgrade of Vietnam's sovereign debt, exacerbating Vietnam's borrowing difficulties<sup>111</sup>.

#### **FDI in Vietnam**

<sup>110</sup>Ministry of Planning and Investment & Foreign Investment Agency, Vietnam. A Guide for Business and Investment. 2007.

<sup>111</sup>Central Intelligence Agency. The CIA World Factbook 2011. 2011.

In terms of restructuring the national economy, the inflows of FDI are considered as an important resource for development in Vietnam. Vietnam is regarded as an attractive destination for FDI. Vietnam ranks first among ASEAN countries, and Vietnam is one of the top ten economies of investment attraction according to the World Investment Prospects Survey 2010-2012 conducted by the United Nations Conference on Trade and Development (UNCTAD).

Foreign investment mechanism in Vietnam included 78.45% of foreign investment and 18.05% of joint ventures as of 2010. In terms of FDI capital in Vietnam, there were 60 billion USD registered capital and 11.5 billion USD implemented capital in 2008, and there were 20 billion USD registered capital and 11 billion USD implemented capital in 2009. To classify FDI in Vietnam by industrial sectors as of 2009, it included processing industry (245%), researching service (148%), retails and households (115%), and construction (74%), respectively.

In 2011, nearly 13,670 valid foreign direct investment projects have operated in Vietnam with a total registered capital of 198 billion USD. Industry and construction made up 70% and real estate made up 5.8% of FDI. Singapore continued to rank first among Vietnam's major investors with a total registered capital of 24 billion USD, followed by the Republic of Korea, Japan and Taiwan. Ho Chi Minh City remains the locality that has attracted the highest number of FDI projects, capitalizing at more than \$32 billion, followed by Ba Ria-Vung Tau, Hanoi, Dong Nai and Binh Duong<sup>112</sup>.

### **3.1.4.1 FDI from Selected ASEAN Countries in Vietnam**

#### **1.) FDI from Indonesia**

Indonesia's investors invest in Vietnam owing to Vietnam's strategic position in the region, rapid growth, stable macroeconomic, political conditions, abundant resources, low wage, diligent and skillful labor force, large domestic market, economic liberalization and reform efforts. Indonesia's direct investment in Vietnam increased with 28 projects and a capital investment at around \$206 million as of 2011.

Indonesia and Vietnam plan to increase trade and investment between the two nations by boosting interaction between the private sectors by more than half, to USD5 billion by 2015, as Indonesia hopes to use Vietnam as an entry point to other Southeast Asian countries<sup>113</sup>. In terms of IT investment, Indonesia is currently competing against Vietnam to gain investment in IT sector. In terms of automobile investment, foreign investors are now heading to Indonesia instead of choosing Vietnam resulting from the underdeveloped Vietnamese automobile industry<sup>114</sup>. In terms of nuclear energy investment, Indonesia and Vietnam have not deterred the plan of nuclear programs yet after the Fukushima nuclear power plant accident in 2011. Indonesia aims to build up to 4 nuclear power stations by 2025, while Vietnam intends to build

<sup>112</sup> Business Times. FDI into Vietnam nears \$200 billion [online]. 2012. Available from: <http://businesstimes.com.vn/fdi-into-vietnam-nears-200-billion> [2012, March 20]

<sup>113</sup> Camelia Pasandaran. Indonesia, Vietnam Intend to Increase Trade and Investment [online]. 2011. Available from: <http://www.thejakartaglobe.com/business/indonesia-vietnam-intend-to-increase-trade-and-investment/465438> [2012, March 18]

<sup>114</sup> Tran Thuy. Big automobile manufacturers leaving Vietnam? [online]. 2011. Available from: <http://english.vietnamnet.vn/en/special-report/15793/big-automobile-manufacturers-leaving-vietnam-.html> [2012, March 18]

10 nuclear power stations by 2030, plus another four after<sup>115</sup>. In terms of trade, bilateral trade between Vietnam and Indonesia reached \$2.5 billion in 2009<sup>116</sup>. Bilateral relations between Indonesia and Vietnam were robust, with two-way trade totaling \$2.1 billion in 2009 in favor of Indonesia<sup>117</sup>. Indonesia exports chemical products, spare parts and steel to Vietnam, while Indonesia imports rubber and agricultural products from Vietnam. In 2010, the value of trade between the two countries reached \$3.5 billion, which was the highest figure ever during the 66 years of diplomatic relations between the two countries<sup>118</sup>.

In terms of bilateral cooperation, Vietnam sees Indonesia as an important partner in the region from signing of the Plan of Action between Indonesia and Vietnam to implement the Declaration in 2003. With the conclusion of the Plan of Action (POA) 2012-2015, the two countries would have a clear path to better explore the bilateral cooperation in politics, security, defence, economy, trade and investment, agriculture and fisheries, culture, education and training, sports and tourism, and other potential aspects, particularly to reach the target of \$5 billion in trade by 2015. Vietnam and Indonesia also agreed to foster cooperation in marine and fisheries, including the need to prevent, combat and diminish Illegal, Unreported and Unregulated (IUU) fishing, as well as other issues of mutual concern as stipulated in the Memorandum of Understanding on Marine and Fisheries Cooperation signed in 2010. Moreover, there is the MoU on Joint Activities to Enhance Bilateral Communications and Consultations between the Ministries of Foreign Affairs of Vietnam and Indonesia, and these two countries shared a common standpoint on the Joint Commission on Economic, Scientific and Technical Cooperation<sup>119</sup>.

## 2.) FDI from Malaysia

In terms of trade, Malaysia is the 9th biggest trading partner of Vietnam. Exports from Vietnam to Malaysia include crude oil, rice, coffee and sea products. Imports from Malaysia to Vietnam include steel, iron, petroleum, oil, and electronic products. The two-way trade turnover between Vietnam and Malaysia increased averagely 20% per year, from 160 million USD in 1992 to 2.7 billion USD in 2006. In 2010, two-way trade between Vietnam and Malaysia increased to 5.5 billion USD, or about 390 projects with a total registered capital of 19 billion USD in Vietnam<sup>120</sup>. In terms of investment, Malaysia ranks the third among foreign investors

<sup>115</sup> Nicholas Fang and Aaron Choo. Fukushima, South-east Asia still eyes nuclear energy [online]. 2012. Available from: <http://www.todayonline.com/Singapore/EDC120309-0000007/Despite-Fukushima,-South-east-Asia-still-eyes-nuclear-energy> [2012, March 18]

<sup>116</sup> Business Times. Vietnam should invest in Indonesia [online]. 2010. Available from: <http://businesstimes.com.vn/vietnam-should-invest-in-indonesia-ambassador-says> [2012, March 18]

<sup>117</sup> Lilian Budianto. Vietnam, RI competing to attract foreign investment [online]. 2010. Available from: <http://www.thejakartapost.com/news/2010/02/12/vietnam-ri-competing-attract-foreign-investment.html> [2012, March 18]

<sup>118</sup> Kieu Linh. Ties with Indonesia to become stronger [online]. 2011. Available from: <http://www.vir.com.vn/news/investlink/ties-with-indonesia-to-become-stronger.html> [2012, March 18]

<sup>119</sup> Kieu Linh. Ties with Indonesia to become stronger [online]. 2011. Available from: <http://www.vir.com.vn/news/investlink/ties-with-indonesia-to-become-stronger.html> [2012, March 18]

<sup>120</sup> The Vietnam News Agency. President Truong Tan Sang on visit to Malaysia [online]. 2011. Available from: <http://vietnamembassy-malaysia.org/index.php/en/vietnam-malaysia-relations/79-president-truong-tan-sang-on-visit-to-malaysia> [2012, March 20]



investing in Vietnam as of 2009. Investment of Malaysia in Vietnam increased from 50 million USD in 1990 to 1.6 billion USD in 2006. In 2009, Malaysia had 337 investment projects with a total capital of 18.06 billion USD in Vietnam<sup>121</sup>. In 2011, Malaysia had 386 projects in Vietnam with a total investment capital of 18.78 billion USD<sup>122</sup>.

The Vietnamese government creates the favorable conditions for Malaysian investors to invest and do business in Vietnam. Malaysia's investment would increase investment and make more contributions to Vietnam's socio-economic development<sup>123</sup>. Bilateral cooperation between Vietnam and Malaysia is in defence, security, labor, education and tourism, which are increasingly promoted by both sides<sup>124</sup>. In terms of labor cooperation between the two countries, Malaysia is Vietnam's third biggest guest worker importing market with the employment of 70,000 Vietnamese workers and it continues to develop strongly<sup>125</sup>. In other aspects of investment, Vietnam is a new strategic market for Malaysian businesses to invest in franchises resulting in the average turnover of the franchise business at 50% each year, especially in the retail sector, beverages, restaurant services, fashion and education<sup>126</sup>. Moreover, Malaysia also invests in banking sector in Vietnam by operating Hong Leong Bank of Malaysia which is the first South East Asia's 100% foreign owned bank<sup>127</sup>.

Malaysia and Vietnam will soon organize the fifth session of the Joint Committee on Economic, Scientific and Technological Cooperation to review and boost cooperation in all aspects, especially in economics, trade and investment, striving to bring two-way trade to 10 billion USD in the near future<sup>128</sup>. There are other agreements signed between Malaysia and Vietnam in order to promote cooperation, i.e., Agreement on Air Services between and beyond their Respective Territories; Agreement on Investment promotion and protection (1992); Agreement on Maritime Transport (1992); Agreement on Economic, Scientific and Technical Cooperation (1992); Agreement on Post and Telecommunication Cooperation (1992); Trade agreement (1992); Agreement on Bilateral Payment between the State Bank of Vietnam and Bank Negara of Malaysia (1993); Agreement on Science, Technology and Environment Cooperation (1993); Agreement on Tourism Cooperation (1994); Agreement on Culture Cooperation (1995); Agreement on Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income (1995); Agreement on Youth and Sports Cooperation (1996); Agreement on Visa exemption for Ordinary passports holders (2001); and Joint

<sup>121</sup> Ministry of Foreign Affairs, Vietnam. Vietnam – Malaysia Relations. 2009.

<sup>122</sup> Malaysia-Vietnam's third biggest trade partner. VOV News (23 September 2011).

<sup>123</sup> Vietnam Investment Review. Vietnam paves way for Malaysian investors [online]. 2011. Available from: <http://www.vir.com.vn/news/investlink/vietnam-paves-way-for-malaysian-investors.html> [2012, March 22]

<sup>124</sup> Bernama. King Calls for Closer Malaysia-Vietnam Ties [online]. 2010. Available from: [http://www.aseanaffairs.com/malaysia\\_news/retail/vietnam\\_investment\\_target\\_for\\_malaysia](http://www.aseanaffairs.com/malaysia_news/retail/vietnam_investment_target_for_malaysia) [2012, March 22]

<sup>125</sup> Malaysia-Vietnam's third biggest trade partner. VOV News (23 September 2011).

<sup>126</sup> ASEAN Affairs. Vietnam investment target for Malaysia [online]. 2010. Available from: [http://www.aseanaffairs.com/malaysia\\_news/retail/vietnam\\_investment\\_target\\_for\\_malaysia](http://www.aseanaffairs.com/malaysia_news/retail/vietnam_investment_target_for_malaysia) [2012, March 20]

<sup>127</sup> Ministry of Foreign Affairs, Vietnam. Vietnam – Malaysia Relations. 2009.

<sup>128</sup> The Vietnam News Agency. Vietnam to lift ties with Singapore, Malaysia to new level [online]. 2011. Available from: <http://www.nhandan.com.vn/cmlink/nhandan-online/homepage/politics/external-relations/vietnam-to-lift-ties-with-singapore-malaysia-to-new-level-1.314476> [2012, March 20]

Declaration on the Framework for Comprehensive Co-operation in the 21st Century (April 2004)  
129

### 3.) FDI from Singapore

Vietnam is welcoming a lot of so-called investment waves, developing country and striving for the goal of national industrialization and modernization, so Singaporean investors can find plenty of economically profitable projects in Vietnam<sup>130</sup>. Economic, trade and investment relations between the two countries have developed quickly. Singapore and Vietnam share a very close and mutually beneficial relationship.

In terms of investment, Singapore investors have carried out many investment projects in Vietnam in recent years, becoming the second largest investor there. Singapore had 503 projects licensed, accounting for 9.6 billion USD, and Singapore ranked second among 79 foreign investors in Vietnam in 2007<sup>131</sup>. In 2010, Singapore became the largest investor in Vietnam with registered cumulative investments worth 23 billion USD in about 900 projects<sup>132</sup>. As of 2011, Singapore had 968 valid projects with a total registered capital of 23.3 billion USD, and Singapore ranked third among 94 countries and territories investing in Vietnam. Based on the registered investment capital and projects as of 2011, Singapore enterprises invested heavily in five major fields: real estate (50 projects or over 7.6 billion USD); processing and manufacturing (329 projects or 6 billion USD); construction (80 projects or over 3.5 billion USD); arts and entertainment (12 projects or 1.7 billion USD); and hotel and restaurant (25 projects or over 1.7 billion USD). Other fields are also attractive to Singaporeans, including warehousing (60 projects or 707million USD), and health and social aid (11 projects or 537 million USD). Singapore tends to invest more in Vietnam in the following sectors: finance and banking, legal arbitration, logistics, sea and air ports, hospitals and schools, power and energy, eco-industrial parks and new townships<sup>133</sup>.

In terms of trade, Singapore also ranks consistently as one of Vietnam's most important trading partners. Bilateral trade has increased four-fold since 2000 to reach close to 10 billion USD in 2010<sup>134</sup>.

There are many close co-operations between Vietnam and Singapore, i.e., Vietnam Singapore Industrial Park (VSIP); Vietnam-Singapore Vocational College in Binh Duong province; Vietnam-Singapore Training Centre in Hanoi; ASEM; APEC; FEALAC; Free Trade Agreement (FTA); and Trans-Pacific Partnership (TPP) with the seven other members (i.e., the US, Chile, Australia, New Zealand, Peru, Brunei and Malaysia). Moreover, economic relations between Singapore and Vietnam are supported by the Connectivity Framework Agreement

<sup>129</sup> Ministry of Foreign Affairs, Vietnam (2007).

<sup>130</sup> Vietnam Business Forum. Vietnam - Singapore Investment Relations Keep Thriving [online]. 2011. Available from: [http://vccinews.com/news\\_detail.asp?news\\_id=24836](http://vccinews.com/news_detail.asp?news_id=24836) [2012, March 20]

<sup>131</sup> Ministry of Foreign Affairs, Vietnam. Strengthening cooperative relations with Singapore, Myanmar and Brunei. 2007.

<sup>132</sup> Ministry of Foreign Affairs, Singapore. Singapore-Vietnam Relations. 2009.

<sup>133</sup> Vietnam News/Asia News Network. Singapore companies look for investments in Vietnam [online]. 2010. Available from: <http://www.asiaone.com/Business/News/SME%2BCentral/Story/A1Story20100810-231357.html> [2012, March 20]

<sup>134</sup> Ministry of Foreign Affairs, Singapore. Singapore-Vietnam Relations. 2009.

implemented in early 2006, which accelerates Vietnam's growth and promotes Singapore's investment for the following fields: finance, education, transportation, ICT, investment, trade and service. Singapore also plays an important role in Vietnam's human resource development by training the Vietnamese in Singapore under the Singapore Cooperation Program since 1992 (i.e., healthcare, environment, finance and trade, productivity, public administration and English language training). Moreover, economic co-operation has expanded to include new area which is cruise tourism, marked by the Memorandum of Understanding (MoU) between Singapore Cruise Centre and Da Nang Port. Therefore, these two countries' economies are complementary to each other, i.e., Singapore provides good training facilities and business experience to Vietnam; Vietnam produces certain electronic components in Vietnam which are then sent to Singapore; and other components are produced in Singapore and then sent to Vietnam.

In order to attract Singapore's investors, the Vietnamese government offers incentive schemes (i.e., tax and land rent), and also improves its infrastructure, administrative reforms, and administrative process. There are specific sectors in Vietnam in which the Vietnamese government encourages Singapore's business investments, for example, high technology, education, medical care, manufacturing and business management.

#### **4.) FDI from Thailand**

Thailand and Vietnam have a very close relationship with a lot of similarities. Vietnam's joining ASEAN in July 1995 opened new perspectives for economic cooperation between Vietnam and other ASEAN countries, including Thailand. Owing to high wages and rising costs in the country, Thailand starts to lose some competitiveness in export markets, so local businesses see more opportunities in investing overseas, including Vietnam. Lower wages, ample workforce, consistent GDP growth, a large pool of consumers and less regulation are luring Thai investors to invest in Vietnam<sup>135</sup>.

In terms of trade, Thailand is the third largest trading partner in the ASEAN region of Vietnam. In 2010, Thailand is holding 72 % of trade balance with Vietnam. Thailand-Vietnam trade ties have been developing sustainably with two-way trade reaching around 7.5 billion USD in 2010, increasing 21% year-on-year<sup>136</sup>. The Royal Thai Ministry of Commerce revealed that trade between the two countries increased by 25% in 2011, reaching 9 billion USD.<sup>137</sup> Thai goods exported to Vietnam include: polyester fabric, chemical substances, fishing nets, pharmaceutical materials, lacquer, iron tubes, and some types of machinery. Vietnam's goods exported to Thailand include: wood, cattle hides, metals, sea products, rice, and other small value goods (i.e., granite, silk and jute). Many of the exported goods of Thailand and Vietnam are similar such as rice, textile and clothes.

In terms of investment, Thai investors have invested in many sectors in Vietnam, i.e., industrial park infrastructure construction, new urban zone construction, tourism, hotel, heavy

<sup>135</sup> Umesh Pandey. Thais consider investment in Vietnam [online]. 2011. Available from: <http://www.bangkokpost.com/business/economics/238381/thais-consider-investment-in-vietnam> [2012, March 20]

<sup>136</sup> Ministry of Planning and Investment Portal, Vietnam. Thailand to further investment in Vietnam [online]. 2011. Available from: <http://www.mpi.gov.vn> [2012, March 20]

<sup>137</sup> Exhibition World. Thailand Expands Mice Trade Relationship with Vietnam [online]. 2012. Available from: <http://www.exhibitionworld.co.uk/newsdetails/1972/thailand-expands-mice-trade-relationship-with-vietnam> [2012, March 20]

industry and light industry. Thailand ranked eighth among foreign investors in Vietnam in 2009, a remarkable progress from the 12th position in 2006.

In 2010, Thailand largely invested in industry and construction, with 108 projects worth 800 million USD, accounting for over 61.4 % of all projects and 51.5 % of all registered investment capital in Vietnam. Thailand invested in the service sector with 36 projects worth 567 million USD, accounting for 20 % of all projects and 28 % of all registered investment capital in Vietnam. Moreover, Thailand also invested in agriculture, forestry and fisheries fields, accounting for over 15.9 % of all projects and 20.6 % of all registered investment capital in Vietnam.

At present, there are Thailand's 250 investment projects worth 5.8 billion USD in Vietnam. Many big firms from Thailand are promoting and expanding their business in Vietnam such as Tipco, Amata, Siam Cement, and CP. Siam Cement Group plans to invest in petrochemical projects in southern Vietnam and the CP Group plans to invest in agriculture in Vietnam<sup>138</sup>.

Thai investors invest in 30 provinces and cities, led by southern Dong Nai province with a total registered investment capital of 485 million USD, followed by the capital city of Hanoi with 24 projects worth 366 million USD. Thai investment in Vietnam has been located mostly in the Southern Key Economic Zone (SKEZ) including Ho Chi Minh City, Binh Duong, Dong Nai and Vung Tau, which generates 75% of Vietnam's revenue<sup>139</sup>.

