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Determining the Directional Flows of Foreign Direct Investments in the ASEAN Region: Key Macroeconomic and "Doing Business" Indicators Affecting the Direction of ASEAN FDI Inflows and Its Impact on Intra- and Extra-ASEAN Trade

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Investments raise the productive capacity of the economy and provide new employment opportunities. Workers are able to secure gainful employment quickly as long as their skills match the jobs offered by existing and newly established companies in the industry. However, when domestic investments are low, most developing countries rely on foreign direct investments (FDIs) to develop domestic industries. FDIs are capital expenditures on plant property and equipment undertaken by foreign firms in various host countries that offer distinct advantages in terms of skilled labor, cheap land, access to natural resources, and larger markets.

The establishment of manufacturing plants by foreign firms can 1) create industrial linkages within the domestic economy, 2) encourage the growth of local enterprises, 3) encourage technology transfer, and 4) contribute to

increasing access to international markets, among others (Dobson & Chia, 1997).

The potential benefits to the economy justify encouraging the entry of FDIs; however, it is also important to remember that possible negative outcomes may occur, particularly if the appropriate economic policies designed to protect the interests of the host country are not in place. For example, multinational corporations (MNCs) can limit the extent of competition in the domestic economy by controlling prices and output, discouraging local firms from entering the market, and lobbying the government to protect their positions within the imperfect market. In addition, MNCs can hide behind tax incentives or use transfer pricing to avoid paying the right amount of taxes and crowd out local borrowers in the financial markets. These negative outcomes, among others, have been experienced by various developing countries in the past and should be considered when courting FDIs.

ASEAN member countries have attempted to augment the relatively low level of domestic investments in the region by encouraging FDIs in higher value-added manufacturing. Indeed, the formation of the ASEAN Free Trade Area (AFTA) agreement in 1992 was not only designed to encourage free trade among the member countries but also expected to indirectly encourage more regional investments by offering lower production costs and a wider customer base (Uttama, 2005).

Problem

How do foreign direct investment inflows move within ASEAN?

Objectives

1. To determine the destination of FDIs within the ASEAN over the last five years and explain why certain countries attract more inflows relative to the others;
2. To determine the impact of key indicators of each member country on its ability to attract FDIs from within and outside the ASEAN; and
3. To determine the impact of ASEAN FDI inflows on intra-ASEAN and extra-ASEAN trade.

Significance of the Study

Identifying the top destinations of FDIs in the ASEAN provides major insights into policy adjustments, which other member countries can implement to more effectively exploit the opportunities offered by greater market access attributed to liberal trade policies and participation in various trade agreements.

In addition, strengthening the ASEAN community is better achieved with the expansion of intra- and extra-ASEAN trade. Increasing extra-ASEAN trade, for instance, is important because of the need to continue to improve market access in rapidly growing economies (i.e., China, Brazil, etc.) and the traditional markets of the United States (US), European Union (EU), Japan, and the Middle East.

Foreign Direct Investments Gains

The entrance of FDIs may 1) allow a country to develop technology and knowledge or introduce efficient production processes and new technologies that facilitate the development of industries in the host economy and offset the effects of diminishing returns to capital (Barrios, Görg, & Strobl, 2004; De Gregorio, 2003; De Mello, 1999; De Mello, 1997; Zarsky & Gallagher, 2004), 2) favorably affect the levels of domestic supply and demand (Markusen & Venables, 1999), and 3) expand the existing stock of knowledge through labor training and the transfer of skills and managerial and organizational practices that promote the use of advanced technology in host countries (Brems, 1970).

Similarly, the presence of MNCs can contribute to improving the efficiency of industries—especially in the manufacturing sector where they introduce the production of higher value-added intermediate goods (Chandran & Krishnan, 2008). In labor surplus economies, FDIs create jobs and increase demand for skilled workers. Employees receive the added benefits of learning new skills and increasing technical knowledge of the production process, thus enhancing their ability to produce higher value-added goods.

Despite the many benefits and advantages that FDIs bring, Dunning (1993) warned that the effects of foreign investments vary across host countries depending on, among others, 1) the type of technology, 2) industries in which FDIs enter, and 3) MNCs' response to policies and regulations imposed by the government.

Theoretical Framework

Traditional Determinants and Ideal Conditions Required to Encourage Foreign Direct Investments

Identifying the determinants of FDI inflows requires the understanding of the multinational company's motivation to undertake capital expenditures in a chosen country.

In general, FDIs locate where there are large and profitable markets, liberal host government policies, physical and technological infrastructure, highly skilled and competitively priced labor, and cultural similarities between the host and the owners of the foreign firm (Sethi, Guisinger, Phelan, & Berg, 2003; Bernal, Kaukab, & Yu, 2004). The subsequent section tackles the major FDI determinants:

Macroeconomic stability is characterized by sustained economic growth, low inflation, low interest rates, and stable exchange rates (Bevan & Estrin, 2004). It eliminates uncertainties and facilitates the projections of macroeconomic variables that denote 1) consumer spending and business opportunities, 2) cost of doing business, 3) cost of borrowing, and 4) access to international markets (Dunning, 1993; Globerman & Shapiro, 2004; Bevan & Estrin, 2000; Campos & Kinoshita, 2008).

Market size. Large markets provide enormous business opportunities, specifically the chance to make higher sales and profits, mass produce, and maximize the advantages of economies of scale (Sethi, Guisinger, Phelan, & Berg, 2003).

Infrastructure support can reduce the cost of doing business. Transport infrastructure, for instance, cuts travel time and delivery costs. Cheaper electricity trims down operational costs, while improved telecommunications systems link suppliers with buyers and promote market efficiency (Rehman, Ilyas, Alam, & Akram, 2011).

Skilled labor. Foreign firms consider not only the cost but also the level and complementarity of labor skills with the production process in the decision to locate plants overseas. MNCs that produce high value-added goods and services require highly skilled workers for they easily absorb and adapt to new production technologies (Borensztein, De Gregorio, & Lee, 1998).

Access to natural resources and raw materials. FDIs in mining, energy, and manufacturing seek economies where natural resources and raw materials are easily accessed or host countries that have liberal laws concerning investments in extractive industries and agriculture. Locating in a developing country with rich natural resources overcomes the disadvantages

of competing with other firms in the MNC-home territories (Dunning, 1993) and make business activities in foreign locations more profitable compared to domestic operations.

Trade openness allows exporters access to more international markets, thus attracting FDIs (Borensztein et al., 1998).

Liberal investment policies, particularly on equity ownership, leasing agreements, and industries in the negative list, provide greater opportunities for foreign-firm entry and reduce MNC transaction costs.

Fiscal incentives allow foreign and domestic firms to cut their tax obligations, keep more of their profits, and recover their initial investments sooner. Moreover, these incentives help encourage and direct investments into the desired priority industries.

Effective institutions promote investments, particularly if the public sector is capable of good governance, which, among others, include a judicial system that is effective in settling disputes and enforcing contracts and political institutions that follow constitutional provisions in the removal or replacement of political leaders (Vittorio & Ugo, 2008).

Good governance. Graft and corruption weaken government efficiency and effectiveness in providing public services. Malfeasance divert public funds away from legitimate infrastructure and social service projects and increase the cost of doing business as investors are induced to pay bribes or offer substantial commissions to expedite the processing of business applications and project approval.

Political stability, manifested in the completion of all elected officials' term of office, ensures the full implementation of development programs and the consistent enactment of rules and regulations.

Transition to Efficiency-Seeking Multinational Corporations

As the global economy transitions towards newer standards, FDI determinants are becoming more varied and sophisticated. MNCs are moving from simply being market-seeking and resource-seeking firms to being efficiency-seeking firms (Sethi, Guisinger, Phelan, & Berg, 2003). Rehman, Ilyas, Alam, and Akram (2011) described the latter as a vertical strategy employed to reduce production costs and increase profits by distributing parts of the production process to different countries (i.e., participation in a global production network) (Uttama, 2005), whereas market-seeking MNCs duplicate their production processes in host economies to capture larger markets.

Global Production Networks

Foreign direct investments may come in the form of global production networks (GPNs), which involve segregating the labor-intensive from the capital-intensive production stages of a foreign firm's operations. The firm breaks up the production process and distributes the various stages to "developing economies" that have labor-intensive or capital-intensive comparative advantages. The intermediate goods produced in the host economies are sent back to the source countries, thus allowing MNCs to exploit the comparative cost advantages in host economies (Austria, 2008). Since small countries can participate by concentrating on a specific stage of production for consequent use in other markets, GPNs also reduce the importance of country size in the location of factories (Lipsey & Sjoholm, 2010). Using the electronics industry as an example, Castillo (2005) stated that "product development is highly skills-intensive and could be located in a country rich in skilled and professional workers" (pp. 1–2) making GPNs influential in the integration of different factor markets.