Thai investors chiefly accept the form of wholly foreign investment, followed by the form of joint venture, moreover, some projects are in the form of business cooperation contract (BCC), build-operate-transfer (BOT), build-transfer-operate (BTO) and build-transfer (BT).

In terms of business corporations, Vietnam, Thailand and some other countries signed a memorandum of understanding on mutual facilitation in Mekong River region, aiming to facilitate transport, investment and industry. Moreover, a memorandum of understanding has recently been signed in Hanoi by the Vietnam Trade Promotion Agency (Vietrade) and the Thailand Convention and Exhibition Bureau (TCEB), which aims to strengthen the bilateral cooperation in the Meetings, Incentives, Conventions and Exhibitions (MICE) industry and facilitate the mutual development of exhibition industry<sup>140</sup>.

### **3.1.4.2 Host Country's FDI Policy & Incentives**

#### **1.) FDI Incentive Policies in Vietnam**

The Vietnamese government has created more incentive policies and perfected its legal system for foreign investors. Maintaining socio-political stability and professionalizing investment promotion activities play a crucial role in consolidating the confidence of foreign investors and increasing the FDI inflows. Since 2011, Vietnam has concentrated on raising the quality rather than the quantity of FDI projects by prioritizing FDI attraction to develop the

<sup>138</sup> Ministry of Planning and Investment Portal, Vietnam. Thailand to further investment in Vietnam [online]. 2011. Available from: <http://www.mpi.gov.vn> [2012, March 20]

<sup>139</sup> VN Economy News. Thailand considers investment in Vietnam [online]. 2011. Available from: <http://www.vneconomynews.com> [2012, March 20]

<sup>140</sup> Kim Phuong. Vietnam - Thailand Boosting Investment, Trade Ties [online]. 2010. Available from: [http://vccinews.com/news\\_detail.asp?news\\_id=20958](http://vccinews.com/news_detail.asp?news_id=20958) [2012, March 20]

infrastructure, hi-technology, supporting industries and highly competitive products for export<sup>141</sup>. Regarding FDI attraction in 2012, the FDI management will focus on disbursing FDI capital and attracting FDI projects in line with the country's development plan for the 2011-2015 period, especially in infrastructure construction and green technology<sup>142</sup>.

The government of Vietnam encourages foreign investors to invest in the following sectors: manufacture of new materials and production of new energy; manufacture of high-tech products; bio-technology; information technology and mechanical manufacturing; breeding, rearing, growing and processing of agricultural forestry and aquaculture products; production of salt; creation of new plant and animal varieties; utilization of high technology and advanced techniques; protection of the ecological environment and research; development and creation of high-technology; labor intensive industries; construction and development of infrastructure facilities and important industrial large-scale projects; professional development of education, training, health, sports, physical education and Vietnamese culture; development of traditional crafts and industries; and other manufacturing and service sectors which require encouragement.

The government of Vietnam encourages foreign investors to invest in the following regions: regions with difficult socio-economic conditions (i.e., mountainous regions, remote or underdeveloped regions); industrial zones; exporting zones; high-tech zones; and economic zones<sup>143</sup>.

Moreover, the government of Vietnam also promotes the State-owned enterprises (SOEs) reform program, i.e. the reorganization and development of SOEs and State Owned Commercial Banks to improve their productivity and efficiency. Since 1986, the government has continued the reform of State Owned Enterprises (SOEs) in three phases (restructure, renovation and development) through the implementation of 4 key measures: (i) reform of SOE management; (ii) reorganization and reinforcement of state owned general corporations; (iii) SOEs equalization; and (iv) transferring, contracting, leasing and selling SOEs<sup>144</sup>.

## **2.) Participating in Economic Co-operation**

Economic cooperation always enables the participating countries to increase trade and investment. Vietnam has participated in various economic co-operations, especially in ASEAN region, as follows: ASEAN Economic Community(AEC) benefiting Vietnam from being a single market and production base, a highly competitive economic region, a region of equitable economic development, and a region fully integrated into the global economy of ASEAN; ASEAN Investment Area (AIA) benefiting Vietnam from FDI in ASEAN countries; ASEAN Free Trade Area (AFTA) benefiting Vietnam from the tariff liberalization and elimination of import duties and tariff rate quotas; The Asia-Pacific Economic Cooperation (APEC) forum bringing economic and political benefits to Vietnam<sup>145</sup>;

<sup>141</sup> Vietnam to change FDI tactics in 2011. Business Times (4 March 2011).

<sup>142</sup> FDI into Vietnam nears \$200 billion. Business Times (3 January 2012).

<sup>143</sup> Ministry of Planning and Investment & Foreign Investment Agency, Vietnam. A Guide for Business and Investment. 2007.

<sup>144</sup> Ministry of Planning and Investment & Foreign Investment Agency, Vietnam. A Guide for Business and Investment. 2007.

<sup>145</sup> The Vietnam News Agency. Deputy PM: Vietnam benefits from APEC [online]. 2011. Available from: [http://www.mcot.net/cfcustom/cache\\_page/130474.html](http://www.mcot.net/cfcustom/cache_page/130474.html) [2012, March 20]

Indonesia - Malaysia - Thailand Growth Triangle (IMT - GT) benefiting Vietnam from achieving the IMT-GT's vision of a seamless, progressive, prosperous and peaceful sub-region, as well as quality of life; Ayeyawady - Chao Phraya - Mekong Economic Cooperation Strategy (ACMECS) benefiting Vietnam from utilizing member countries' diverse strengths and promoting balanced development in the sub-region; and The Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) benefiting Vietnam from fully participating in the ASEAN development process.

In terms of trade relations, Vietnam has bilateral trade agreements with some ASEAN countries which are Indonesia, Philippines, Singapore, Cambodia, Laos, Malaysia and Thailand.

### **3.1.4.3 Comparative Basic Indicators**

Joining ASEAN in 1995 and joining WTO in 2007 have opened new perspectives for economic cooperation between Vietnam and other ASEAN countries.

In terms of investment incentives, the Vietnamese government had amended various laws including investment, enterprise, land, and business competition to become more favorable to foreign investors. Furthermore, its strategic position in the region, rapid growth, stable macroeconomic and political conditions, large domestic market, economic liberalization and economic reform efforts by Vietnamese government, are also the investment incentives in Vietnam. Seventy percent of Vietnam's 85 million people are under 30 years of age, enabling the country to provide a secure, talented and willing workforce as well as low labor costs to investors in the long term. Investing in mining in Vietnam is potentially profitable as the country has abundant natural resources (i.e., high-grade coal, zinc, and copper). Vietnam also has the largest anthracite coal reserves in the world. Foreign investors are allowed to acquire 100% shares in private firms. The Vietnamese government has promised to provide all necessary infrastructures, including roads, water systems, and electricity for factories in promoted industries. Although Vietnam offers many opportunities to foreign investors, it also has some weaknesses, for example, shortage of raw materials, long-term return on investment, corruption and high land prices.

In comparison between Thailand and Vietnam, Vietnam offers a corporate tax holiday for 10 years for promoted industries implemented between 2006 and 2020, while Thailand's Board of Investment (BOI) offers only eight years. Vietnam's labor costs are currently lower than those in Thailand and labor availability in Vietnam is greater than in Thailand, however, wages in Vietnam are rising particularly in the high position jobs (i.e., managers, accountants, HR professionals, Engineers, etc).

Moreover, World Bank released the Doing Business ranking in 2011 as follows:

In the ease of doing business as of 2011<sup>146</sup>, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 18<sup>th</sup>, Vietnam was ranked 98<sup>th</sup> and Indonesia was ranked 129<sup>th</sup>.

In the ease of starting a business as of 2011, Singapore was ranked 4<sup>th</sup>, Malaysia was ranked 50<sup>th</sup>, Thailand was ranked 78<sup>th</sup>, Vietnam was ranked 103<sup>rd</sup> and Indonesia was ranked 155<sup>th</sup>.

In the ease of getting electricity as of 2011, Singapore was ranked 5<sup>th</sup>, Thailand was ranked 9<sup>th</sup>, Malaysia was ranked 59<sup>th</sup>, Vietnam was ranked 135<sup>th</sup> and Indonesia was ranked 161<sup>th</sup>.

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<sup>146</sup> World Bank (2011).

In the ease of registering property as of 2011, Singapore was ranked 14<sup>th</sup>, Thailand was ranked 28<sup>th</sup>, Vietnam was ranked 47<sup>th</sup>, Malaysia was ranked 59<sup>th</sup> and Indonesia was ranked 99<sup>th</sup>.

In the aspect of protecting investors as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 4<sup>th</sup>, Thailand was ranked 13<sup>th</sup>, Indonesia was ranked 46<sup>th</sup> and Vietnam was ranked 166<sup>th</sup>.

In the aspect of resolving insolvency as of 2011, Singapore was ranked 2<sup>nd</sup>, Malaysia was ranked 47<sup>th</sup>, Thailand was ranked 51<sup>th</sup>, Vietnam was ranked 142<sup>nd</sup> and Indonesia was ranked 146<sup>th</sup>.

In the ease of trading across borders as of 2011, Singapore was ranked 1<sup>st</sup>, Thailand was ranked 17<sup>th</sup>, Malaysia was ranked 29<sup>th</sup>, Indonesia was ranked 39<sup>th</sup>, and Vietnam was ranked 68<sup>th</sup>.

### **3.2 Intra-ASEAN FDI Outflows**

#### **3.2.1 Indonesia**

Indonesia is the largest national economy in ASEAN. The government plays a significant role by owning more than 164 state-owned enterprises and administers prices on several basic goods. The initial effort of trade liberalization began in 1985 when oil price continued to decline. The first reform package was introduced in October 1986<sup>147</sup> and then followed by a series of deregulation package in the subsequent years. The reform packages have transformed Indonesian industry from a protected, inward-looking sector to a more outward-looking sector<sup>148</sup>.

Indonesian investors have struggled with domestic threats, such as the saturated market, high production costs (especially in transportation costs and new salary standards), the lack of security, legal uncertainties, and the lack of infrastructure development (especially in logistics sector). Therefore, Indonesian investors are looking for new markets with more cost-efficient by expanding their businesses abroad.

Net FDI outflows in Indonesia were reported at 1.16% of GDP in 2008<sup>149</sup>, 0.42% of GDP in 2009<sup>150</sup> and 0.38% of GDP in 2010<sup>151</sup>. As of 2011, Indonesian investors had invested 7.7 billion USD in a various business sectors in Asia, the Americas and Africa. The investment value grew by 185% compared to 2.7 billion USD in 2010<sup>152</sup>. Direct investments abroad made by Indonesian investors almost tripled in value in 2011. However, it reflects deteriorating investment conditions domestically. The total dollar amount of stock of direct investments abroad of Indonesia is \$10,510,000,000 which was ranked 46<sup>th</sup> among other countries<sup>153</sup>.

#### **3.2.2 Malaysia**

Malaysia's outward FDI had taken a leap since the 1990s, or since the economic reforms had been initiated. The Malaysia's outward FDI undertaken primarily by the government-linked companies (GLCs)<sup>154</sup> is focused mainly in the oil and gas industry, services sector (i.e., hotel

<sup>147</sup> Pangestu (1996).

<sup>148</sup> Della Temenggung. Productivity Spillovers from Foreign Direct Investment: Indonesian Manufacturing Industry's Experience 1975-2000. 2006.

<sup>149</sup> World Bank (2009).

<sup>150</sup> World Bank (2010).

<sup>151</sup> World Bank (2011).

<sup>152</sup> Hans David Tampubolon. Indonesian firms invest heavily abroad. 2012.

<sup>153</sup> Central Intelligence Agency. The CIA World Factbook 2011. 2011.

<sup>154</sup> Tajul Ariffin Masron and Amirul Shah Md Shahbudin. 'Push Factors' Of Outward FDI: Evidence from Malaysia and Thailand. 2010.

and telecommunications), construction industry, property and real estate, banking and finance, and in the manufacturing sector (i.e., food and beverages). The overseas investment destinations are mainly in ASEAN, East Asia, South Asia, North Africa, Middle East countries, and certain developed western countries. Malaysian investors maintain their competitiveness by taking advantage of the opportunities from regional agreements, the various bilateral agreements including Free Trade Agreements (FTAs), and the outsourcing which is the current global trend.

The push factor that contributed to Malaysia's outward FDI is Wawasan 2020 or Vision 2020 which aims to be a self sufficient industrialized nation encompassing all aspects of life from economic prosperity and social well being. The main pull factors that attracted Malaysia's outward FDI are supply of cheap labor, the abundance of raw materials, large and growing domestic markets, geographic proximity, special tax and other incentives, and the development of export markets through preferential treatment<sup>155</sup>. Moreover, the increasing power of the Malaysian ringgit is encouraging Malaysian investors to invest in overseas properties<sup>156</sup>.

At present, Malaysian companies are increasingly undertaking investments overseas. Malaysia's overseas investment jumped from 7.26 billion USD in 2006 to 13.90 billion USD in 2007 and to 15.93 billion USD in 2008, implying Malaysian investors increased interest and capability to expand and diversify their investments abroad.

Malaysian government has encouraged and facilitated Malaysian investors to invest abroad in order to capture new markets, new investment opportunities, and new technology. Incentives provided by the Malaysian government for promoting Malaysian investors investing overseas are tax exemption on income earned overseas and remitted back to Malaysia; tax deduction for pre-operating business expenditure in connection with proposals to undertake investments in business ventures overseas; and Malaysia-Singapore Third Country Business Development Fund allowing Malaysian and Singaporean enterprises to cooperate and jointly identify investment and business opportunities in "third countries"<sup>157</sup>.

### **3.2.3 Singapore**

Singapore has a highly developed and successful free-market economy with high GDP per capita. Despite its land constraints and lack of resources, Singapore's development has relied heavily on overseas investment, owing to its financial and management potential<sup>158</sup>, in order to obtain market access and higher-value-added technology development. In the post-crisis era, Singapore has benefited from increasing investment in developing Asia as well as from the rising capital flows to the emerging economies in general. Singapore also accounted for half of ASEAN's FDI.

Overseas investment by Singapore's investors can be divided into overseas subsidiaries, overseas associates, and overseas affiliates. An overseas subsidiary is a company incorporated outside Singapore in which a Singapore company owns at least 50% of the ordinary paid-up shares. An overseas associate is a company incorporated outside Singapore in which a Singapore

<sup>155</sup> Mohamed Ariff. *Outward Foreign Direct Investment: The Malaysian Experience*. 2006.

<sup>156</sup> Malaysian currency strength encouraging overseas investment says CBRE. *The Overseas Property Professional* (25 October 2011).

<sup>157</sup> Malaysian Industrial Development Authority, Malaysia. *Malaysia-Singapore Third Country Business Development Fund*. 2010.

<sup>158</sup> International Institute for Trade and Development (Public Organization), Thailand. 2009.



company owns at least 20% but less than 50% of the ordinary paid-up shares. The definition of subsidiary and associate is in line with the accounting practice in Singapore. From the 1995 survey onwards, it was expanded the investment in “other overseas affiliate”, which is company incorporated outside Singapore and Singapore company owns at least 10% but less than 20% of the ordinary shares. Moreover, investments in overseas companies with less than 10% equity interest are treated as foreign portfolio investment (FPI)<sup>159</sup>.

As of 2009, there are three components of Singapore’s investment abroad, i.e., direct investment (48.8%), portfolio investment (28.3%) and other foreign assets (22.9%). Singapore’s overseas direct investments were concentrated in financial & insurance services (49.5 % or \$177.9 billion), manufacturing sectors (23.4 % or \$84.1 billion), real estate activities (5.6 %), wholesale & retail trade (5.5 %), and information & communications (4.7 %). Major Asian hosts to Singapore investors were China (\$58.1 billion), Malaysia (\$28.7 billion) and Indonesia (\$26.3 billion). There were also significant direct investments from Singapore to Hong Kong (\$21.5 billion) and to Thailand (\$19.5 billion)<sup>160</sup>. Total investment abroad made by Singapore’s corporate sector grew from \$669.0 billion as of 2008 to \$736.5 billion as of 2009. Moreover, Singapore’s stock of direct investment in Asia rose 9.7% to reach \$189.8 billion.

In 2010, Singapore investors continued to expand aggressively overseas, with cumulative direct investment abroad hitting \$311.8 billion, or increasing by 8.9% over 2009, moreover, the Singapore’s overseas investments were channeled to China (\$68 billion), British Virgin Islands (\$34 billion), United Kingdom (\$32 billion) and Malaysia (\$31 billion).

In 2011, Singapore’s direct investment outflows increased by 9.7% over 2010 and cumulative direct investment abroad soared 27% above GDP in 2010. Moreover, International Enterprise (IE) Singapore assisted Singapore’s companies on 336 overseas projects, with two-thirds taking place in developing regions such as Indonesia, Vietnam and United Arab Emirates. Moreover, most of Singapore’s direct investment outflows were channeled to China, accounting for 104 overseas projects in 2011, or increasing by 50% since 2009<sup>161</sup>.

In terms of net outflows of FDI, it was at -0.14% of GDP in 2008, 9.80% of GDP in 2009<sup>162</sup>, and 9.46% of GDP in 2010.<sup>163</sup>

The government of Singapore has started promoting FDI since 1993 by setting The Committee to Promote Enterprise Overseas. Singapore's outward FDI has been led by government-linked companies (GLCs). Moreover, International Enterprise Singapore (IE Singapore) is the lead agency under the Ministry of Trade and Industry with the responsibility to develop Singapore's external trade and help Singapore based companies to expand overseas. In the period 1990-2009, Singapore ranked 1<sup>st</sup> in the value of overseas investment comparing with other ASEAN countries<sup>164</sup>.

<sup>159</sup> Department of Statistics, Singapore. Singapore’s Investment Abroad 2006. 2006.

<sup>160</sup> Department of Statistics, Singapore. Singapore’s Investment Abroad. 2009.

<sup>161</sup> The Singapore Department of Statistics and International Enterprise Singapore, Singapore. Overseas investment outflows enjoy strong growth, with 9.7% increase in 2011, 2012.

<sup>162</sup> World Bank Report (2010).

<sup>163</sup> World Bank Report (2011).

<sup>164</sup> Sunti Tongkaew. The Push and Pull Factors of Outward Foreign Direct Investment of Singapore Malaysia Thailand in Cambodia Lao and Vietnam. 2010.

### 3.2.4 Vietnam

Vietnamese investors have expanded their businesses to regional and global markets (especially in energy, rubber plantation and telecommunications projects) because they have successfully occupied the domestic market and have been competitive enough for international markets. The government began encouraging local companies to invest overseas during 2007-2008 owing to its ample capital sources<sup>165</sup>. The priority support policies of the government for Vietnam's FDI outflows are support on investment capital, tax favourable policy, implementation of bilateral agreements, and labour training.

Vietnam's FDI outflows in the period 1989-2008 were in 35 countries and regions, and concentrated on the service fields and industry sectors. In 2011, Vietnam had a total of US\$10.8 billion of investment in 627 projects in 55 countries which helped Vietnamese investors approach markets better, expand investment opportunities, and establish appropriate business channels. Net outflows of FDI were at 0.33% of GDP in 2008, 0.72% of GDP in 2009<sup>166</sup>, and 0.85% of GDP in 2010<sup>167</sup>. As of 2011, Laos ranked 1<sup>st</sup> in Vietnam's investment destination receiving \$3.4 billion, followed by Cambodia (\$2.1 billion) and Venezuela (\$1.8 billion). PetroVietnam is Vietnam's highest outbound investor accounting for \$347 million, followed by Viettel (\$185 million), the Vietnam Rubber Corporation (\$134.6 million), and Song Da Corporation (\$161 million)<sup>168</sup>.