Motivation for Participating in Global Production Networks

The primary motivation for an MNC to be part of a global production network is access to lower cost resources that are compatible with a flagship's competencies (Ernst & Kim, 2001). From the host country's perspective, there is an incentive to engage in a flagship's value chain as it helps producers transition from servicing local firms to transacting with multinational ones (Kaminski & Smarzynska, 2001). GPNs also create an atmosphere of competition, pushing producers to become more efficient and to continuously innovate.

Location Strategy

It is important to note that a global production network is strategically located based on the intensity of specialization required for a certain stage of production. Outsourcing requires segregating highly specialized stages from those which are close to the production of the final good. Typically, complex and specialized processes require a more concentrated location strategy, while final goods or stages close to its production are outsourced from a more dispersed set of countries (Ernst & Kim, 2001).

Review of Related Literature

The participation of countries in liberal trade agreements is designed to provide more market access to all trading partners involved. As enhanced trade fuels economic growth, this consequently encourages more investment by the trading partners into each other's economy because of new advantages found in competitive labor, cheap land, low cost capital, and easy access to raw materials and production technologies. These advantages contribute to the competitiveness of each trading partner's export sector and to the entire economy as a whole.

Improving the competitiveness of nations depends on enhancing their industrial capabilities, particularly in the area of manufactured exports. FDIs in the manufacturing sector facilitate the transfer of technology, expansion of productive capacity, and exploitation of economies of scale.

Vertical FDI occurs when companies locate the different stages of production in other countries to take advantage of cross-border factor cost differences. It enables firms to have assembly lines across countries, which would entail the export and import of goods within a particular industry and, thus, facilitate intra-industry trade (Ruffin, 1999). Embedded within the aggregate trade and investment flows, vertical FDI leads to more trade as intermediate goods are exchanged several times during a production process (Feesntra, 1998; Yeung, Dicken, Henderson, & Coe, 2002). Conversely, horizontal FDI occurs when companies duplicate the same activities in other countries to be closer to target markets (Alfaro & Charlton, 2007). Whether a firm is attempting to minimize cost or trying to increase market access, investments have become a competitive strategy that responds to changing economic conditions (Monczka & Trent, 1992).

As FDIs positively contribute to a country's economic growth and development, numerous studies assert the need to understand the determinants of investment inflows and consider them in intraregional investment and trade policies. Masron and Abdullah (2010) noted that owing to the competition for FDIs between ASEAN member and nonmember countries, the former is motivated to continuously create an attractive climate for investments.

In general, investors study the economic conditions in host countries, especially those which are subject to public policy (Sahoo, 2006). Macroeconomic variables, for instance, influence FDIs and investments improve macroeconomic performance. Mottaleb and Kalirajan (2010) affirmed the link in their study of FDI inflows determinants in 68 developing countries wherein gross domestic product (GDP) levels and growth rates yielded significant impacts on inflows in 2005–2007. Likewise, Nunnenkamp

and Spatz (2002) found the same significant relationship and referred to the indicators as "traditional determinants."

With regard to other macroeconomic indicators, the estimation of Arbatli (2011) of panel data consisting of 46 countries from 1990 to 2009 showed that 1) inflation has a negative but insignificant relationship with FDIs and 2) exports and real exchange rates have positive but insignificant relationships with FDIs. Overall, these findings suggest that prudent macroeconomic policies and conditions are critical in assessing FDIs flow direction.

Another host country characteristic that draws interest is the quality and cost of labor. Typically, firms recruit efficient employees in order to reduce average costs and increase output levels, revenues, and profits. Although developing countries can easily supply low-cost labor, MNCs also look for the stock of human capital, competitiveness relative to other countries, and productivity (Sarna, 2005). Carstensen and Toubal (2003) confirmed that labor costs and FDI inflows to Central and Eastern European Countries (CEECs) were inversely related. Bevan and Estrin (2004) presented similar outcomes in their study of FDIs from the EU into the CEECs and claimed that the negative relationship holds regardless of distance or host country size. Contrastingly, Esiyok (2011) found that labor costs are positively related to FDI inflows in cases wherein multinational firms prioritize labor quality and effectiveness. Based on the highly varied findings, it can be inferred that the effect of labor costs on FDIs depends on the industry and the quality of skills.

Other than labor considerations, MNCs may prefer to divide and distribute stages of their value chain to countries that offer lower trade costs. Feinberg, Keane, and Bognanno (1998)—in their study of the impact of Canada's tariff level on its labor supply and US firms' capital stock—endorsed the negative relationship between the two variables. However, according to Neary (2005), if firms are more sensitive to the proximity concentration of their production networks, then the reduction in trade costs would adversely affect the flow of horizontal investments. Mukherjee and Suetrong (2006) asserted that both positive and negative relationships between trade costs and FDIs exist due to differences in demand and competition in the host and home countries. Thus, various studies would suggest an ambiguous relationship between the two variables.

Besides production efficiency, MNCs also consider market size in deciding factory locations. MNCs are pulled towards countries that have adequate domestic markets and/or linkages with the markets of their trading partners. Hence, the largest markets in the world (i.e., US and China) attract the most FDI (UNCTAD, 2011). Mughal and Akram (2011) confirmed that

market size influences investment inflows in the long run. Jaumotte (2004), in studying 71 developing countries integrated into regional trade agreements (RTAs), verified that both RTA market size and domestic population size yielded positive relationships with FDIs.

In other studies, market size is connected to regionalism and effective institutions. Du, Lu, and Tao (2008) determined that enforcement of intellectual property rights laws, lesser government intervention in the private sector, the eradication of corruption, and better contract enforcement significantly motivate American MNCs to bring their investments to China. Anghel (2005) suggested bureaucracy, rule of law, and political stability as additions to the factors proposed by Du, Lu, and Tao (2008) to attract investors. Roberts (2006) provided that a strong democracy, the protection of property rights, and consistent policy implementation in the presence of multiple veto players create a conducive environment for investment.

The latter recognizes the fact that there are numerous decision-making bodies involved in assessing and maintaining laws on FDIs, which may result in conflicting policies. Although the study was shown to produce empirical inconsistencies, it inferred that such factors positively induce the entrance of FDIs and should be considered by host country governments.

Government support for physical infrastructure is another host country characteristic considered essential by MNCs. Using data available for the number of roads, railways, phone lines, media, and energy from a cross-country data set, Kumar (2001) showed that 1) investment in infrastructure positively influences FDI inflows and 2) developing countries with deficits that render them incapable of offering tax incentives can opt to upgrade local infrastructure and improve the landscape for investments.

Overall, these studies show various factors that governments should consider in enhancing the policy climate for investments. Evidently, macroeconomic indicators contribute significantly to courting FDIs. However, there are other indicators such as good governance, institutional strength, and infrastructure support that are relevant to increasing FDI inflows to a country or a region.

Methodology

Panel Regression Analysis

Determining the direction pursued by foreign direct investment inflows in the ASEAN region is conducted by providing a comparative description of the actual intra-ASEAN and extra-ASEAN FDI flows to each member country from 2007 to 2011.

The study uses panel-data regression analysis to determine the impact and significance of the key economic indicators affecting intra-ASEAN and extra-ASEAN FDI inflows. Panel-data controls for variables that change over time but are stable across countries (Torres-Reyna, 2009). Longitudinal data on the nine ASEAN economies (excluding Myanmar) over a period of five years is used in two types of regression equations: 1) fixed effects with robust heteroscedasticity and autocorrelation consistent (HAC) standard errors and 2) random effects using generalized least squares GLS.

Prior to the use of these two regression models, an application of the ordinary least squares (OLS) technique was undertaken, and results indicated the presence of heteroscedastic variances alongside several parameter estimates with coefficient signs that contradicted fundamentally accepted theoretical relationships. Thus, the use of the two other regression procedures discussed earlier.

A fixed-effects model is used to determine the effect of independent variables that change over time in a panel data set. It eliminates the impact of characteristics that do not change over time from the explanatory variable so that its final effect can be better measured (Torres-Reyna, 2009).

The fixed-effects model, with robust HAC standard errors, addresses the problem of differences in the error term variances across the nine ASEAN countries over the five-year period. On the other hand, the random-effects model using GLS helps in analyzing panel data with the assumption that there are no fixed/individual effects. "The random effects model assumes that the variation across entities is random and uncorrelated with the explanatory variables included in the model" (Torres-Reyna, 2009, p. 25)—which implies that the error term is not correlated with the independent variables.

Best Fitting Model Identification

All panel regressions initially used the specified explanatory variables under the theoretical framework. Independent variables with doubtful coefficient signs and insignificant test statistics are systematically removed, and new equations are estimated. The best fitting panel regression results are consequently identified based on the 1) fundamentally acceptable signs of the parameter estimates and their relationship with the dependent variable, 2) individual significance of the independent variables, 3) overall significance of the model, 4) goodness of fit, and 5) correction for problems pertaining to heteroscedasticity, autocorrelation, serial correlation, and multicollinearity.