The obstacles for Vietnamese investors wishing to do business overseas are poor state management procedures, conflicts in regulations on investment certificate granting, limited development capacity of some investors, low efficiency of overseas investments, and non-existent legal regulations on local enterprises' indirect overseas investment<sup>169</sup>. Moreover, the return on overseas investments has been very low so far.

### 3.2.5 Thailand

Thailand is one of Southeast Asia's best performers owing to its well-developed infrastructure, a free-enterprise economy, and generally pro-investment policies. However, overall economic growth has fallen sharply in 2008 and 2009 because of global downturn and persistent political crisis which eroded investor and consumer confidence.

Kee Hwee Wee (2007) found that outward FDI from Thailand has become more prominent since the late 1980s. There are 4 phases of Thai outward FDI as follows:

1.) The first phase (early stage)

Before the first half of the 1980s, there was limited amount of Thai investment abroad in response to the government's strict capital control. At that time, most of overseas investments were undertaken by financial institutions in key trading partner countries (i.e., Hong Kong and Singapore).

2.) The second phase (take-off stage)

<sup>165</sup> Le Hung Vong. Overseas investments soar as FDI plunges. 2011.

<sup>166</sup> World Bank Report (2010).

<sup>167</sup> World Bank Report (2011).

<sup>168</sup> Vietnam invests US\$10.8b overseas. The Jakarta Post (6 January 2012).

<sup>169</sup> Foreign Investment Agency, Ministry of Planning and Investment, Vietnam. Foreign Direct Investment (2011).

It took place between 1986 and 1996 when Thai outward FDI increased rapidly, especially in ASEAN countries.

3.) The third phase (financial crisis impact stage)

There was a dramatic decline in Thai outward FDI due to the impact of the financial crisis during 1997-2002.

4.) The fourth phase (recovering stage)

Since 2003, there has been a recovery in outward FDI encouraging by support policy, recovery from the financial crisis, and the conclusion of regional and bilateral free trade agreements<sup>170</sup>.

Kee Hwee Wee (2007) also stated that Thai firms invest abroad in order to increase competitiveness through extending market access, strengthening brand and ownership advantages (i.e., business experience, skills or technological know-how), taking advantage of opportunities in host countries, and relocating to a low-cost country (Thailand increased wages by 15.2% in 2011<sup>171</sup>). Moreover, Thai investors invest in neighboring countries (i.e., Cambodia, Lao PDR and Vietnam) resulting from Thai Overseas Development Assistance on the improvement of infrastructures in these neighboring countries, which created new investment opportunities to Thai investors<sup>172</sup>.

Most of the overseas investments have come from energy sector and have been through mergers and acquisitions. Total investment overseas by Thai companies from 2006 to 2010 reached 6.64 billion USD, accounting for 93% of total mergers and acquisitions value, and it reached 2.7 billion USD in 2011. Net outflows of FDI in Thailand were 1.50% of GDP in 2008, 1.56% of GDP in 2009<sup>173</sup>, and 1.66% of GDP in 2010<sup>174</sup>. Thailand's overseas investment focuses mainly on Australia and North America.

The obstacles to Thai overseas investment are a lack of knowledge of investment regulations in targeted countries; a lack of market information; a lack of coherent institutional support and government guidance; few significant Thai government incentives encouraging Thai firms to invest abroad; limited access to finance (especially SMEs); the absence of skilled human resources; and double taxation. Therefore, the government should launch a more comprehensive investment-promotion plan and ease barriers to Thai investors.

In terms of support measures, the government has been encouraging Thai enterprises in infrastructure in the sub-regional economic cooperation areas of which Thailand is a member. These sub-regional areas include the Greater Mekong Sub-region (GMS), the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC), and Ayeyawady-Chao Phraya, Mekong Economic Cooperation Strategy (ACMECS). The institutions providing overseas investment support include the Board of Investment (BOI), EXIM Bank of Thailand,

<sup>170</sup>Kee Hwee Wee. Outward foreign direct investment by enterprises from Thailand. 2007.

<sup>171</sup>JETRO Comparative Survey 2011, The Japan External Trade Organization. The 21th Comparative Survey of Investment-Related Costs in 31 Major Cities and Regions in Asia and Oceania. 2011.

<sup>172</sup>Kee Hwee Wee. Outward foreign direct investment by enterprises from Thailand. 2007.

<sup>173</sup>World Bank Report (2010).

<sup>174</sup>World Bank Report (2011).

the Federation of Thai Industries, the Thailand Board of Trade, the Ministry of Finance, and the Ministry of Foreign Affairs<sup>175</sup>.

The latest policies encouraging Thailand's overseas investment are as follows:

Since 2010, the Bank of Thailand (BOT) has lifted the overseas investment ceiling from US\$30 billion to \$50 billion in order to stabilize the Thai baht in greater currency volatility. Moreover, BOT has also reduced limits on the purchase of real estate abroad<sup>176</sup>. In 2012, BOT expects to launch a master plan that will encourage Thai investment overseas to help balance fund flows and promote greater awareness of the private sector's foreign exchange risk management<sup>177</sup>. The Office of the Board of Investment (BOI) has amended its law with a provision of low interest rate loans for Thai investors who plan to invest in foreign countries, and a provision of tax exemption for profit posted by overseas investment. Moreover, two times of the expenses the Thai investors spent for carrying out feasibility study on overseas investment will also be allowed to deduct their annual corporate tax.

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<sup>175</sup> Kee Hwee Wee. Outward foreign direct investment by enterprises from Thailand. 2007.

<sup>176</sup> Bank of Thailand (2010).

<sup>177</sup> Bank of Thailand (2012).

## CHAPTER IV

### METHODOLOGY

This chapter presents quantitative analysis in 2 aspects which are FDI attractiveness and relative FDI attractiveness.

#### 4. Quantitative Analysis

##### 4.1 FDI Attractiveness

Panel Data Estimation is applied to estimate the determinants of FDI in 4 host ASEAN countries separately. The economic relationship based on the existing literatures on determinants of inward FDI is proposed as follows:

$$RFDI_{ijt} = f(RGDP_{ijt}^+, REX_{ijt}^+, RIM_{ijt}^+, RW_{ijt}^+, RER_{ijt}^+, RBC_{ijt}^-, GEOD_{ijt}^-) \quad (1)$$

$$RFDI_{ijt} = \beta_0 + \beta_1 RGDP_{ijt}^+ + \beta_2 REX_{ijt}^+ + \beta_3 RIM_{ijt}^+ + \beta_4 RW_{ijt}^+ + \beta_5 RER_{ijt}^+ + \beta_6 RBC_{ijt}^- + \beta_7 GEOD_{ijt}^- + \mu_{ijt} \quad (2)$$

The log-linear form of the above equation is:

$$\ln RFDI_{ijt} = \beta_0 + \beta_1 \ln RGDP_{ijt}^+ + \beta_2 \ln REX_{ijt}^+ + \beta_3 \ln RIM_{ijt}^+ + \beta_4 \ln RW_{ijt}^+ + \beta_5 \ln RER_{ijt}^+ + \beta_6 \ln RBC_{ijt}^- + \beta_7 \ln GEOD_{ijt}^- + \mu_{ijt} \quad (3)$$

$i = 1, 2, 3, \dots, N;$

$j = 1, 2, 3, \dots, N;$

$t = 1, 2, 3, \dots, T;$

Where

**RFDI**: The relative annual real inward FDI, defined as the ratio of home country's real inward FDI to host country's real inward FDI;

**RGDP**: The relative real GDP, defined as the ratio of home country's real GDP to host country's real GDP;

**REX**: The relative real export, defined as the ratio of the host country's real export to the home countries' real export;

**RIM**: The relative real import, defined as the ratio of the home country's real import to the host countries' real import;

**RWAGE**: Relative real wage, defined as the ratio of home country's real wage to host country's real wage;

**RER**: Relative real exchange rate, defined as the ratio of the home country's real currency/US\$ exchange rate to host country's real currency/US\$ exchange rate;

**RBC**: Relative real borrowing cost, defined as the ratio of home country's nominal lending interest rate to the host country's nominal lending interest rate;

**GEOD**: The geographic distance between home country and the capital of the host country.

Where + and - denote the direction of the expected effect of the factors on FDI from the home country in the host country.

Where  $i$ ,  $j$  and  $t$  denote host country, home country and time respectively.  $N$  is the total number of countries,  $T$  is the overall time period and  $\mu_{it}$  represents the error term.

Moreover, there are several advantages of adopting a log-linear form. Firstly, in the case of FDI in each ASEAN country, there are extreme values arising from surges of inflows in some years. The use of logarithms may counteract this problem statistically. Secondly, it can transform a likely non-linear relationship between inward FDI in each ASEAN country and the explanatory variables into a linear one. Thirdly, the  $\beta$  in the log-linear model (3) directly measure FDI elasticities with respect to the explanatory variables. Alternatively, these coefficients may be interpreted as the partial derivatives of the growth rate of FDI with respect to the growth rate of the explanatory variables.

Panel data (or time-series cross-sectional data) is the term used when the data are dominated by large numbers of units (i) relative to time periods (t). Panel analysis uses panel data to examine changes in variables over time and differences in variables between subjects. There are several benefits from using panel data, for example, panel data gives more informative data, more variability, less collinearity among the variables, and more degrees of freedom hence more efficiency<sup>1</sup>. The following are the three types of panel analytic models used:

(1) Pooled regression model

Pooled regression model is one type of model that has constant coefficients, referring to both intercepts and slopes. For this model, researchers can pool all of the data and run an ordinary least squares regression model.

(2) Fixed effect model

The fixed effect model is the differences across cross-sectional units that can be captured in differences in the constant term and the intercept term of the regression model varies across the cross sectional units.

(3) Random effect model

For the random effect model, the individual effects are randomly distributed across the cross-sectional units and in order to capture the individual effects, the regression model is specified with an intercept term representing an overall constant term<sup>2</sup>.

In order to find the appropriate model, the pooled regression model, fixed effect model and the random effect model were considered in each equation. Several methods are applied to identify the best statistical model. The Lagrange multiplier (LM) test was used to test for the random-effect model against the pooled OLS model. Redundant fixed effect was used to test for the fixed-effect model against pooled regression model. Hausman test<sup>3</sup> was used to test for the random-effect model against the fixed-effect model. Model fitness was measured by R-squared<sup>4</sup>. The above regression was applied to each equation separately<sup>5</sup>.

Panel Data Estimation was used to analyze the determinants of FDI in each host country from all selected home countries in ASEAN. Moreover, OLS estimation was used to analyze the determinants of FDI from each home country in each host country separately (The results are presented in Appendix D). This study emphasizes only the results from Panel Data Estimation.

<sup>1</sup> Hsiao (1985), Klevarmarken (1989) and Solon (1989)

<sup>2</sup> Seddighi (2000)

<sup>3</sup> Hausman (1978)

<sup>4</sup> Buse (1973)

<sup>5</sup> Wenhui Wei. The State University of New Jersey, 2005, p.729.

#### 4.2 Relative FDI Attractiveness

An econometric decomposition method (Oaxaca-Blinder decomposition) is used to quantify the contribution of each explanatory variable to the total gap, as a percentage of the total FDI gap (Some of the differences in FDI inflow between host ASEAN countries can be explained by the differences in the characteristics). As long as the expected mean of the error terms in the regressions are both zero, the total estimated gap in FDI inflows between host ASEAN countries can be represented by:

$$\overline{\ln RFDI}_1 - \overline{\ln RFDI}_2 = \hat{\beta}'_1 \bar{X}_1 - \hat{\beta}'_2 \bar{X}_2 \quad (4)$$

Where  $\hat{\beta}_1$  and  $\hat{\beta}_2$  represent the estimated coefficients of the log-linear regression of two host ASEAN countries.  $\bar{X}_1$  and  $\bar{X}_2$  represent the average characteristics of two host ASEAN countries relative to the home countries. The total estimated gap can be further decomposed into the following two components:

$$\overline{\ln RFDI}_1 - \overline{\ln RFDI}_2 = \hat{\beta}'_1 (\bar{X}_1 - \bar{X}_2) + (\hat{\beta}_1 - \hat{\beta}_2)' \bar{X}_2 \quad (5)$$

The first component is the “explained portion” of the gap, which is sum of the differences in country 1 and country 2 in their observed characteristic weighted by country 1’s estimated coefficients. The second component is the “unexplained portion” of the gap, which is the sum of differences in country 1 and country 2’s estimated coefficients weighted by country 2’s endowments. There is an obvious index-number problem as one can instead evaluate the first component of equation (5) by country 2’s estimated coefficients, and the second component by country 1’s endowments. But Wenhui Wei (2005) found the analyses yielded similar results.

This study reported the contribution of each characteristic to the total gap, as a percentage of the total FDI gap. For example, the contribution of FDI differences in the distribution of real GDP (RGDP) to the estimated total gap between country 1 and country 2 can be calculated as:

$$\frac{\left(\hat{\beta}_1^{\text{RGDP}}\right)' \bar{X}_1^{\text{RGDP}} - \left(\hat{\beta}_1^{\text{RGDP}}\right)' \bar{X}_2^{\text{RGDP}}}{\hat{\beta}'_1 \bar{X}_1 - \hat{\beta}'_2 \bar{X}_2} \times 100 \quad (6)$$

Where  $\hat{\beta}_1$  and  $\hat{\beta}_2$  represent the estimated coefficients of the log-linear regression of two host ASEAN countries.  $\bar{X}_1$  and  $\bar{X}_2$  represent the average characteristics of two host ASEAN countries relative to the home countries. And RGDP is the two host countries’ variable which we would like to find the contribution of this characteristic to the total gap, as a percentage of the total FDI gap. However, the estimated coefficient is already in logarithmic form which

represents the percentage change, so it would not be multiplied by 100 in order to represent the percentage result.

Moreover, Oaxaca-Blinder decomposition method can also imply which factor helps increasing or decreasing FDI gap between the host countries by applying Oaxaca command in Stata.

The Oaxaca command in Stata for Two-fold decomposition is as follow:

```
. oaxaca Y X1 X2 X3, by(group) pooled
```

The Oaxaca command in Stata used in this study is as follow:

```
. oaxaca RFDI RGDP REX RIM RW RER RBC GEOD, by(group) pooled
```

Moreover, data source and data analysis is presented in Appendix B.



## CHAPTER V

### RESEARCH RESULTS

This chapter presents research results which are FDI attractiveness and relative FDI attractiveness. The tables and figures of research results are shown in Appendix C. Moreover, results analysis is also presented at the end of this chapter.

#### 5.1 FDI Attractiveness

##### 5.1.1 FDI Attractiveness from All Selected Home Countries

###### 5.1.1.1 Thailand

**Host country:** Thailand

**Home country:** Indonesia, Malaysia, Singapore, Vietnam

From Pooled Least Squares method in Table 19 of Appendix C, a value of R-squared is close to 1 indicating a better fit.

The "F value" and "Prob(F)" statistics test the overall significance of the regression model. At a confidence level of 99 percent (Significance at the 0.01 level), probability of F-statistics has a value of zero which is less than 0.01, so we reject the null hypothesis ( $H_0 : \beta_1 = 0, \beta_2 = 0$ ) and independent variables are significant to explain dependent variable.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.776312 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RGDP, RIM and GEOD have the wrong sign.

The coefficients of RGDP, RIM and RW are statistically significant at 5%. Therefore, RGDP, RIM and RW have an impact on Thailand's RFDI. However, only RW has the correct sign.

If RW increases by 1%, RFDI increases by 1.810425 %.

###### 5.1.1.2 Malaysia

**Host country:** Malaysia

**Home country:** Indonesia, Thailand, Singapore

From Pooled Least Squares method in Table 20 of Appendix C, a value of R-squared is close to 1 indicating a better fit.

The "F value" and "Prob(F)" statistics test the overall significance of the regression model. At a confidence level of 99 percent (Significance at the 0.01 level), probability of F-statistics has a value of zero which is less than 0.01, so we reject the null hypothesis ( $H_0 : \beta_1 = 0, \beta_2 = 0$ ) and independent variables are significant to explain dependent variable.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.683313 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RIM and RW have the wrong sign.

The coefficients of RER, RBC and GEOD are statistically significant at 10%. Therefore, RER, RBC and GEOD have an impact on Malaysia's RFDI.

If RER increases by 1%, RFDI increases by 0.527639 %.

If RBC increases by 1%, RFDI decreases by 0.223738%.

If GEOD increases by 1%, RFDI decreases by 6.239357%.

### **5.1.1.3 Indonesia**

**Host country:** Indonesia

**Home country:** Malaysia, Thailand, Singapore

From Pooled Least Squares method in Table 21 of Appendix C, a value of R-squared is not close to 1, so it could not be indicated as goodness of fit.

The "F value" and "Prob(F)" statistics test the overall significance of the regression model. At a confidence level of 99 percent (Significance at the 0.01 level), probability of F-statistics has a value of 0.000031 which is less than 0.01, so we reject the null hypothesis ( $H_0 : \beta_1 = 0, \beta_2 = 0$ ) and independent variables are significant to explain dependent variable.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 2.070318 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

RGDP, REX, RW, RER, RBC and GEOD have the wrong sign.

No coefficient is statistically significant.

### **5.1.1.4 Vietnam**

**Host country:** Vietnam

**Home country:** Indonesia, Malaysia, Singapore, Thailand

From Pooled Least Squares method in Table 22 of Appendix C, a value of R-squared is close to 1 indicating a better fit.

The "F value" and "Prob(F)" statistics test the overall significance of the regression model. At a confidence level of 99 percent (Significance at the 0.01 level), probability of F-statistics has a value of zero which is less than 0.01, so we reject the null hypothesis ( $H_0 : \beta_1 = 0, \beta_2 = 0$ ) and independent variables are significant to explain dependent variable.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.418424 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RER has the wrong sign.

The coefficient of RER is statistically significant at 5% and the coefficient of RGDP is statistically significant at 10%.

Therefore, RER and RGDP have an impact on Vietnam's RFDI. However, only RGDP has the correct sign.

If RGDP increases by 1%, RFDI increases by 0.696036 %.

### **5.1.2 FDI Attractiveness from Each Selected Home Country**

The results of this part are presented in Appendix D because this study emphasizes only in the results of FDI Attractiveness from All Selected Home Countries.

## **5.2 Relative FDI Attractiveness**

According to the equation (6) in chapter IV, this part will quantify the contribution of each characteristic to the total gap, as a percentage of the total FDI gap, between two host countries. The positive result implies that the factor helps increase FDI gap between two host countries. The estimated coefficient is already in logarithmic form which represents the percentage change, so it would not be multiplied by 100 in order to represent the percentage result.

### **5.2.1 Thailand**

#### **1) Thailand (Host) –Indonesia (Host)**

The contributions of all variables between two host countries which are Thailand and Indonesia are shown in column (I) in Table 23 of Appendix C.

RGDP, RW, and RBC help increase FDI gap of Thailand for 0.21%, 1.79% and 0.009%, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

#### **2.)Thailand (Host) –Malaysia (Host)**

The contributions of all variables between two host countries which are Thailand and Malaysia are shown in column (I) in Table 23 of Appendix C.

REX, RW, and RER help increase FDI gap of Thailand for 0.08%, 0.04% and 0.13%, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

#### **3.)Thailand (Host) –Vietnam (Host)**

The contributions of all variables between two host countries which are Thailand and Vietnam are shown in column (I) in Table 23 of Appendix C.

RIM, RW, and GEOD help increase FDI gap of Thailand for 0.12 %, 5.87 % and 0.001%, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

### **5.2.2 Malaysia**

#### **1.)Malaysia (Host) –Indonesia (Host)**

The contributions of all variables between two host countries which are Malaysia and Indonesia are shown in column (I) in Table 27 of Appendix C.

RIM and RBC help increase FDI gap of Malaysia for 0.06 % and 11.33 %, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

#### **2.)Malaysia (Host) –Thailand (Host)**

The contributions of all variables between two host countries which are Malaysia and Thailand are shown in column (I) in Table 27 of Appendix C.

RGDP, REX, RER and GEOD help increase FDI gap of Malaysia for 0.68 %, 0.04%, 0.47% and 1.18 %, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

### **3.)Malaysia (Host) –Vietnam(Host)**

The contributions of all variables between two host countries which are Malaysia and Vietnam are shown in column (I) in Table 27 of Appendix C.

REX, RW, RER and GEOD help increase FDI gap of Malaysia for 0.51%, 7.59%, 8.59% and 3.98 %, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

#### **5.2.3 Indonesia**

##### **1.) Indonesia (Host) –Malaysia (Host)**

The contributions of all variables between two host countries which are Indonesia and Malaysia are shown in column (I) in Table 31 of Appendix C.

RGDP, REX, RER and GEOD help increase FDI gap of Indonesia for 24.53 %, 38.09 %, 318.47 % and 2.88 %, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

##### **2.) Indonesia (Host) – Thailand (Host)**

The contributions of all variables between two host countries which are Indonesia and Thailand are shown in column (I) in Table 31 of Appendix C.

RGDP, REX, RIM and RER help increase FDI gap of Indonesia for 0.10 %, 0.04%, 0.21 % and 3.48 %, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

##### **3.) Indonesia (Host) –Vietnam (Host)**

The contributions of all variables between two host countries which are Indonesia and Vietnam are shown in column (I) in Table 31 of Appendix C.

RGDP, RIM, RW and RER help increase FDI gap of Indonesia for 1.84 %, 1.18 %, 0.16 % and 1.66 %, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

#### **5.2.4 Vietnam**

##### **1.)Vietnam (Host) –Indonesia (Host)**

The contributions of all variables between two host countries which are Vietnam and Indonesia are shown in column (I) in Table 35 of Appendix C.

REX, RIM, RER, RBC and GEOD help increase FDI gap of Vietnam for 0.96 %, 0.59 %, 0.58 %, 0.11% and 0.19 %, respectively.

The part which can better explain the gap is “Explained part” which is an observable characteristic.

##### **2.)Vietnam (Host) –Malaysia (Host)**

The contributions of all variables between two host countries which are Vietnam and Malaysia are shown in column (I) in Table 35 of Appendix C.

REX, RIM and GEOD help increase FDI gap of Vietnam for 1.46 %, 0.77 % and 0.29 %, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

### 3.)Vietnam (Host) –Thailand (Host)

The contributions of all variables between two host countries which are Vietnam and Thailand are shown in column (I) in Table 35 of Appendix C.

RGDP, RW and RER help increase FDI gap of Vietnam for 1.04 %, 0.86 % and 1.50%, respectively.

The part which can better explain the gap is “Unexplained part” which is an unobservable characteristic.

### 5.3 Results Analysis

**Table 11: Relative FDI Attractiveness’s Result Comparison: Thailand and Indonesia**

Thailand-Indonesia	Indonesia-Thailand
Real GDP(0.21%)	Real export(0.04%)
Real wage(1.79% )	Real import(0.21 %)
Real lending interest rate(0.009%)	Real exchange rate(3.48 %)

Regarding the result in Table 11, different factor helps increase FDI gap of each host country.

Real wage helps increase FDI gap of Thailand for 1.79% comparing to Indonesia. It is because Thailand acts as an important production base for distributing products to the global market, and as a hub for re-exportation of products into additional markets. Although the wage in Indonesia is lower than in Thailand, Indonesia still has the main obstacle in the lack of skilled labor. However, foreign investors in Thailand may consider relocating to other countries owing to the daily minimum wage adjustment to 300 baht (US\$9.86) throughout the country and the devastation of the floods that hit Thailand in 2011. Foreign investors are eyeing Indonesia to replace Thailand as their manufacturing base owing to the similar manufacturing and tax facilities granted by the government of Indonesia.

Real exchange rate helps increase FDI gap of Indonesia for 3.48% comparing to Thailand.

**Table 12: Relative FDI Attractiveness’s Result Comparison: Thailand and Malaysia**

Thailand-Malaysia	Malaysia-Thailand
Real export(0.08%)	Real GDP(0.68 %)
Real wage(0.04% )	Real exchange rate(0.47% )
	Geographic distance(1.18 %)

Regarding the result in Table 12, different factor helps increase FDI gap of each host country.

Real export helps increase FDI gap of Thailand for 0.08% comparing to Malaysia. The FDI gap increased by real export is quite not different because both Thailand and Malaysia rely heavily on export-oriented manufacturing which includes the similar export goods. In 2011, the ease of doing business ranking of Malaysia and Thailand was quite not different<sup>1</sup>, but Thailand

<sup>1</sup> World Bank (2011).

(17<sup>th</sup>) achieved a higher ranking than Malaysia(18<sup>th</sup>). Thailand remains one of the easiest and most comfortable locations in ASEAN for manufacturing and other investment, while Malaysia is as an attractive destination for efficiency-seeking FDI.

Geographic distance helps increase FDI gap of Malaysia for 1.18% comparing to Thailand. This is because Malaysia is strategically positioned as the gateway into the ASEAN region and has market-oriented economy, supportive government policies, and a large local business community which is ready to do business with international corporations. The headquarters, regional offices and support centers of many multinational companies have been based in Malaysia, especially finance and accounting, and information technology functions. Although Thailand is located near Malaysia, Malaysia is the faster growing country and has a higher level of political stability than Thailand. Moreover, the Malaysian financial sector did not shoulder such large non-performance loans in the economic crisis in 1997, which led to the expansion of mergers and acquisitions that drew in FDI flows in Malaysia.

**Table 13: Relative FDI Attractiveness's Result Comparison: Thailand and Vietnam**

Thailand-Vietnam	Vietnam-Thailand
Real Import(0.12 %)	Real GDP(1.04 %)
Real wage(5.87 %)	Real exchange rate(1.50%)
Geographic distance(0.001%)	

Regarding the result in Table 13, different factor helps increase FDI gap of each host country.

Real wage helps increase FDI gap of Thailand for 5.87% comparing to Vietnam. Thailand and Vietnam are cost competitive locations to locate a business. Although Vietnam's labor costs are currently lower than those in Thailand and labor availability in Vietnam is greater than in Thailand, the wages in Vietnam are rising particularly in the high position jobs (i.e., managers, accountants, HR professionals, Engineers, etc). Comparing Vietnam to Thailand, Thailand looks like a better choice for foreign investors who concentrate on pro-business policies, rule of law, right to own land, mandated personnel benefits, tax incentives and quality of life for company executives sent to manage operation.

Real exchange rate helps increase FDI gap of Vietnam for 1.50% comparing to Thailand. There are many developments in investment in Vietnam which is favourable to the Vietnamese Dong. Current updates on investment in Vietnam include active investment funds, costly lease agreements, Japanese investment entry, and decentralized FDI management. All of these strategies have been expected to support Vietnamese Dong revaluation. At present, FDI mechanism employs a decentralization strategy to come up with favourable investment conditions. Decentralized FDI processing is anticipated to give off an enormous sigh of relief to foreign investors. The decentralization strategy in Vietnam is likely to raise the value of the Vietnamese Dong.

**Table 14: Relative FDI Attractiveness's Result Comparison: Malaysia and Indonesia**

Malaysia-Indonesia	Indonesia-Malaysia
Real Import(0.06 % )	Real GDP (24.53 %)
Real lending interest rate(11.33 %)	Real export(38.09 %)
	Real exchange rate(318.47 % )
	Geographic distance(2.88 %)

Regarding the result in Table 14, different factor helps increase FDI gap of each host country.

Real lending interest rate helps increase FDI gap of Malaysia for 11.33% comparing to Indonesia. Regarding lending interest rate in Malaysia, interest rate policy has primacy over other tools in the Malaysian central bank's management of foreign reserves in order to cope with currency volatility. The government of Malaysia supports industrialization in the provision of interest-free loans. Bank Negara, the central bank of Malaysia, also provides free of charge for new financing with loan tenures of up to 5 years. At present, low interest loans in Malaysia has increased access to foreign exchange, and contributed the massive influx in the number of FDI's in Malaysia. Malaysia is not keen to increase interest rates as it would have an impact on private investments.

Real exchange rate helps increase FDI gap of Indonesia for 318.47% comparing to Malaysia. In the past few years, the exchange rate of Malaysian ringgit as against US dollar has depreciated sharply owing to global financial crisis accelerated in September 2008, rising FDI in Indonesia. However, since the second half of 2010, Malaysia has opened and expanded the investment door for foreign investors to invest in Malaysia's stock market. With Malaysia's long term capital income drastically been improved, the amount of hot money that flows into Malaysia share market has pushed the Malaysian currency from depreciation to appreciation accompanied by low volatility. Currency in Indonesia has undergone relatively mild appreciation compared to other currencies in the region, enabling Indonesia to maintain a competitive position.

**Table 15: Relative FDI Attractiveness's Result Comparison: Malaysia and Vietnam**

Malaysia-Vietnam	Vietnam-Malaysia
Real wage(7.59%)	Real export(1.46 %)
Real exchange rate(8.59% )	Real import(0.77 %)
Geographic distance(3.98 %)	

Regarding the result in Table 15, different factor helps increase FDI gap of each host country.

Real exchange rate helps increase FDI gap of Malaysia for 8.59% comparing to Vietnam. In the past few years, the exchange rate of Malaysian ringgit as against US dollar has depreciated sharply owing to global financial crisis accelerated in September 2008. However, since the second half of 2010, Malaysia has opened and expanded the investment door for foreign investors to invest in Malaysia's stock market. With Malaysia's long term capital income drastically been improved, the amount of hot money that flows into Malaysia share market has pushed the Malaysian currency from depreciation to appreciation accompanied by low volatility.

Real export helps increase FDI gap of Vietnam for 1.46% comparing to Malaysia.

Vietnam's exports have been strong, primarily due to high demand for agriculture products, garments, and crude oil as well as a surge in commodity prices. FDI enterprises in Vietnam have gain benefits from export turnover owing to the export growth of FDI companies, especially electronic component manufacturing projects that have been in operational. Although the credit squeeze in Vietnam could lead to an investment slowdown but foreign capital inflows would continue to be strong.

**Table 16: Relative FDI Attractiveness's Result Comparison: Indonesia and Vietnam**

Indonesia-Vietnam	Vietnam-Indonesia
Real GDP (1.84 %)	Real export(0.96 %)
Real import(1.18 %)	Real lending interest rate(0.11% )
Real wage(0.16 %)	Geographic distance(0.19 %)
Real exchange rate(1.66 %)	

Regarding the result in Table 16, different factor helps increase FDI gap of each host country.

Real GDP helps increase FDI gap of Indonesia for 1.84% comparing to Vietnam. As the market size is usually measured by GDP, the booming domestic consumption in Indonesia has attracted strong FDI inflows to the country. However, the strong GDP results in rising inflation concerns. Booming domestic consumption and investment has enabled Indonesia to grow faster than its neighbors whose economies are more dependent on global trade flows.

Real export helps increase FDI gap of Vietnam for 0.96% comparing to Indonesia. Vietnam's exports have been strong, primarily due to high demand for agriculture products, garments, and crude oil as well as a surge in commodity prices. FDI enterprises in Vietnam have gain benefits from export turnover owing to the export growth of FDI companies, especially electronic component manufacturing projects that have been in operational. Although the credit squeeze in Vietnam could lead to an investment slowdown but foreign capital inflows would continue to be strong.



## CHAPTER VI

## CONCLUSION AND RECOMMENDATIONS

This chapter presents general conclusion, limitations and recommendations.

### 6.1 General Conclusion

#### 6.1.1 FDI Attractiveness from All Selected Home Countries

The variables help attract FDI inflows from all selected home countries are shown in Table 17 as follows:

**Table 17: Empirical Results: FDI Attractiveness from All Selected Home Countries**

Host Country	Home Country	FDI Attractiveness
Thailand	Indonesia, Malaysia, Singapore and Vietnam	Real wage
Malaysia	Indonesia, Singapore and Thailand	Real exchange rate, Real lending interest rate, Geographic distance
Indonesia	Malaysia, Singapore and Thailand	No significant variable
Vietnam	Indonesia, Malaysia, Singapore and Thailand	Real GDP

#### 6.1.2 Relative FDI Attractiveness

The variables which help increase FDI gap of each host country comparing with another host country are shown in Table 18 as follows:

**Table 18: Empirical Results: Relative FDI Attractiveness**

Host country (1)	Host country (2)	Factor helps increase FDI gap of host country (1)
Thailand	Indonesia	Real GDP(0.21%)
		Real wage(1.79% )
		Real lending interest rate(0.009%)
	Malaysia	Real export(0.08%)
		Real wage(0.04% )
		Real exchange rate(0.13%)
	Vietnam	Real Import(0.12 %)
		Real wage(5.87 % )
		Geographic distance(0.001%)
Malaysia	Indonesia	Real Import(0.06 % )
		Real lending interest rate(11.33 %)
	Thailand	Real GDP(0.68 %)
		Real export(0.04%)
		Real exchange rate(0.47% )
	Vietnam	Geographic distance(1.18 %)
		Real export(0.51%)
		Real wage(7.59%)
	Indonesia	Malaysia
Geographic distance(3.98 %)		
Real GDP (24.53 %)		
Thailand		Real export(38.09 %)
		Real exchange rate(318.47 % )
		Geographic distance(2.88 %)
Vietnam		Real GDP (0.10 %)
		Real export(0.04%)
		Real import(0.21 %)
Vietnam	Thailand	Real exchange rate(3.48 %)
		Real GDP (1.84 %)
		Real import(1.18 %)
	Malaysia	Real wage(0.16 % )
		Real exchange rate(1.66 %)
		Real GDP (0.96 %)
	Indonesia	Real import(0.59 %)
		Real exchange rate(0.58 %)
		Real lending interest rate(0.11% )
Thailand	Geographic distance(0.19 %)	
	Real export(1.46 %)	
	Real import(0.77 %)	
Malaysia	Geographic distance(0.29 %)	
	Real GDP(1.04 %)	
	Real wage(0.86 % )	
Indonesia	Real exchange rate(1.50%)	

## **6.2 Limitations and Recommendations**

### **6.2.1 Limitations**

Limitations of this study are as follows:

1.) The data of wage in many countries is not provided in US Dollar currency, so it has to be converted the currency to US Dollar.

2.) The ratio of home country's real wage to host country's real wage (RWAGE) must be neglected in some countries according to the lack of wage data in few countries.

### **6.2.2 Recommendations**

The differentiation among ASEAN countries' FDI inflows results from many reasons, for example, different degree of openness, different FDI incentive policy, reliance on external demand of the country, etc.

According to the results of FDI attractiveness from all selected home countries, the government of Thailand should emphasize the wage policy, for example, setting minimum wage requirements properly or setting fair wage policy. The government of Malaysia should emphasize the appropriate exchange rate regimes, rationalize the interest rates policy to increase the repayment ability of the borrowers which would reduce persistent loan defaults in the country, moreover, Malaysia should maintain the good relationship with its neighboring countries. Vietnam should strengthen the domestic demand in order to stimulate FDI inflows and economic growth.

According to the results of relative FDI attractiveness, Thailand has comparative advantage in wage comparing to Vietnam since real wage helps increase FDI gap of Thailand for 5.87% comparing to Vietnam. Malaysia has comparative advantage in lending interest rate comparing to Indonesia since real lending interest rate helps increase FDI gap of Malaysia for 11.33% comparing to Indonesia. Malaysia has comparative advantage in wage and exchange rate comparing to Vietnam since they help increase FDI gap of Malaysia for 7.59% and 8.59% respectively. Indonesia has comparative advantage in exchange rate comparing to Malaysia since real exchange rate helps increase FDI gap of Indonesia for 318.47% comparing to Malaysia. In case of Vietnam, the results show the very small gap in all factors which help increase FDI gap of Vietnam comparing to other host countries. In conclusion, these results show the differences in investment efficiency and basic needs between ASEAN countries. Therefore, each country should emphasize and enhance its own comparative advantages.

In the wake of the financial crisis which has an impact on ASEAN, it is useful to concentrate on the treatment of foreign investors which help restore investor confidence and allows foreign investors to play a greater role in the domestic economy. To attract foreign direct investment, the host country should improve its competitiveness and attractiveness towards a more favorable and effective environment for doing business, for example, maintaining macroeconomic stability, upgrading labor quality and infrastructure, enhancing transparent policy and investment promotion, etc. At the same time, ASEAN countries should also support local companies expanding abroad amid greater business opportunities. Moreover, in order to enhance intra-ASEAN FDI flows, ASEAN countries should concentrate on emerging growth sectors such as services (i.e., education, healthcare, tourism and environment), infrastructure, energy and agriculture, in order to diversify sources of FDI growth in ASEAN and bring more balanced growth to the region.

As the global investment environment becomes more competitive, ASEAN has to achieve the AEC goals in the near future and provide investors the certainty and predictability agreed under the various ASEAN agreements which help enhance intra-ASEAN FDI, enhance investment liberalization, improve investment facilitation and empower the ASEAN Comprehensive Investment Agreement (ACIA). Therefore, investor will be able to view ASEAN as a single regional market that has more drawing power than individual markets.

It is recommended that further research might explore in the following areas:

- 1.) To examine the FDI attractiveness in specific areas/aspects; for example, in manufacturing sector, service sector, agricultural sector, etc.
- 2.) To examine the FDI attractiveness whether in a regular or irregular situation (i.e., political instability, natural disaster, economic crisis, etc.) by applying dummy variable.
- 3.) To examine the FDI attractiveness and relative FDI attractiveness in other ASEAN countries apart from these 4 ASEAN countries as host countries.
- 4.) To examine other factors which help to attract FDI to the host country apart from these 7 exogenous variables.

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APPENDICES

APPENDIX A  
Oaxaca-Blinder Decomposition<sup>1</sup>

This study applied Oaxaca Blinder Decomposition to examine the relative FDI attractiveness of ASEAN countries.

Ben Jann (2008) stated that the counterfactual decomposition technique popularized by Blinder (1973) and Oaxaca (1973) is widely used to study mean outcome differences between groups. For example, the technique is often used to analyze wage gaps by sex or race. Methodology is to decompose mean differences in log wages based on regression models in a counterfactual manner. The procedure divides the wage differential between two groups into a part that is “explained” by group differences in productivity characteristics such as education or work experience and a residual part that cannot be accounted for by such differences in wage determinants. This “unexplained” part is often used as a measure for discrimination, but it also subsumes the effects of group differences in unobserved predictors. Most applications of the technique can be found in the labor market and discrimination literature. However, the method may also be useful in other fields. In general, the technique can be employed to study group differences in any (continuous and unbounded) outcome variable. For example, O’Donnell et al. (2008) use it to analyze health inequalities by poverty status.