Data

Data for the study is taken from the ASEAN International Merchandise Trade Statistics Yearbook 2014, ASEAN Investment Report for 2011 and 2012, Asian Development Bank "Key Indicators for Asia and the Pacific" Report for 2011 and 2012, and World Bank "Doing Business Report" from 2007 to 2013.

Macroeconomic key indicators, expressed as either monetary values or percentages, provide a measure of each ASEAN member country's economic performance. The rankings of each ASEAN country under the "Doing Business Report" provide indications of the change in the regulatory environment. Economies are ranked on the ease of doing business from 1 to 189. A high ranking on these indexes means that the regulatory environment is more conducive to starting and operating a local firm.

Ten topics are included in the 2013 World Bank "Doing Business Report." However, the study is confined to five "doing business" indicators: 1) ease of doing business, 2) starting a business, 3) trading across borders, 4) protecting investors, and 5) enforcing contracts insolvency (World Bank "Doing Business Report" 2013).

Operational Framework

Impact of Key Economic Indicators on Foreign Direct Investments

Five panel regression equations are used—with each equation using a different type of foreign investment measure as dependent variable. The dependent variables are as follows:

Dependent Variables

Label	Description
EXTRA_FDI_	Extra-ASEAN FDI (billions of US$)
INTRA_FDI_	Intra-ASEAN FDI (billions of US$)
FINANCE_FDI	FDI in the financial sector (billions of US$)
MANUF_FDI	FDI in the manufacturing sector(billions of US$)
MINING_FDI	FDI the mining sector (billions of US$)

The explanatory variables used for the panel regressions include the 1) fundamental key macroeconomic indicators for each ASEAN country and 2) World Bank "doing business indicators" (refer to the table on the next page).

Explanatory Variables

Label	Description
CAPX_GOVT	Capital outlays as a percentage of government spending for each ASEAN country
EASE	Country rank between 1 to 189 for the ease of doing business
ECO_GROWTH	Economic growth measured as the percentage change in real GDP
ENFORCE	Country rank between 1 to 189 for enforcing contracts
FOREX	Foreign exchange rate (domestic currency per $1)
GDPDOLLAR	GDP of each ASEAN country in billions of US$ at constant prices
GDP_CAPITA	Real per capita GDP of each ASEAN country at constant prices
INFLA	Inflation rate (percentage change in the consumer price index)
OPEN	Trade openness measured by the ratio of the combined value of exports and imports divided by GDP: (X + M) / GDP
PROTECT	Country rank between 1 to 189 for protecting investments
START	Country rank between 1 to 189 for starting a business
TRADING	Country rank between 1 to 189 for trading across borders

Impact of Foreign Direct Investments on Intra- and Extra-ASEAN Trade

The second set of panel regression equations determines how ASEAN FDI inflows affect intra-ASEAN and extra-ASEAN trade. Two equations are estimated using the sum of the intra- and extra-ASEAN FDI as dependent variables (refer to the table below).

Dependent Variables

Label	Description
EXTRA_A_TRADE1	Extra-ASEAN trade (billions of US$)
INTRA_A-TRADE1	Intra-ASEAN trade (billions of US$)

Macroeconomic and the "doing business indicators" serve as independent variables in the second set of panel regressions (refer to the table on the next page).

Explanatory Variables

Label	Description
ASEAN_FDI	ASEAN FDI inflows (intra-ASEAN FDI + extra-ASEAN FDI) (billions of US$)
ECO_GROWTH	Economic growth, measured as the percentage change in real GDP
ENFORCE	Country rank between 1 to 189 for enforcing contracts
FOREX	Foreign exchange rate (domestic currency per $1)
GDPDOLLAR	GDP of each ASEAN country in billions of US$ at constant prices
PROTECT	Country rank between 1 to 189 for protecting investments
START	Country rank between 1 to 189 for starting a business
TRADING	Country rank between 1 to 189 for trading across borders

All of the identified independent variables are initially used in both sets of the panel regressions. In the succeeding equation estimates, several explanatory variables are systematically removed from the model because of incorrect coefficient signs, insignificant statistical results, and multicollinear effects.