**Methods and Formulas**

Ben Jann (2008) demonstrates how to derive the general formula for Oaxaca-Blinder Decomposition by focusing on wage differential between two groups as follows:

Given are two groups A and B, an outcome variable Y, and a set of predictors. For example, think of males and females, (log) wages as the outcome variable, and human capital indicators such as education and work experience as predictors. The question now is how much of the mean outcome difference

$$R = E(Y_A) - E(Y_B) \dots \dots \dots (1)$$

where  $E(Y)$  denotes the expected value of the outcome variable, is accounted for by group differences in the predictors.

Based on the linear model

$$Y_{\ell} = X_{\ell}'\beta_{\ell} + \epsilon_{\ell}, \quad E(\epsilon_{\ell}) = 0, \quad \ell \in \{A, B\} \dots \dots \dots (2)$$

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<sup>1</sup> Ben Jann (2008), A Stata implementation of the Blinder-Oaxaca decomposition.

where  $X$  is a vector containing the predictors and a constant,  $\beta$  contains the slope parameters and the intercept, and  $\epsilon$  is the error, the mean outcome difference can be expressed as the difference in the linear prediction at the group-specific means of the regressors. That is

$$R = E(Y_A) - E(Y_B) = E(X_A)' \beta_A - E(X_B)' \beta_B \dots \dots \dots (3)$$

since

$$E(Y_i) = E(X_i' \beta_i + \epsilon_i) = E(X_i' \beta_i) + E(\epsilon_i) = E(X_i)' \beta_i$$

with  $E(\beta_i) = \beta_i$  and  $E(\epsilon_i) = 0$  by assumption.

To identify the contribution of group differences in predictors to the overall outcome difference, equation (3) can be rearranged, for example, as follows (see Winsborough and Dickinson 1971; Jones and Kelley 1984; Daymont and Andrisani 1984):

$$R = [E(X_A) - E(X_B)]' \beta_B + E(X_B)' (\beta_A - \beta_B) + [E(X_A) - E(X_B)]' (\beta_A - \beta_B) \dots \dots \dots (4)$$

This is a “three-fold” decomposition, that is, the outcome difference is divided into three parts:

$$R = E + C + I$$

The first summand

$$E = [E(X_A) - E(X_B)]' \beta_B$$

amounts to the part of the differential that is due to group differences in the predictors (the “endowments effect”). The second component

$$C = E(X_B)' (\beta_A - \beta_B)$$

measures the contribution of differences in the coefficients (including differences in the intercept).

The third summand

$$I = [E(X_A) - E(X_B)]' (\beta_A - \beta_B)$$

is an interaction term accounting for the fact that differences in endowments and coefficients exist simultaneously between the two groups.

Decomposition (4) is formulated from the viewpoint of Group B. That is, the group differences in the predictors are weighted by the coefficients of Group B to determine the endowments effect (E). In other words, the E component measures the expected change in Group B’s mean outcome, if Group B had Group A’s predictor levels. Similarly, for the second component (C), the differences in coefficients are weighted by Group B’s predictor levels. That is, the second component measures the expected change in Group B’s mean outcome, if Group B had Group A’s coefficients. Naturally, the differential can analogously be expressed from the viewpoint of Group A, yielding the reverse three-fold decomposition

$$R = [E(X_A) - E(X_B)]' \beta_A + E(X_A)' (\beta_A - \beta_B) - [E(X_A) - E(X_B)]' (\beta_A - \beta_B) \dots \dots \dots (5)$$

Now the “endowments effect” amounts to the expected change of Group A’s mean outcome, if Group A had Group B’s predictor levels. The “coefficients effect” quantifies the expected change in Group A’s mean outcome, if Group A had Group B’s coefficients.

An alternative decomposition that is prominent in the discrimination literature results from the concept that there is some nondiscriminatory coefficients vector that should be used to determine the contribution of the differences in the predictors. Let  $\beta^*$  be such a nondiscriminatory coefficients vectors. The outcome difference can then be written as

$$R = [E(X_A) - E(X_B)]'\beta^* + [E(X_A)'(\beta_A - \beta^*) + E(X_B)'(\beta^* - \beta_B)] \dots\dots\dots(6)$$

We now have a “two-fold” decomposition

$$R = Q + U$$

where the first component

$$Q = [E(X_A) - E(X_B)]'\beta^*$$

is the part of the outcome differential that is “explained” by group differences in the predictors (the “quantity effect”) and the second summand

$$U = E(X_A)'(\beta_A - \beta^*) + E(X_B)'(\beta^* - \beta_B)$$

is the “unexplained” part. The latter is usually attributed to discrimination, but it is important recognize that it to also captures all potential effects of differences in unobserved variables.

The “unexplained” part in (6) is sometimes further decomposed. Let  $\beta_A = \beta^* + \delta_A$  and  $\beta_B = \beta^* + \delta_B$  with  $\delta_A$  and  $\delta_B$  as group-specific discrimination parameter vectors (positive or negative discrimination, depending on sign). U can then be expressed as

$$U = E(X_A)'\delta_A - E(X_B)'\delta_B \dots\dots\dots(7)$$

**A Stata Implementation of the Blinder-Oaxaca Decomposition**

that is, the unexplained component of the differential can be subdivided into a part

$$U_A = E(X_A)'\delta_A$$

that measures discrimination in favor of Group A and a part

$$U_B = -E(X_B)'\delta_B$$

that quantifies discrimination against Group B.<sup>2</sup> Again, however, this interpretation hinges on the assumption that there are no relevant unobserved predictors.

The estimation of the components of the three-fold decompositions (4) and (5) is straightforward. Let  $\hat{\beta}_A$  and  $\hat{\beta}_B$  be the least squares estimates for  $\beta_A$  and  $\beta_B$ , obtained separately from the two group-

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<sup>2</sup>  $U_A$  and  $U_B$  have opposite interpretations. A positive value for  $U_A$  reflects positive discrimination of Group A; a positive value for  $U_B$  indicates negative discrimination of Group B.



specific samples. Furthermore, use the group means  $\bar{X}_A$  and  $\bar{X}_B$  as estimates for  $E(X_A)$  and  $E(X_B)$ .

Based on these estimates the decompositions (4) and (5) are computed as

$$\bar{R} = \bar{Y}_A - \bar{Y}_B = (\bar{X}_A - \bar{X}_B)' \hat{\beta}_B + \bar{X}_B'(\hat{\beta}_A - \hat{\beta}_B) + (\bar{X}_A - \bar{X}_B)'(\hat{\beta}_A - \hat{\beta}_B) \dots\dots\dots(8)$$

and

$$\bar{R} = \bar{Y}_A - \bar{Y}_B = (\bar{X}_A - \bar{X}_B)' \hat{\beta}_A + \bar{X}_A'(\hat{\beta}_A - \hat{\beta}_B) - (\bar{X}_A - \bar{X}_B)'(\hat{\beta}_A - \hat{\beta}_B) \dots\dots\dots(9)$$

The determination of the components of the two-fold decomposition (6) is more involved because an estimate for the unknown nondiscriminatory coefficients vector  $\beta^*$  is needed. Several suggestions have been made in the literature. For example, there may be reason to assume that discrimination is directed towards one of the groups only, so that  $\beta^* = \beta_A$  or  $\beta^* = \beta_B$  (see Oaxaca 1973, who speaks of an “index number problem”). Again assume that Group A are males and Group B are females. If, for instance, wage discrimination is only directed against women and there is no (positive) discrimination of men, then we may use  $\hat{\beta}_A$  as an estimate for  $\beta^*$  and compute decomposition (6) as

$$\bar{R} = (\bar{X}_A - \bar{X}_B)' \hat{\beta}_A + \bar{X}_B'(\hat{\beta}_A - \hat{\beta}_B) \dots\dots\dots(10)$$

Similarly, if there is no discrimination of women, but only (positive) discrimination of men, the decomposition is

$$\bar{R} = (\bar{X}_A - \bar{X}_B)' \hat{\beta}_B + \bar{X}_A'(\hat{\beta}_A - \hat{\beta}_B) \dots\dots\dots(11)$$

Often, however, there is no specific reason to assume that the coefficients of one or the other group are nondiscriminating. Moreover, economists have argued that the undervaluation of one group comes along with an overvaluation of the other (e. g. Cotton 1988). Reimers (1983) therefore proposes to use the average coefficients over both groups as an estimate for the nondiscriminatory parameter vector, that is

$$\hat{\beta}^* = 0.5\hat{\beta}_A + 0.5\hat{\beta}_B \dots\dots\dots(12)$$

Similarly, Cotton (1988) suggests to weight the coefficients by the group sizes  $n_A$  and  $n_B$ , that is

$$\hat{\beta}^* = \frac{n_A}{n_A + n_B} \hat{\beta}_A + \frac{n_B}{n_A + n_B} \hat{\beta}_B \dots\dots\dots(13)$$

Furthermore, based on theoretical derivations, Neumark (1988) advocates the usage of the coefficients from a pooled regression over both groups as an estimate for  $\beta^*$ .

Note that, as has been pointed out by Oaxaca and Ransom (1994) and others, decomposition (6) can also be expressed as

$$R = [E(X_A) - E(X_B)]' [W\beta_A + (I - W)\beta_B] + [(I - W)'E(X_A) + W'E(X_B)]'(\beta_A - \beta_B) \dots\dots\dots(14)$$

where  $W$  is a matrix of relative weights given to the coefficients of Group A and  $I$  is the identity matrix. For example, choosing  $W = I$  is equivalent to setting  $\beta^* = \beta_A$ . Similarly,  $W = 0.5I$  is equivalent to  $\beta^* = 0.5\beta_A + 0.5\beta_B$ . Furthermore, Oaxaca and Ransom (1994) show that

$$\hat{W} = \Omega = (X_A'X_A + X_B'X_B)^{-1}X_A'X_A \dots\dots\dots(15)$$

with  $X$  as the observed data matrix, is equivalent to using the coefficients from a pooled model over both groups as the reference coefficients.<sup>3</sup>

An issue with the approach by Neumark (1988) or Oaxaca and Ransom (1994) is that it may inappropriately transfer some of the unexplained part of the differential into the explained component, although this does not seem to have received much attention in the literature.<sup>4</sup> Assume a simple model of log wages ( $\ln W$ ) on education ( $Z$ ) with sex-specific intercepts  $\alpha_M$  and  $\alpha_F$  due to discrimination. The model is

$$\ln W = \begin{cases} \alpha_M + \gamma Z + \epsilon & \text{if "male"} \\ \alpha_F + \gamma Z + \epsilon & \text{if "female"} \end{cases} \dots\dots\dots(16)$$

Let  $\alpha_M = \alpha$  and  $\alpha_F = \alpha + \delta$ , where  $\delta$  is the discrimination parameter. Then the model may also be expressed as

$$\ln W = \alpha + \gamma Z + \delta F + \epsilon \dots\dots\dots(17)$$

with  $F$  as an indicator for "female". Assume that  $\gamma > 0$  (positive relation between education and wages) and  $\delta < 0$  (discrimination against women). If we now use  $\gamma^*$  from a pooled model

$$\ln W = \alpha^* + \gamma^* Z + \epsilon^* \dots\dots\dots(18)$$

in decomposition (6), then, following from the theory on omitted variables (see, e. g., Gujarati 2003, 510f.), the explained part of the differential is

$$Q = [E(Z_M) - E(Z_F)]\gamma^* = [E(Z_M) - E(Z_F)] \left( \gamma + \delta \frac{\text{Cov}(Z,G)}{\text{Var}(Z)} \right) \dots\dots\dots(19)$$

with  $\text{Var}(Z)$  as the variance of  $Z$  and  $\text{Cov}(Z,G)$  as the covariance between  $Z$  and  $G$ . If men on average are better educated than women, then the covariance between  $Z$  and  $G$  is negative and the explained part of the decomposition gets overstated (given  $\gamma > 0$  and  $\delta < 0$ ). In essence, the difference in wages between men and women is explained by sex.

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<sup>3</sup> Another solution is to set  $W = \text{diag}(\beta - \beta_B) \cdot \text{diag}(\beta_A - \beta_B)^{-1}$ , where  $\beta$  without subscript denotes the coefficients from the pooled model. Note that, although the decomposition results are the same, this approach yields a weighting matrix that is quite different from Oaxaca and Ransom's  $\Omega$ . For example, whereas  $W$  computed as described in this footnote is a diagonal matrix,  $\Omega$  has off-diagonal elements unequal zero and is not even symmetric.

<sup>4</sup> An exception is Fortin (2006)

To avoid such a distortion of the decomposition results due to the residual group difference spilling over into the slope parameters of the pooled model, Ben Jann(2008)'s recommendation is to always include a group indicator in the pooled model as an additional covariate.

### Estimation of Sampling Variances

Given the popularity of the Blinder-Oaxaca procedure it is astonishing how little attention has been paid to the issue of statistical inference. Most studies in which the procedure is applied only report point estimates for the decomposition results, but do not make any indication about sampling variances or standard errors.<sup>5</sup> However, for an adequate interpretation of the results approximate measures of statistical precision are indispensable.

Approximate variance estimators for certain variants of the decomposition were first proposed by Oaxaca and Ransom (1998) with Greene (2003, 53–54) making similar suggestions. The estimators by Oaxaca and Ransom (1998) and Greene (2003) are a good starting point, but they neglect an important source of variation. Most socialscience studies on discrimination are based on survey data where all (or most) variables are random variables. That is, not only the outcome variable, but also the predictors are subject to sampling variation (an exception would be experimental factors set by the researcher). Whereas an important result for regression analysis is that it does not matter for the variance estimates whether regressors are stochastic or fixed, this is not true for the Blinder-Oaxaca decomposition. The decomposition is based on multiplying regression coefficients by means of regressors. If the regressors are stochastic, then the means have sampling variances. These variances are of the same asymptotic order than the variances of the coefficients (think of the means as the intercepts from regression models without covariates). To get consistent standard errors for the decomposition results it seems therefore important to take the variability induced by the randomness of the predictors into account.

Consider the expression

$$\bar{Y} = \bar{X}'\hat{\beta} \dots \dots \dots (20)$$

where  $\bar{X}$  is the vector of mean estimates for the predictors and  $\hat{\beta}$  contains the least squares estimates of the regression coefficients. If the predictors are stochastic, then  $\bar{X}$  and  $\hat{\beta}$  are both subject to sampling variation. Assuming that  $\bar{X}$  and  $\hat{\beta}$  are uncorrelated (which follows from the

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<sup>5</sup> Exceptions are for example Oaxaca and Ransom (1994, 1998), Silber and Weber (1999), Horrace and Oaxaca (2001), Fortin (2006), Heinrichs and Kennedy (2007) and Lin (2007). Furthermore, Jackson and Lindley (1989) and Shrestha and Sakellariou (1996) propose statistical tests for discrimination.

standard regression assumption that the conditional expectation of the error is zero for all covariate values; of course this is only true if the model is correctly specified), the variance of (20) can be written as

$$V(\bar{X}'\hat{\beta}) = E(\bar{X})'V(\hat{\beta})E(\bar{X}) + E(\hat{\beta})'V(\bar{X})E(\hat{\beta}) + \text{trace}[V(\bar{X})V(\hat{\beta})] \dots\dots\dots(21)$$

where  $V(\bar{X})$  and  $V(\hat{\beta})$  are the variance-covariance matrices for  $\bar{X}$  and  $\hat{\beta}$  (see the proof in Jann 2005b; for the variance of the product of two independent random variables also see Mood et al. 1974, 180). By inserting estimates for the expectations and variance matrices, we get the variance estimator

$$\hat{V}(\bar{X}'\hat{\beta}) = \bar{X}'\hat{V}(\hat{\beta})\bar{X} + \hat{\beta}'\hat{V}(\bar{X})\hat{\beta} + \text{trace}[\hat{V}(\bar{X})\hat{V}(\hat{\beta})] \dots\dots\dots(22)$$

$V(\hat{\beta})$  is simply the variance-covariance matrix obtained from the regression procedure. A natural estimator for  $V(\bar{X})$  is  $\hat{V}(\bar{X}) = \mathcal{X}'\mathcal{X}/[n(n-1)]$ , where  $\mathcal{X}$  is the centered data matrix, i. e.  $\mathcal{X} = X - 1\bar{X}'$ .

The variances for the components of the Blinder-Oaxaca decomposition can be derived analogously. For example, ignoring the asymptotically vanishing<sup>6</sup> last term in (22) and assuming that the two groups are independent, the approximate variance estimators for the two terms of decomposition (10) are

$$\hat{V}([\bar{X}_A - \bar{X}_B]' \hat{\beta}_A) \approx (\bar{X}_A - \bar{X}_B)' \hat{V}(\hat{\beta}_A)(\bar{X}_A - \bar{X}_B) + \hat{\beta}_A' [\hat{V}(\bar{X}_A) + \hat{V}(\bar{X}_B)] \hat{\beta}_A \dots\dots\dots(23)$$

and

$$\hat{V}(\bar{X}_B' [\hat{\beta}_A - \hat{\beta}_B]) \approx \bar{X}_B' [\hat{V}(\hat{\beta}_A) + \hat{V}(\hat{\beta}_B)] \bar{X}_B + (\hat{\beta}_A - \hat{\beta}_B)' \hat{V}(\bar{X}_B)(\hat{\beta}_A - \hat{\beta}_B) \dots\dots\dots(24)$$

where use of the fact is made that the variance of the sum of two uncorrelated random variables is equal to the sum of the individual variances. An interesting point about formulas (23) and (24) is that ignoring the stochastic nature of the predictors will primarily affect the variance of the first term of the decomposition (the “explained” part). This is because in most applications group differences in coefficients and means are much smaller than the levels of coefficients and means.

It is possible to develop similar formulas for all the decomposition variants outlined above, but derivations can get complicated once a pooled model is used and covariances between the pooled model and the group models have to be taken into account or if the assumption of independence between the two groups is loosened (e. g. if dealing with a cluster sample). An alternative approach that is simple and general and produces equivalent results is to estimate the joint variance-covariance matrix of all used statistics and then apply the “delta method”. In fact, in the case of independence between the two groups the results of the delta method for decomposition (4)

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<sup>6</sup> Whereas the first and second terms are of order  $O(n^{-1})$ , the last term is  $O(n^{-2})$ .

are formally equal to (23) and (24). Furthermore, a general result for the delta method is that if the input variance matrix is asymptotically normal, then also the variance matrix of the transformed statistics is asymptotically normal (see, e. g., Greene 2003, 70). That is, since asymptotic normality holds for regression coefficients and mean estimates under very general conditions, the variances obtained by the delta method can be used to construct approximate confidence intervals for the decomposition results in the usual manner.

**Detailed Decomposition**

Often not only is the total decomposition of the outcome differential into an explained and an unexplained part of interest, but also the detailed contributions of the single predictors or sets of predictors are subject to investigation. For example, one might want to evaluate how much of the gender wage gap is due to sex differences in education and how much is due to differences in work experience. Similarly, it might be informative to determine how much of the unexplained gap is related to differing returns to education and how much to differing returns to work experience.

Identifying the contributions of the individual predictors to the explained part of the differential is easy because the total component is a simple sum over the individual contributions. For example, for decomposition (10),

$$\hat{Q} = (\bar{X}_A - \bar{X}_B)' \hat{\beta}_A = (\bar{X}_{1A} - \bar{X}_{1B}) \hat{\beta}_{1A} + (\bar{X}_{2A} - \bar{X}_{2B}) \hat{\beta}_{2A} + \dots \dots \dots (25)$$

where  $\bar{X}_1, \bar{X}_2, \dots$  are the means of the single regressors and  $\hat{\beta}_1, \hat{\beta}_2, \dots$  are the associated coefficients. The first summand reflects the contribution of the group differences in  $\bar{X}_1$ , the second of differences in  $\bar{X}_2$ , and so on. Also the estimation of standard errors for the individual contributions is straightforward.

Similarly, using decomposition (10) as an example, the individual contributions to the unexplained part are the summands in

$$\hat{U} = \bar{X}'_B (\hat{\beta}_A - \hat{\beta}_B) = \bar{X}'_{1B} (\hat{\beta}_{1A} - \hat{\beta}_{1B}) + \bar{X}'_{2B} (\hat{\beta}_{2A} - \hat{\beta}_{2B}) + \dots \dots \dots (26)$$

Note, however, that other than for the explained part of the decomposition, the contributions to the unexplained part may depend on arbitrary scaling decisions if the predictors do not have natural zero points (e. g. Jones and Kelley 1984, 334). Without loss of generality, assume a simple model with just one explanatory variable:

$$Y_\ell = \beta_{0\ell} + \beta_{1\ell} Z_\ell + \epsilon_\ell, \quad \ell \in \{A, B\}$$

The unexplained part of the decomposition based on (10) then is

$$\hat{U} = (\hat{\beta}_{0A} - \hat{\beta}_{0B}) + (\hat{\beta}_{1A} - \hat{\beta}_{1B}) \bar{Z}_B$$

The first summand is the part of the unexplained gap that is due to “group membership” (Jones and Kelley 1984); the second summand reflects the contribution of differing returns to  $Z$ . Now assume that the zero point of  $Z$  is shifted by adding a constant  $a$ . The effect of such a shift on the decomposition results is as follows:

$$\bar{U} = [(\hat{\beta}_{0A} - a\hat{\beta}_{1A}) - (\hat{\beta}_{0B} - a\hat{\beta}_{1B})] + (\hat{\beta}_{1A} - \hat{\beta}_{1B})(\bar{Z}_B + a)$$

Evidently, the scale shift changes the results; a portion amounting to  $a(\hat{\beta}_{1A} - \hat{\beta}_{1B})$  is transferred from the group membership component to the part that is due to different slope coefficients. The conclusion is that the detailed decomposition results for the unexplained part only have a meaningful interpretation for variables for which scale shifts are not allowed, that is, for variables that have a natural zero point.<sup>7</sup>

A related issue that has received much attention in the literature is that the decomposition results for categorical predictors depend on the choice of the omitted base category (Jones 1983; Jones and Kelley 1984; Oaxaca and Ransom 1999; Nielsen 2000; Horrace and Oaxaca 2001; Gardeazabal and Ugidos 2004; Polavieja 2005; Yun 2005b). The effect of a categorical variable is usually modeled by including 0/1-variables (“dummy” variables) for the different categories in the regression equation, where one of the categories (the “base” category) is omitted to avoid collinearity. It is easy to see that the decomposition results for the single 0/1-variables depend on the choice of the base category, since the associated coefficients quantify differences with respect to the base category. If the base category changes, the decomposition results change.

For the explained part of the decomposition this may not be critical because the sum of the contributions of the single indicator variables, that is, the total contribution of the categorical variable is unaffected by the choice of the base category. For the unexplained part of the decomposition, however, there is again a tradeoff between the group membership component (the difference in intercepts) and the part attributed to differences in slope coefficients. For the unexplained part changing the base category not only alters the results for the singly dummy variables but also changes the contribution of the categorical variable as a whole.

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<sup>7</sup> The problem does not occur for the explained part of the decomposition or the interaction component in the three-fold decomposition because  $a$  cancels out in these cases. Furthermore, stretching or compressing the scales of the  $X$  variables (multiplication by a constant) does not alter any of the decomposition results because such multiplicative transformations are counterbalanced by the coefficient estimates.

An intuitively appealing solution to the problem has been proposed by Gardeazabal and Ugidos (2004) and Yun (2005b). The idea is to restrict the coefficients for the single categories to sum to zero, that is, to express effects as deviations from the grand mean. This can be implemented by restricted least squares estimation or by transforming the dummy variables before model estimation as proposed by Gardeazabal and Ugidos (2004).<sup>8</sup> A more convenient method in the context of the Blinder-Oaxaca decomposition is to estimate the group models using the standard dummy coding and then transform the coefficients vectors so that deviations from the grand mean are expressed and the (redundant) coefficient for the base category is added (Suits 1984; Yun 2005b). If applied to such transformed estimates, the results of the Blinder-Oaxaca decomposition are independent of the choice of the omitted category. Furthermore, the results are equal to the simple averages of the results one would get from a series of decompositions in which the categories are used one after another as the base category (Yun 2005b).

#### A Stata Implementation of the Blinder-Oaxaca Decomposition

The deviation contrast transform works as follows. Given is the model

$$Y = \beta_0 + \beta_1 D_1 + \dots + \beta_{k-1} D_{k-1} + \epsilon$$

where  $\beta_0$  is the intercept and  $D_j, j = 1, \dots, k-1$ , are the dummy variables representing a categorical variable with  $k$  categories. Category  $k$  is the base category. Alternatively, the model may be formulated as

$$Y = \beta_0 + \beta_1 D_1 + \dots + \beta_{k-1} D_{k-1} + \beta_k D_k + \epsilon$$

where  $\beta_k$  is constrained to zero. Now let

$$c = (\beta_1 + \dots + \beta_k)/k$$

and define

$$\tilde{\beta}_0 = \beta_0 + c \text{ and } \tilde{\beta}_j = \beta_j - c, \quad j = 1, \dots, k$$

The transformed model then is

$$Y = \tilde{\beta}_0 + \tilde{\beta}_1 D_1 + \dots + \tilde{\beta}_k D_k + \epsilon, \quad \sum_{j=1}^k \tilde{\beta}_j = 0$$

Note that the transformed model is mathematically equivalent to the untransformed model. For example, the two models produce identical predictions. The variance-covariance matrix for the transformed model can be obtained by applying the general formula for weighted sums of random variables given in, e. g., Mood et al. (1974, 179). Models with several sets of dummy variables can

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<sup>8</sup> In fact, the approach by Gardeazabal and Ugidos (2004) is simply what is known as the “effects coding” (Hardy 1993, 64–71) or the “deviation contrast coding” (Hendrickx 1999).

be transformed by applying the formulas to each set separately. Furthermore, the transformation can be applied to the interaction terms between a categorical and a continuous variable in an analogous manner except that now  $c$  is added to the main effect of the continuous variable instead of the intercept. Also note that the application of the transform is not restricted to linear regression. It can be used with any model as long as the effects of the dummies are expressed as additive effects.

Other restrictions to identify the contribution of a categorical variable to the unexplained part of the decomposition are imaginable. For example, the restriction could be

$$\sum_{j=1}^k w_j \tilde{\beta}_j = 0$$

where  $w_j$  are weights proportional to the relative frequencies of the categories, so that the coefficients reflect deviations from the overall sample mean (Kennedy 1986; Haisken- DeNew and Schmidt 1997). Hence, there is still some arbitrariness in the method by Gardeazabal and Ugidos (2004) and Yun (2005b).



## APPENDIX B

### Data Source and Data Analysis

#### Data Source

Most updated, reliable and available data can be collected from CEIC, World Bank and UNCTAD, and the wage data can be collected from The International Labour Organization (ILO).

#### Data Analysis

##### 1.) Independent Variables

##### 1.1) GDP

GDP is used to estimate market size. Market size is the size of the host market, which also represents the host country's economic conditions and the potential demand for their output as well, so it is an important element in FDI decision-makings. The larger host markets reduce the cost of supplying the market because of the economies of scale and lower fixed cost per unit of output. Therefore, FDI responds positively to the market size<sup>9</sup>. The importance of the market size has been confirmed in many previous empirical studies<sup>10</sup>. This study follows previous empirical studies and use real GDP to proxy for market size. Since this variable is used as an indicator of the market potential for FDI, the expected sign is positive.

##### 1.2) Export

Export is used to estimate openness. It is a standard hypothesis that openness promotes FDI<sup>11</sup> and is also often interpreted as a measure of trade restrictions. Openness is also important for foreign direct investors who are motivated by the export market. Empirical evidences exist to back up the hypothesis that higher levels of exports lead to higher FDI inflows<sup>12</sup>.

##### 1.3) Import

Increase in private consumption causes higher import and higher inward foreign direct investment (FDI). Competition on the domestic market is thereby increased, and domestic firms have

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<sup>9</sup> Scaperlanda and Mauer (1969).

<sup>10</sup> Kravis and Lipsey, 1982; Schneider and Frey, 1985; Wheeler and Mody, 1992; Tsai, 1994; Loree and Guisinger, 1995; Lipsey, 1999; Wei, 2000.

<sup>11</sup> Hufbauer et al. 1994.

<sup>12</sup> Jun and Singh, 1996.

to perform more efficiently to maintain their market position. The impact of import on FDI inflows of the host country is positive.

#### 1.4) Wage

Wage is used to estimate labour cost. Labour cost has always been argued to be a major component of total production cost and of the productivity of firms. A higher wage would deter FDI. This study uses the real wage rate (RWAGE) as a proxy for labor cost.

If the cost of wage in the home country is higher than in the host country, home country firms will have a cost disadvantage over the host country rivals. Therefore, the home country will enter the host country's market via FDI in order to gain the advantage in wage in the host country. According to relative real wage which is defined as the ratio of home country's real wage to host country's real wage, therefore, the expected sign of wage on FDI in this study is positive.

#### 1.5) Lending Interest Rates

According to the ratio of the home country's real lending interest rates to host country's real lending interest rates in this study, the expected sign of the lending interest rate on FDI is negative because FDI is basically financed from the home country. If the cost of borrowing in the home country is higher than in the host country, home country's firms will have a cost disadvantage over the host country rivals, and are in a worse positions to enter the host country market via FDI<sup>13</sup>.

#### 1.6) Exchange Rate

In international trade, exchange rate is the most important financial tool to adjust import and export. Furthermore, exchange rate, which determines the value of the currency, becomes an important factor affecting FDI. Aliber (1970) argued that firms from countries with strong currencies are able to support financial investments more successfully than firms from countries with weak currencies. A low or undervalued exchange rate encourages export but discourages import<sup>14</sup>.

The appreciation of home-country currency will be a motive for the home country to invest abroad with less transaction costs. According to the real exchange rate measured by a ratio of home country's real exchange rate to the host country's real exchange rate, therefore, the net impact of home-country currency on FDI inflows of the host country is positive<sup>15</sup>.

#### 1.7) Geographic Distance

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<sup>13</sup> Grosse and Trevino (1996).

Muhammad Tariq Mejeed and Eatzaz Ahmad, human capital development and FDI in developing countries, 2008.

<sup>14</sup> Kohlhagen, 1977; Stevens, 1993.

<sup>15</sup> William X. Wei, Int. J. Business and Emerging Markets, Chinese Outward Direct Investment: A Study on Macroeconomic Determinants. 2010.

The further distance between the home country's market and the host country's market implies the higher transportation cost. A low cost of transporting goods would encourage production in a foreign market to exploit economies of scale. If goods produced abroad are shipped back to the home or the third country markets, then the closer distance between the host country's production site and the home/or the third country causes more FDI in the host country. Therefore, the expected sign is negative<sup>16</sup>.

## 2.) Dependent Variables

Foreign direct investment (FDI) is measured as the net inflows of investment. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. FDI in this study is in current U.S. dollars.

All of these independent variables are measured simultaneously with FDI because the impact of these factors is expected to occur either simultaneously with FDI (e.g., geographic distance) or with a lag of a few months or longer (e.g., exchange rates, bilateral trade). Thus all factors could be seen as exogenous, allowing standard panel estimation to be applied.

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<sup>16</sup>Ewe-Ghee Lim, IMF Working Paper. Determinants of, and the Relation between, Foreign Direct Investment and Growth: A Summary of the Recent Literature. 2001.

APPENDIX C  
Research Results

Table 19: Thailand's FDI Attractiveness from All Selected Home Countries

Dependent Variable: LNRFDI?				
Method: Pooled Least Squares				
Date: 01/31/12 Time: 16:14				
Sample: 1990 2010				
Included observations: 21				
Cross-sections included: 4				
Total pool (balanced) observations: 84				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.95668	4.015999	4.222282	0.0001
LRGDP?	-0.982159	0.306939	-3.199854	0.0020
LREX?	0.205694	0.234038	0.878892	0.3822
LRIM?	-0.302144	0.143449	-2.106291	0.0385
LRW?	1.810425	0.271060	6.679048	0.0000
LRER?	0.153795	0.104263	1.475069	0.1443
LRBC?	-0.032427	0.107603	-0.301354	0.7640
LGEOD?	0.139167	0.346340	0.401821	0.6889
R-squared	0.950488	Mean dependent var	16.17524	
Adjusted R-squared	0.945928	S.D. dependent var	2.647679	
S.E. of regression	0.615677	Akaike info criterion	1.958203	
Sum squared resid	28.80838	Schwarz criterion	2.189709	
Log likelihood	-74.24452	Hannan-Quinn criter.	2.051267	
F-statistic	208.4261	Durbin-Watson stat	1.776312	
Prob(F-statistic)	0.000000			

Table 20: Malaysia's FDI Attractiveness from All Selected Home Countries

Dependent Variable: LNRFDI?				
Method: Pooled Least Squares				
Date: 01/31/12 Time: 16:11				
Sample: 1990 2010				
Included observations: 21				
Cross-sections included: 3				
Total pool (balanced) observations: 63				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	56.28691	22.72220	2.477177	0.0163
LRGDP?	1.449246	1.321346	1.096796	0.2775
LREX?	0.112767	0.444930	0.253448	0.8009

LRIM?	-0.005405	0.429377	-0.012589	0.9900
LRW?	-1.039732	1.280999	-0.811657	0.4205
LRER?	0.527639	0.278264	1.896181	0.0632
LRBC?	-0.223738	0.115472	-1.937601	0.0578
LGEOD?	-6.239357	3.350789	-1.862056	0.0679
R-squared	0.796600	Mean dependent var	18.02302	
Adjusted R-squared	0.770712	S.D. dependent var	1.836457	
S.E. of regression	0.879369	Akaike info criterion	2.698942	
Sum squared resid	42.53091	Schwarz criterion	2.971086	
Log likelihood	-77.01666	Hannan-Quinn criter.	2.805977	
F-statistic	30.77182	Durbin-Watson stat	1.683313	
Prob(F-statistic)	0.000000			

Table 21: Indonesia's FDI Attractiveness from All Selected Home Countries

Dependent Variable: LNRFDI?				
Method: Pooled Least Squares				
Date: 01/31/12 Time: 13:35				
Sample: 1990 2010				
Included observations: 21				
Cross-sections included: 3				
Total pool (balanced) observations: 63				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.53608	18.07863	1.135931	0.2609
LRGDP?	-0.465514	0.782898	-0.594603	0.5545
LREX?	-1.156412	1.210837	-0.955051	0.3437
LRIM?	0.567116	0.610401	0.929087	0.3569
LRW?	-0.042273	1.184652	-0.035684	0.9717
LRER?	-0.735912	0.924778	-0.795771	0.4296
LRBC?	0.321568	0.210710	1.526118	0.1327
LGEOD?	0.636127	0.570935	1.114183	0.2700
R-squared	0.433803	Mean dependent var	18.04730	
Adjusted R-squared	0.361742	S.D. dependent var	1.634173	
S.E. of regression	1.305558	Akaike info criterion	3.489304	
Sum squared resid	93.74644	Schwarz criterion	3.761448	
Log likelihood	-101.9131	Hannan-Quinn criter.	3.596340	
F-statistic	6.019914	Durbin-Watson stat	2.070318	
Prob(F-statistic)	0.000031			

Table 22: Vietnam's FDI Attractiveness from All Selected Home Countries

Dependent Variable: LNRFDI?				
Method: Pooled Least Squares				
Date: 01/31/12 Time: 16:16				
Sample: 1990 2010				
Included observations: 21				
Cross-sections included: 4				
Total pool (balanced) observations: 84				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.966945	3.736302	1.329375	0.1877
LRGDP?	0.696036	0.372737	1.867364	0.0657

LREX?	0.319532	0.286018	1.117173	0.2674
LRIM?	0.286519	0.271838	1.054005	0.2952
LRW?	0.265823	0.235204	1.130176	0.2620
LRER?	-0.257196	0.103740	-2.479225	0.0154
LRBC?	-0.121021	0.111769	-1.082782	0.2823
LGEOD?	-0.455865	0.326063	-1.398087	0.1662
R-squared	0.773532	Mean dependent var		17.45929
Adjusted R-squared	0.752673	S.D. dependent var		1.573571
S.E. of regression	0.782568	Akaike info criterion		2.437921
Sum squared resid	46.54338	Schwarz criterion		2.669428
Log likelihood	-94.39269	Hannan-Quinn criter.		2.530985
F-statistic	37.08403	Durbin-Watson stat		1.418424
Prob(F-statistic)	0.000000			

Table 23: Relative FDI Attractiveness: Thailand

Host Country		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	More Explainable Part
Country1-Country2	Variable	$\hat{\beta}$	$\bar{X}_1$	(A)*(B)	$\hat{\beta}$	$\bar{X}_2$	(D)*(E)	(C)-(F)	Total FDI Gap	(G)/(H)=%	
1.Thailand-Indonesia	RGDP	-0.9822	-0.4600	0.4518	-0.9822	-0.8700	0.8545	-0.4027	-1.872063	0.21510237	Explained Part
	REX	0.20569	21.5800	4.4389	0.2057	21.5000	4.4224	0.0165	-1.872063	-0.00879005	
	RIM	-0.3021	21.0900	-6.3722	-0.3021	21.8100	-6.5898	0.2175	-1.872063	-0.11620532	
	RW	1.81043	-0.3000	-0.5431	1.8104	1.5600	2.8243	-3.3674	-1.872063	1.79875918	
	RER	0.1538	1.5000	0.2307	0.1538	-7.3600	-1.1319	1.3626	-1.872063	-0.72787278	
	RBC	-0.0324	-0.1000	0.0032	-0.0324	-0.6500	0.0211	-0.0178	-1.872063	0.00952684	
	GEOD	0.13917	7.2500	1.0090	0.1392	7.0100	0.9756	0.0334	-1.872063	-0.01784132	
2.Thailand-Malaysia	RGDP	-0.9822	-0.4600	0.4518	-0.9822	0.4100	-0.4027	0.8545	-1.847778	-0.4624356	Unexplained Part
	REX	0.20569	21.5800	4.4389	0.2057	22.3000	4.5870	-0.1481	-1.847778	0.08015015	
	RIM	-0.3021	21.0900	-6.3722	-0.3021	22.1000	-6.6774	0.3052	-1.847778	-0.16515265	
	RW	1.81043	-0.3000	-0.5431	1.8104	-0.2500	-0.4526	-0.0905	-1.847778	0.04898925	
	RER	0.1538	1.5000	0.2307	0.1538	3.1500	0.4845	-0.2538	-1.847778	0.13733346	
	RBC	-0.0324	-0.1000	0.0032	-0.0324	0.5800	-0.0188	0.0221	-1.847778	-0.01193345	
	GEOD	0.13917	7.2500	1.0090	0.1392	6.9000	0.9603	0.0487	-1.847778	-0.02636055	
3.Thailand-Vietnam	RGDP	-0.9822	-0.4600	0.4518	-0.9822	1.4600	-1.4340	1.8857	-1.284048	-1.46859407	Explained Part
	REX	0.20569	21.5800	4.4389	0.2057	19.7200	4.0563	0.3826	-1.284048	-0.29795681	
	RIM	-0.3021	21.0900	-6.3722	-0.3021	20.5800	-6.2181	-0.1541	-1.284048	0.12000598	
	RW	1.81043	-0.3000	-0.5431	1.8104	3.8700	7.0063	-7.5495	-1.284048	5.87943149	
	RER	0.1538	1.5000	0.2307	0.1538	-6.0300	-0.9274	1.1581	-1.284048	-0.90189491	
	RBC	-0.0324	-0.1000	0.0032	-0.0324	-0.0900	0.0029	0.0003	-1.284048	-0.00025254	
	GEOD	0.13917	7.2500	1.0090	0.1392	7.2600	1.0104	-0.0014	-1.284048	0.00108381	

Table 24: Thailand (Host) –Indonesia (Host): Oaxaca-Blinder Decomposition







```
. oaxaca rfdi rgdp rex rim rw rer rbc geod, by(g) pooled
```

Blinder-Oaxaca decomposition

Number of obs	=	<b>126</b>
Model	=	<b>linear</b>
Group 1: g = 0	N of obs 1	= <b>63</b>
Group 2: g = 1	N of obs 2	= <b>63</b>

rfdi	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
<b>overall</b>						
group_1	<b>18.0473</b>	<b>.2054196</b>	<b>87.86</b>	<b>0.000</b>	<b>17.64469</b>	<b>18.44992</b>
group_2	<b>18.02302</b>	<b>.2311835</b>	<b>77.96</b>	<b>0.000</b>	<b>17.5699</b>	<b>18.47613</b>
difference	<b>.0242857</b>	<b>.309262</b>	<b>0.08</b>	<b>0.937</b>	<b>-.5818567</b>	<b>.6304281</b>
explained	<b>3.95128</b>	<b>1.075885</b>	<b>3.67</b>	<b>0.000</b>	<b>1.842584</b>	<b>6.059977</b>
unexplained	<b>-3.926995</b>	<b>1.033974</b>	<b>-3.80</b>	<b>0.000</b>	<b>-5.953547</b>	<b>-1.900443</b>
<b>explained</b>						
rgdp	<b>.9954352</b>	<b>.4057606</b>	<b>2.45</b>	<b>0.014</b>	<b>.200159</b>	<b>1.790711</b>
rex	<b>-.659241</b>	<b>.2613901</b>	<b>-2.52</b>	<b>0.012</b>	<b>-.1469259</b>	<b>1.171556</b>
rim	<b>-.2220655</b>	<b>.2289193</b>	<b>-0.97</b>	<b>0.332</b>	<b>-.6707391</b>	<b>.2266081</b>
rw	<b>1.124641</b>	<b>.6097328</b>	<b>1.84</b>	<b>0.065</b>	<b>-.0704134</b>	<b>2.319695</b>
rer	<b>1.387393</b>	<b>1.576157</b>	<b>0.88</b>	<b>0.379</b>	<b>-1.701819</b>	<b>4.476605</b>
rbc	<b>-.0053166</b>	<b>.1424078</b>	<b>-0.04</b>	<b>0.970</b>	<b>-.2844308</b>	<b>.2737975</b>
geod	<b>.0119527</b>	<b>.0251483</b>	<b>0.48</b>	<b>0.635</b>	<b>-.0373371</b>	<b>.0612424</b>
<b>unexplained</b>						
rgdp	<b>-1.18632</b>	<b>.7728712</b>	<b>-1.53</b>	<b>0.125</b>	<b>-2.701119</b>	<b>.3284802</b>
rex	<b>-28.03112</b>	<b>23.96705</b>	<b>-1.17</b>	<b>0.242</b>	<b>-75.00567</b>	<b>18.94343</b>
rim	<b>12.70827</b>	<b>12.542</b>	<b>1.01</b>	<b>0.311</b>	<b>-11.8736</b>	<b>37.29015</b>
rw	<b>-1.453334</b>	<b>1.809893</b>	<b>-0.80</b>	<b>0.422</b>	<b>-5.000658</b>	<b>2.093991</b>
rer	<b>2.361275</b>	<b>6.649183</b>	<b>0.36</b>	<b>0.722</b>	<b>-10.67088</b>	<b>15.39343</b>
rbc	<b>-.0736991</b>	<b>.131918</b>	<b>-0.56</b>	<b>0.576</b>	<b>-.3322535</b>	<b>.1848554</b>
geod	<b>47.49879</b>	<b>21.72186</b>	<b>2.19</b>	<b>0.029</b>	<b>4.924729</b>	<b>90.07285</b>
_cons	<b>-35.75086</b>	<b>27.10073</b>	<b>-1.32</b>	<b>0.187</b>	<b>-88.86732</b>	<b>17.3656</b>

Table 29: Malaysia (Host) –Thailand (Host): Oaxaca-Blinder Decomposition

```
. oaxaca rfdi rgdp rex rim rw rer rbc geod, by(g) pooled
```

Blinder-Oaxaca decomposition

Number of obs	=	<b>147</b>
Model	=	<b>linear</b>
Group 1: g = 0	N of obs 1	= <b>84</b>
Group 2: g = 1	N of obs 2	= <b>63</b>

rfdi	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
<b>overall</b>						
group_1	<b>16.17524</b>	<b>.2888487</b>	<b>56.00</b>	<b>0.000</b>	<b>15.6091</b>	<b>16.74137</b>
group_2	<b>18.02302</b>	<b>.2311568</b>	<b>77.97</b>	<b>0.000</b>	<b>17.56996</b>	<b>18.47607</b>
difference	<b>-1.847778</b>	<b>.3699555</b>	<b>-4.99</b>	<b>0.000</b>	<b>-2.572877</b>	<b>-1.122678</b>
explained	<b>1.182374</b>	<b>.3992969</b>	<b>2.96</b>	<b>0.003</b>	<b>.3997667</b>	<b>1.964982</b>
unexplained	<b>-3.030152</b>	<b>.2243017</b>	<b>-13.51</b>	<b>0.000</b>	<b>-3.469775</b>	<b>-2.590529</b>
<b>explained</b>						
rgdp	<b>1.426087</b>	<b>.2567986</b>	<b>5.55</b>	<b>0.000</b>	<b>.9227707</b>	<b>1.929403</b>
rex	<b>.2451074</b>	<b>.1123186</b>	<b>2.18</b>	<b>0.029</b>	<b>.024967</b>	<b>.4652477</b>
rim	<b>-.0936186</b>	<b>.093118</b>	<b>-1.01</b>	<b>0.315</b>	<b>-.2761265</b>	<b>.0888892</b>
rw	<b>-.1033655</b>	<b>.5792518</b>	<b>-0.18</b>	<b>0.858</b>	<b>-1.238678</b>	<b>1.031947</b>
rer	<b>-.5261536</b>	<b>.2279444</b>	<b>-2.31</b>	<b>0.021</b>	<b>-.9729164</b>	<b>-.0793907</b>
rbc	<b>.1365148</b>	<b>.0587881</b>	<b>2.32</b>	<b>0.020</b>	<b>.0212923</b>	<b>.2517373</b>
geod	<b>.0978032</b>	<b>.0716684</b>	<b>1.36</b>	<b>0.172</b>	<b>-.0426643</b>	<b>.2382707</b>
<b>unexplained</b>						
rgdp	<b>-1.568954</b>	<b>.5042308</b>	<b>-3.11</b>	<b>0.002</b>	<b>-2.557229</b>	<b>-.5806802</b>
rex	<b>1.679259</b>	<b>9.383437</b>	<b>0.18</b>	<b>0.858</b>	<b>-16.71194</b>	<b>20.07046</b>
rim	<b>-6.158353</b>	<b>8.548473</b>	<b>-0.72</b>	<b>0.471</b>	<b>-22.91305</b>	<b>10.59635</b>
rw	<b>-.7037929</b>	<b>.579907</b>	<b>-1.21</b>	<b>0.225</b>	<b>-1.84039</b>	<b>.432804</b>
rer	<b>-.9067008</b>	<b>.7708006</b>	<b>-1.18</b>	<b>0.239</b>	<b>-2.417442</b>	<b>.6040406</b>
rbc	<b>-.0044381</b>	<b>.0372377</b>	<b>-0.12</b>	<b>0.905</b>	<b>-.0774226</b>	<b>.0685464</b>
geod	<b>43.96298</b>	<b>21.5372</b>	<b>2.04</b>	<b>0.041</b>	<b>1.75084</b>	<b>86.17513</b>
_cons	<b>-39.33015</b>	<b>21.14175</b>	<b>-1.86</b>	<b>0.063</b>	<b>-80.76723</b>	<b>2.106924</b>

Table 30: Malaysia (Host) –Vietnam (Host): Oaxaca-Blinder Decomposition



```
. oaxaca rfdi rgdp rex rim rw rer rbc geod, by(g) pooled
```

Blinder-Oaxaca decomposition

Number of obs	=	<b>126</b>
Model	=	<b>linear</b>
N of obs 1	=	<b>63</b>
N of obs 2	=	<b>63</b>

Group 1: g = 0  
Group 2: g = 1

rfdi	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
<b>overall</b>						
group_1	18.02302	.2311835	77.96	0.000	17.5699	18.47613
group_2	18.0473	.2054196	87.86	0.000	17.64469	18.44992
difference	-.0242857	.309262	-0.08	0.937	-.6304281	.5818567
explained	-3.95128	1.075885	-3.67	0.000	-6.059977	-1.842584
unexplained	3.926995	1.033974	3.80	0.000	1.900443	5.953547
<b>explained</b>						
rgdp	-.9954352	.4057606	-2.45	0.014	-1.790711	-.200159
rex	-.659241	.2613901	-2.52	0.012	-1.171556	-.1469259
rim	.2220655	.2289193	0.97	0.332	-.2266081	.6707391
rw	-1.124641	.6097328	-1.84	0.065	-2.319695	.0704134
rer	-1.387393	1.576157	-0.88	0.379	-4.476605	1.701819
rbc	.0053166	.1424078	0.04	0.970	-.2737975	.2844308
geod	-.0119527	.0251483	-0.48	0.635	-.0612424	.0373371
<b>unexplained</b>						
rgdp	1.18632	.7728712	1.53	0.125	-.3284802	2.701119
rex	28.03112	23.96705	1.17	0.242	-18.94343	75.00567
rim	-12.70827	12.542	-1.01	0.311	-37.29015	11.8736
rw	1.453334	1.809893	0.80	0.422	-2.093991	5.000658
rer	-2.361275	6.649183	-0.36	0.722	-15.39343	10.67088
rbc	.0736991	.131918	0.56	0.576	-.1848554	.3322535
geod	-47.49879	21.72186	-2.19	0.029	-90.07285	-4.924729
_cons	35.75086	27.10073	1.32	0.187	-17.3656	88.86732

Table 33: Indonesia (Host) – Thailand (Host): Oaxaca-Blinder Decomposition

(9 vars, 147 obs)

```
. oaxaca rfdi rgdp rex rim rw rer rbc geod, by(g) pooled
```

Blinder-Oaxaca decomposition

Number of obs	=	<b>147</b>
Model	=	<b>linear</b>
N of obs 1	=	<b>84</b>
N of obs 2	=	<b>63</b>

Group 1: g = 0  
Group 2: g = 1

rfdi	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
<b>overall</b>						
group_1	16.17524	.2888487	56.00	0.000	15.6091	16.74137
group_2	18.0473	.2053534	87.88	0.000	17.64482	18.44979
difference	-1.872063	.354406	-5.28	0.000	-2.566866	-1.17744
explained	-3.020603	.4254822	-7.10	0.000	-3.854533	-2.186674
unexplained	1.14854	.29301	3.92	0.000	.5742508	1.722829
<b>explained</b>						
rgdp	-.333593	.1405343	-2.37	0.018	-.6090352	-.0581509
rex	-.0223327	.0383518	0.58	0.560	-.0528355	.0975009
rim	.2456686	.114858	2.14	0.032	.0205511	.470786
rw	-2.012531	.5379702	-3.74	0.000	-3.066933	-.9581283
rer	-1.213255	.8356532	-1.45	0.147	-2.851105	.4245949
rbc	.054246	.0454093	1.19	0.232	-.0347545	.1432465
geod	.2165282	.1478738	1.46	0.143	-.0732992	.5063555
<b>unexplained</b>						
rgdp	.3816097	.7486773	0.51	0.610	-1.085771	1.84899
rex	29.27391	22.53731	1.30	0.194	-14.89841	73.44623
rim	-18.98385	9.613508	-1.97	0.048	-37.82598	-1.141717
rw	1.534065	1.840154	0.83	0.404	-2.07257	5.1407
rer	-3.968267	6.750011	-0.59	0.557	-17.19805	9.261513
rbc	.1568463	.0674171	2.33	0.020	.0247112	.2889815
geod	-3.666486	4.362135	-0.84	0.401	-12.21611	4.883142
_cons	-3.579295	17.80348	-0.20	0.841	-38.47348	31.31489

Table 34: Indonesia (Host) – Vietnam (Host): Oaxaca-Blinder Decomposition

```
. oaxaca rfdi rgdp rex rim rw rer rbc geod, by(g) pooled
```

Blinder-Oaxaca decomposition

Number of obs	=	<b>147</b>	
Model	=	<b>Linear</b>	
Group 1: g = 0	N of obs 1	=	<b>84</b>
Group 2: g = 1	N of obs 2	=	<b>63</b>

rfdi	Coef.	Robust Std. Err.	z	P> z	[95% conf. Interval]	
<b>overall</b>						
group_1	17.45929	.1715908	101.75	0.000	17.12297	17.7956
group_2	18.0473	.2053534	87.88	0.000	17.64482	18.44979
difference	-.5880159	.2676069	-2.20	0.028	-1.112516	-.063516
explained	-.9384418	.3792664	-2.47	0.013	-1.68179	-.1950933
unexplained	.350426	.3977544	0.88	0.378	-.4291583	1.13001
<b>explained</b>						
rgdp	-.6237949	.5010698	-1.24	0.213	-1.605874	.3582839
rex	-.7229841	.2852044	-2.53	0.011	-1.639937	1.281975
rim	-.7619267	.1938227	-3.93	0.000	-1.141812	-.3820412
rw	-.0570578	.4250386	0.13	0.893	-.7760026	.8901182
rer	-.4450982	.178411	-2.49	0.013	-.7947773	-.0954191
rbc	-.0495903	.0550302	0.90	0.368	-.0582668	-.1574475
geod	.0627457	.0558934	1.12	0.262	-.0468034	.1722948
<b>unexplained</b>						
rgdp	1.234198	.6893523	1.79	0.073	-.1169073	2.585304
rex	30.43618	23.10921	1.32	0.188	-14.85703	75.7294
rim	-5.707455	11.39477	-0.50	0.616	-28.0408	16.62589
rw	1.037569	2.442878	0.42	0.671	-3.750383	5.825521
rer	-3.417114	7.150922	-0.48	0.633	-17.43266	10.59844
rbc	.1688086	.0838675	2.01	0.044	.0044312	.333186
geod	-7.832733	4.342841	-1.80	0.071	-16.34454	6.790782
_cons	-15.56903	17.62692	-0.88	0.377	-50.11715	18.97909

Table 35: Relative FDI Attractiveness: Vietnam

Host Country		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	More
Country1-Country2	Variable	$\hat{\beta}$	$\bar{X}_1$	(A)*(B)	$\hat{\beta}$	$\bar{X}_2$	(D)*(E)	(C)-(F)	Total FDI Gap	(G)/(H)=%	Explainable Part
1.Vietnam-Indonesia	RGDP	0.69604	1.4600	1.0162	0.6960	-0.8700	-0.6056	1.6218	-0.5880159	-2.75802726	Explained Part
	REX	0.31953	19.7200	6.3012	0.3195	21.5000	6.8699	-0.5688	-0.5880159	0.967264593	
	RIM	0.28652	20.5800	5.8966	0.2865	21.8100	6.2490	-0.3524	-0.5880159	0.599334763	
	RW	0.26582	3.8700	1.0287	0.2658	1.5600	0.4147	0.6141	-0.5880159	-1.0442764	
	RER	-0.2572	-6.0300	1.5509	-0.2572	-7.3600	1.8930	-0.3421	-0.5880159	0.581737126	
	RBC	-0.121	-0.0900	0.0109	-0.1210	-0.6500	0.0787	-0.0678	-0.5880159	0.115254979	
	GEOD	-0.4559	7.2600	-3.3096	-0.4559	7.0100	-3.1956	-0.1140	-0.5880159	0.193814912	
2.Vietnam-Malaysia	RGDP	0.69604	1.4600	1.0162	0.6960	0.4100	0.2854	0.7308	-0.5637301	-1.2964321	Unexplained Part
	REX	0.31953	19.7200	6.3012	0.3195	22.3000	7.1256	-0.8244	-0.5637301	1.462388757	
	RIM	0.28652	20.5800	5.8966	0.2865	22.1000	6.3321	-0.4355	-0.5637301	0.772548565	
	RW	0.26582	3.8700	1.0287	0.2658	-0.2500	-0.0665	1.0952	-0.5637301	-1.94275729	
	RER	-0.2572	-6.0300	1.5509	-0.2572	3.1500	-0.8102	2.3611	-0.5637301	-4.1882796	
	RBC	-0.121	-0.0900	0.0109	-0.1210	0.5800	-0.0702	0.0811	-0.5637301	-0.14383491	
	GEOD	-0.4559	7.2600	-3.3096	-0.4559	6.9000	-3.1455	-0.1641	-0.5637301	0.291116972	
3.Vietnam-Thailand	RGDP	0.69604	1.4600	1.0162	0.6960	-0.4600	-0.3202	1.3364	1.284048	1.040762588	Unexplained Part
	REX	0.31953	19.7200	6.3012	0.3195	21.5800	6.8955	-0.5943	1.284048	-0.46285615	
	RIM	0.28652	20.5800	5.8966	0.2865	21.0900	6.0427	-0.1461	1.284048	-0.11380002	
	RW	0.26582	3.8700	1.0287	0.2658	-0.3000	-0.0797	1.1085	1.284048	0.863271396	
	RER	-0.2572	-6.0300	1.5509	-0.2572	1.5000	-0.3858	1.9367	1.284048	1.508265953	
	RBC	-0.121	-0.0900	0.0109	-0.1210	-0.1000	0.0121	-0.0012	1.284048	-0.0009425	
	GEOD	-0.4559	7.2600	-3.3096	-0.4559	7.2500	-3.3050	-0.0046	1.284048	-0.00355022	

Table 36: Vietnam (Host) –Indonesia (Host): Oaxaca-Blinder Decomposition





## APPENDIX D

## FDI Attractiveness from Each Selected Home Country

OLS estimation was used to analyze the determinants of FDI from each home country in each host country separately. The results are as follows:

## 1.Thailand

## 1.)Thailand (Host) –Indonesia (Home)

Table 39: Thailand (Host) –Indonesia (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:17 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-75.82018	211.6202	-0.358284	0.7259
LRGDP	0.810118	1.438939	0.562997	0.5830
LREX	0.316391	1.842916	0.171679	0.8663
LRIM	1.123044	2.212374	0.507619	0.6202
LRW	0.885665	1.330971	0.665428	0.5174
LRER	1.337827	2.669963	0.501066	0.6247
LRBC	-0.589226	0.447764	-1.315928	0.2109
LGEOD	6.726095	24.04070	0.279779	0.7840
R-squared	0.387995	Mean dependent var		15.20286
Adjusted R-squared	0.058455	S.D. dependent var		0.687707
S.E. of regression	0.667305	Akaike info criterion		2.311192
Sum squared resid	5.788846	Schwarz criterion		2.709106
Log likelihood	-16.26752	Hannan-Quinn criter.		2.397550
F-statistic	1.177382	Durbin-Watson stat		2.378573
Prob(F-statistic)	0.378655			

Regarding Least Squares method in Table 39, no coefficient is statistically significant.

## 2.)Thailand (Host) –Malaysia (Home)

Table 40: Thailand (Host) –Malaysia (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:20 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	48.96644	103.8437	0.471540	0.6451
LRGDP	4.985054	6.771115	0.736223	0.4747
LREX	-1.781615	1.903427	-0.936004	0.3663
LRIM	0.344863	1.930364	0.178652	0.8610
LRW	3.107607	3.447601	0.901382	0.3838
LRER	13.09169	5.314978	2.463170	0.0285
LRBC	-0.080999	0.173756	-0.466165	0.6488
LGEOD	4.245878	13.66325	0.310752	0.7609

R-squared	0.587296	Mean dependent var	17.01571
Adjusted R-squared	0.365071	S.D. dependent var	0.623519
S.E. of regression	0.496835	Akaike info criterion	1.721215
Sum squared resid	3.208986	Schwarz criterion	2.119128
Log likelihood	-10.07275	Hannan-Quinn criter.	1.807572
F-statistic	2.642795	Durbin-Watson stat	2.536704
Prob(F-statistic)	0.061903		

Regarding Least Squares method in Table 40, a value of R-squared is 0.587296 which is quite low.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 2.536704 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only REX and GEOD have the wrong sign.

The coefficient of RER is statistically significant at 5%. Therefore, RER has an impact on Thailand's RFDI.

If RER increases by 1%, RFDI increases by 13.09169 %.

### 3.)Thailand (Host) –Singapore (Home)

Table 41: Thailand (Host) –Singapore (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 15:23				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.50819	161.0975	0.381807	0.7088
LRGDP	2.422768	2.081972	1.163689	0.2655
LREX	2.335376	2.811902	0.830532	0.4212
LRIM	-4.334960	2.620447	-1.654283	0.1220
LRW	0.604122	2.042218	0.295817	0.7720
LRER	12.17661	5.569362	2.186356	0.0477
LRBC	0.481958	0.243709	1.977596	0.0696
LGEOD	5.419106	20.48837	0.264497	0.7955
R-squared	0.576871	Mean dependent var	19.72905	
Adjusted R-squared	0.349033	S.D. dependent var	0.708124	
S.E. of regression	0.571332	Akaike info criterion	2.000639	
Sum squared resid	4.243464	Schwarz criterion	2.398553	
Log likelihood	-13.00671	Hannan-Quinn criter.	2.086997	
F-statistic	2.531932	Durbin-Watson stat	1.353176	
Prob(F-statistic)	0.070327			



Regarding Least Squares method in Table 41, a value of R-squared is equal to 0.576871 which is quite low.

Only RIM, RBC and GEOD have the wrong sign.

The coefficient of RER is statistically significant at 5%. Therefore, RER has an impact on Thailand's RFDI.

If RER increases by 1%, RFDI increases by 12.17661 %.

#### 4.)Thailand (Host) –Vietnam (Home)

Table 42: Thailand (Host) –Vietnam (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 15:26				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	38.78922	110.1326	0.352205	0.7303
LRGDP	1.017352	2.116667	0.480639	0.6388
LREX	-0.105007	0.793483	-0.132337	0.8967
LRIM	-0.164330	0.426292	-0.385486	0.7061
LRW	0.916229	1.033110	0.886865	0.3913
LRER	-0.133320	2.519397	-0.052917	0.9586
LRBC	0.205609	0.305286	0.673496	0.5124
LGEOD	-2.405324	13.47460	-0.178508	0.8611
R-squared	0.595520	Mean dependent var		12.75333
Adjusted R-squared	0.377723	S.D. dependent var		0.662362
S.E. of regression	0.522501	Akaike info criterion		1.821953
Sum squared resid	3.549098	Schwarz criterion		2.219866
Log likelihood	-11.13051	Hannan-Quinn criter.		1.908310
F-statistic	2.734288	Durbin-Watson stat		2.633347
Prob(F-statistic)	0.055794			

Regarding Least Squares method in Table 42, a value of R-squared is equal to 0.595520 which is quite low.

No coefficient is statistically significant at 5%.

## 2.Malaysia

### 1.) Malaysia (Host) –Indonesia (Home)

Table 43: Malaysia (Host) –Indonesia (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:03 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1354.538	1240.066	-1.092311	0.2945
LRGDP	4.106659	2.471656	1.661501	0.1205
LREX	2.230867	1.345929	1.657492	0.1213
LRIM	7.239504	8.694819	0.832623	0.4201
LRW	-1.280232	1.963254	-0.652097	0.5257
LRER	3.438921	2.656169	1.294692	0.2180
LRBC	-0.347153	0.172614	-2.011158	0.0655
LGEOD	150.1143	138.9946	1.080000	0.2998
R-squared	0.603650	Mean dependent var		17.10524
Adjusted R-squared	0.390231	S.D. dependent var		0.943237
S.E. of regression	0.736552	Akaike info criterion		2.508659
Sum squared resid	7.052623	Schwarz criterion		2.906572
Log likelihood	-18.34092	Hannan-Quinn criter.		2.595016
F-statistic	2.828470	Durbin-Watson stat		2.997411
Prob(F-statistic)	0.050202			

Regarding Least Squares method in Table 43, a value of R-squared is close to 1 indicating a better fit.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 2.997411 which is not close to 2, this does not support the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is quite not free of autocorrelation.

Only RW and GEOD have the wrong sign.

The coefficient of RBC is statistically significant at 10%. Therefore, RBC has an impact on Malaysia's RFDI.

If RBC increases by 1%, RFDI decreases by 0.347153%.

## 2.)Malaysia (Host) –Singapore (Home)

Table 44: Malaysia (Host) –Singapore (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:07 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	39.06869	71.00130	0.550253	0.5915
LRGDP	-1.222596	4.500540	-0.271656	0.7902

LREX	8.148601	16.75192	0.486428	0.6348
LRIM	1.014907	12.41900	0.081722	0.9361
LRW	-16.68201	4.250627	-3.924599	0.0017
LRER	-25.16280	8.582814	-2.931766	0.0117
LRBC	0.140949	0.206222	0.683480	0.5063
LGEOD	-41.53116	17.78340	-2.335389	0.0362
R-squared	0.709930	Mean dependent var	20.26381	
Adjusted R-squared	0.553739	S.D. dependent var	0.961704	
S.E. of regression	0.642445	Akaike info criterion	2.235260	
Sum squared resid	5.365560	Schwarz criterion	2.633174	
Log likelihood	-15.47023	Hannan-Quinn criter.	2.321618	
F-statistic	4.545262	Durbin-Watson stat	1.801874	
Prob(F-statistic)	0.009112			

Regarding Least Squares method in Table 44, a value of R-squared is close to 1 indicating a better fit.

The "F value" and "Prob(F)" statistics test the overall significance of the regression model. At a confidence level of 99 percent (Significance at the 0.01 level), probability of F-statistics has a value of 0.009112 which is less than 0.01, so we reject the null hypothesis ( $H_0 : \beta_1 = 0, \beta_2 = 0$ ) and independent variables are significant to explain dependent variable.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.801874 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RGDP, RW, RER and RBC have the wrong sign.

The coefficients of RW, RER and GEOD are statistically significant at 5%. Therefore, RW, RER and GEOD have an impact on Malaysia's RFDI.

If GEOD (which has the right sign) increases by 1%, RFDI decreases by 41.53116%.

### 3.)Malaysia (Host) –Thailand (Home)

Table 45: Malaysia (Host) –Thailand (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 15:12				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-738.3548	375.4862	-1.966397	0.0710
LRGDP	13.56329	6.334332	2.141234	0.0518
LREX	-3.568164	1.447011	-2.465886	0.0284
LRIM	11.79537	4.207773	2.803234	0.0149
LRW	0.747301	4.350511	0.171773	0.8663
LRER	9.876687	7.341529	1.345317	0.2015
LRBC	-0.195380	0.185118	-1.055432	0.3104
LGEOD	79.82710	41.96272	1.902334	0.0795

R-squared	0.509005	Mean dependent var	16.70000
Adjusted R-squared	0.244623	S.D. dependent var	0.803660
S.E. of regression	0.698481	Akaike info criterion	2.402514
Sum squared resid	6.342384	Schwarz criterion	2.800427
Log likelihood	-17.22640	Hannan-Quinn criter.	2.488871
F-statistic	1.925261	Durbin-Watson stat	1.752881
Prob(F-statistic)	0.146018		

Regarding Least Squares method in Table 45, a value of R-squared is equal to 0.509005 which is quite low.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.752881 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only REX and GEOD have the wrong sign.

The coefficients of REX and RIM are statistically significant at 5%. Therefore, REX and RIM have an impact on Malaysia's RFDI.

If RIM (which has the correct sign) increases by 1%, RFDI increases by 11.79537 %.

### 3.Indonesia

#### 1.) Indonesia (Host) –Malaysia (Home)

Table 46: Indonesia (Host) –Malaysia (Home) : Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 14:10				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	493.4148	3316.230	0.148788	0.8840
LRGDP	0.974104	3.942601	0.247072	0.8087
LREX	2.298744	5.548261	0.414318	0.6854
LRIM	0.064795	2.518977	0.025723	0.9799
LRW	-2.925234	3.421467	-0.854965	0.4081
LRER	-3.573174	4.598064	-0.777104	0.4510
LRBC	0.126539	0.319788	0.395698	0.6987
LGEOD	-101.7225	623.6062	-0.163120	0.8729
R-squared	0.225942	Mean dependent var	17.07952	
Adjusted R-squared	-0.190859	S.D. dependent var	1.253170	
S.E. of regression	1.367540	Akaike info criterion	3.746236	
Sum squared resid	24.31216	Schwarz criterion	4.144149	
Log likelihood	-31.33548	Hannan-Quinn criter.	3.832594	
F-statistic	0.542086	Durbin-Watson stat	2.188288	
Prob(F-statistic)	0.788399			

Regarding Least Squares method in Table 46, no coefficient is statistically significant at 5%.

1.) Indonesia (Host) –Singapore (Home)

Table 47: Indonesia (Host) –Singapore (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 14:52				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31.32139	333.3547	-0.093958	0.9266
LRGDP	-0.981576	2.227045	-0.440753	0.6666
LREX	1.844783	5.937505	0.310700	0.7610
LRIM	-0.123746	5.596852	-0.022110	0.9827
LRW	0.388418	2.484584	0.156331	0.8782
LRER	-2.689223	1.634399	-1.645390	0.1238
LRBC	0.117598	0.310256	0.379037	0.7108
LGEOD	-1.740575	45.00240	-0.038677	0.9697
R-squared	0.526486	Mean dependent var		19.30429
Adjusted R-squared	0.271518	S.D. dependent var		0.937916
S.E. of regression	0.800522	Akaike info criterion		2.675226
Sum squared resid	8.330862	Schwarz criterion		3.073140
Log likelihood	-20.08988	Hannan-Quinn criter.		2.761584
F-statistic	2.064905	Durbin-Watson stat		2.461847
Prob(F-statistic)	0.122848			

Regarding Least Squares method in Table 47, no coefficient is statistically significant at 5%.

2.) Indonesia (Host) –Thailand (Home)

Table 48: Indonesia (Host) –Thailand (Home) : Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 14:59				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	123.3485	406.5533	0.303401	0.7664
LRGDP	-4.665150	3.848410	-1.212228	0.2470
LREX	-7.631616	8.425632	-0.905762	0.3815
LRIM	10.10352	7.260537	1.391567	0.1874
LRW	5.660273	4.007665	1.412362	0.1813
LRER	0.876921	6.934878	0.126451	0.9013
LRBC	1.835108	1.170639	1.567612	0.1410
LGEOD	-20.50417	45.78020	-0.447883	0.6616
R-squared	0.469656	Mean dependent var		17.75810
Adjusted R-squared	0.184087	S.D. dependent var		1.760181
S.E. of regression	1.589935	Akaike info criterion		4.047595
Sum squared resid	32.86260	Schwarz criterion		4.445508

Log likelihood	-34.49974	Hannan-Quinn criter.	4.133952
F-statistic	1.644630	Durbin-Watson stat	3.210272
Prob(F-statistic)	0.208059		

Regarding Least Squares method in Table 48, no coefficient is statistically significant at 5%.

#### 4. Vietnam

##### 1.) Vietnam (Host) –Indonesia (Home)

Table 49: Vietnam (Host) –Indonesia (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 15:45				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	256.0209	98.24785	2.605868	0.0218
LRGDP	4.368324	3.197245	1.366278	0.1950
LREX	-0.762333	0.892191	-0.854450	0.4083
LRIM	0.841900	0.757706	1.111116	0.2866
LRW	-1.877333	3.877395	-0.484174	0.6363
LRER	4.621881	1.934527	2.389153	0.0327
LRBC	-0.649132	0.255091	-2.544712	0.0244
LGEOD	-31.21395	10.34546	-3.017163	0.0099
R-squared	0.665711	Mean dependent var		15.34857
Adjusted R-squared	0.485710	S.D. dependent var		1.151153
S.E. of regression	0.825538	Akaike info criterion		2.736770
Sum squared resid	8.859675	Schwarz criterion		3.134683
Log likelihood	-20.73608	Hannan-Quinn criter.		2.823127
F-statistic	3.698361	Durbin-Watson stat		2.725505
Prob(F-statistic)	0.020133			

Regarding Least Squares method in Table 49, a value of R-squared is close to 1 indicating a better fit.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 2.725505 which is not close to 2, this does not support the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is not likely free of autocorrelation.

Only REX and RW have the wrong sign.

The coefficients of RER, RBC and GEOD are statistically significant at 5%. Therefore, RER, RBC and GEOD have an impact on Vietnam's RFDI.

If RER increases by 1%, RFDI increases by 4.621881 %.

If RBC increases by 1%, RFDI decreases by 0.649132 %.

If GEOD increases by 1%, RFDI decreases by 31.21395 %.

## 2.)Vietnam (Host) –Malaysia (Home)

Table 50: Vietnam (Host) –Malaysia (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:49 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.289723	48.31302	0.068092	0.9467
LRGDP	1.352560	1.587151	0.852194	0.4095
LREX	1.240772	0.553454	2.241871	0.0430
LRIM	-0.702068	0.655869	-1.070440	0.3039
LRW	1.220067	1.331633	0.916219	0.3762
LRER	0.588530	0.921298	0.638806	0.5340
LRBC	0.054541	0.131091	0.416052	0.6842
LGEOD	0.395554	6.433388	0.061485	0.9519
R-squared	0.613369	Mean dependent var		17.81048
Adjusted R-squared	0.405182	S.D. dependent var		0.611698
S.E. of regression	0.471769	Akaike info criterion		1.617676
Sum squared resid	2.893355	Schwarz criterion		2.015589
Log likelihood	-8.985599	Hannan-Quinn criter.		1.704033
F-statistic	2.946250	Durbin-Watson stat		1.805838
Prob(F-statistic)	0.044075			

Regarding Least Squares method in Table 50, a value of R-squared is close to 1 indicating a better fit.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 1.805838 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RIM, RBC and GEOD have the wrong sign.

The coefficient of REX is statistically significant at 5%. Therefore, REX has an impact on Vietnam's RFDI.

If REX increases by 1%, RFDI increases by 1.240772 %.

## 3.)Vietnam (Host) –Singapore (Home)

Table 51: Vietnam (Host) –Singapore (Home): Least Squares Method

Dependent Variable: LNRFDI Method: Least Squares Date: 01/31/12 Time: 15:53 Sample: 1990 2010 Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-38.85990	47.50475	-0.818021	0.4281

LRGDP	2.017738	1.592709	1.266859	0.2274
LREX	0.482887	0.899942	0.536576	0.6006
LRIM	1.581975	0.868721	1.821039	0.0917
LRW	5.374055	1.709457	3.143721	0.0078
LRER	2.622528	1.544151	1.698363	0.1132
LRBC	0.100663	0.207611	0.484861	0.6358
LGEOD	0.887478	5.733116	0.154799	0.8794
R-squared	0.679572	Mean dependent var		19.01048
Adjusted R-squared	0.507034	S.D. dependent var		0.823174
S.E. of regression	0.577963	Akaike info criterion		2.023718
Sum squared resid	4.342538	Schwarz criterion		2.421632
Log likelihood	-13.24904	Hannan-Quinn criter.		2.110076
F-statistic	3.938673	Durbin-Watson stat		2.640690
Prob(F-statistic)	0.015933			

Regarding Least Squares method in Table 51, a value of R-squared is close to 1 indicating a better fit.

Durbin-Watson test (d) identify the statistical significance of any positive serial correlation within the regression residuals. Durbin-Watson stat is equal to 2.640690 which is close to 2, this supports the null hypothesis (autocorrelation of the disturbances is 0, or error deviations are uncorrelated), then the model is likely free of autocorrelation.

Only RBC and GEOD have the wrong sign.

The coefficient of RW is statistically significant at 5%. Therefore, RW has an impact on Vietnam's RFDI.

If RW increases by 1%, RFDI increases by 5.374055 %.

#### 4.) Vietnam (Host) –Thailand (Home)

Table 52: Vietnam (Host) –Thailand (Home): Least Squares Method

Dependent Variable: LNRFDI				
Method: Least Squares				
Date: 01/31/12 Time: 15:55				
Sample: 1990 2010				
Included observations: 21				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	37.14762	59.93350	0.619814	0.5461
LRGDP	2.725089	2.256006	1.207927	0.2486
LREX	0.008042	0.760930	0.010568	0.9917
LRIM	0.494688	0.663461	0.745617	0.4692
LRW	0.093685	1.124858	0.083286	0.9349
LRER	2.345224	2.784369	0.842282	0.4149
LRBC	-0.054562	0.354635	-0.153853	0.8801
LGEOD	-3.187426	7.328620	-0.434929	0.6707
R-squared	0.460810	Mean dependent var		17.66762
Adjusted R-squared	0.170476	S.D. dependent var		0.720791
S.E. of regression	0.656483	Akaike info criterion		2.278492
Sum squared resid	5.602609	Schwarz criterion		2.676405



Log likelihood	-15.92416	Hannan-Quinn criter.	2.364849
F-statistic	1.587175	Durbin-Watson stat	1.959048
Prob(F-statistic)	0.223902		

Regarding Least Squares method in Table 52, no coefficient is statistically significant at 5%.

In conclusion, the variables help attract FDI inflows from each selected home countries are shown in Table 53 as follows:

Table 53: Empirical Results: FDI Attractiveness from Each Selected Home Country

Host Country	Home Country	FDI Attractiveness
Thailand	Indonesia	No significant variable
	Malaysia	Real exchange rate
	Singapore	Real exchange rate
	Vietnam	No significant variable
Malaysia	Indonesia	Real lending interest rate
	Singapore	Geographic distance
	Thailand	Real Import
Indonesia	Malaysia	No significant variable
	Singapore	No significant variable
	Thailand	No significant variable
Vietnam	Indonesia	Real exchange rate
		Real lending interest rate
		Geographic distance
	Malaysia	Real Export
	Singapore	Real wage
	Thailand	No significant variable

# VITAE

Miss Teera Boonyanuwat

## Personal Information

Marital Status     Single  
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Religion              Buddhism

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### **Master's Degree**

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