Results and Analysis

ASEAN Foreign Direct Investment Inflows

ASEAN FDI inflows increased from $46.90 in 2009 billion to $114.11 billion in 2011, growing 2.43 times since the occurrence of the US financial crisis and the global economic slowdown (refer to Table 1). From 2006 to 2011, Singapore consistently attracted the largest amount of FDI peaking in 2011 at $64 billion. In 2010 and 2011, Singapore cornered more than half of the total ASEAN FDI inflows. Indonesia was the second FDI largest destination for 2010 and 2011 at $13.77 billion and $19.24 billion, respectively. Malaysia was the third largest recipient of FDI—almost doubling from 2006's $6.07 billion to 2011's $12 billion (refer to Table 1).

Table 1. ASEAN FDI Inflows, 2006–2011 (Millions of US$)

Country	2006	2007	2008	2009	2010	2011
ASEAN	63,689.2	84,152.4	49,289.7	46,896.7	92,278.6	114,110.6
Brunei Darussalam	434.0	260.2	330.1	371.14	625.4	1,208.3
Cambodia	483.2	867.3	815.2	539.0	782.6	891.7
Indonesia	4,913.8	6,928.3	9,318.1	4,876.8	13,770.9	19,241.6
Lao PDR	187.4	323.5	227.8	318.6	332.6	300.7
Malaysia	6,072.4	8,538.4	7,248.4	1,405.1	9,155.9	12,000.9
Myanmar	427.8	714.8	975.6	963.3	450.2	0.0
Philippines	2,921.0	2,916.0	1,544.0	1,963.0	1,298.0	1.262.0
Singapore	36,389.9	45,534.6	10,712.2	24,006.1	48,751.6	63,997.2
Thailand	9,459.6	11,330.2	8,539.5	4,853.5	9,111.6	7,778.1
Vietnam	2,400.0	6,739.0	9,579.0	7,600.0	8,000.0	7,430.0

Source: ASEAN Investment Report 2012.

Sources of Foreign Direct Investment Inflows

In 2011, the largest portion of ASEAN FDI inflows originated from its regional members—23.02% of all inflows to the region. The second largest contributor was the EU with 15.98%, and Japan, third at 13.16%. For the years 2009 and 2010, ASEAN was only the second largest contributor to FDI inflows at 13.43% and 15.52%, respectively. The EU topped the list for these years at 17.19% and 18.44%, respectively. Japan's contribution to ASEAN FDI decreased from 8.8% in 2008 to 8.08% in 2009 but rose to 11.66% in 2010 and 13.16% in 2011 (refer to Table 2 for FDI levels).

Table 2. Sources of ASEAN FDI Flows (Millions of US$)

	2005	2006	2007	2008	2009	2010	2011
Intra-ASEAN	4,210.6	8,641.9	9,113.0	9,728.9	6,300.2	14,322.7	26,270.7
Dialogue Partners	24,717.2	33,461.5	50,870.6	22,280.7	23,772.2	54,482.1	47,720.8
Australia	257.0	569.3	2,170.3	1,042.4	993.0	2,584.9	1,338.0
Canada	682.7	364.5	408.7	636.7	720.3	1,393.0	985.4
China	615.6	1,938.5	2,069.2	1,208.4	1,852.6	2,784.6	6,034.4
European Union 27	11,722.3	15,808.2	21,902.1	8,871.7	8,063.1	17,012.1	18,240.5
India	471.5	-96.1	2,615.4	1,400.8	616.4	3,351.5	-1,848.5

Table 2 (cont.). Sources of ASEAN FDI Flows (Millions of US$)

	2005	2006	2007	2008	2009	2010	2011
Japan	6,581.7	10,758.7	8,723.5	4,335.5	3,789.9	10,756.4	15,051.1
New Zealand	595.0	-144.4	114.0	-106.1	98.9	3.4	13.4
Republic of Korea	528.7	1,290.3	2,444.9	1,550.8	1,794.0	3.764.2	2,138.3
Russian Federation	0.0	1.2	31.0	81.3	139.8	60.3	21.6
United States	3,262.6	2,971.4	10,391.6	3,259.1	5,704.3	12.771.6	5,782.7
Others	13,628.6	21,585.8	15,055.8	17,280.1	16,824.3	23,473.8	40,119.1
Total FDI Flows	42,556.4	63,689.2	84,152.4	49,289.7	46,896.7	92,278.6	114,110.6

Source: ASEAN Investment Report 2012.

The presence of bilateral or multilateral agreements governing trade with large market non-ASEAN members provides opportunities for the growing number of competitive exporters among ASEAN member countries to sell more goods and services within the free-trade area.

Panel Regression Results for Key Macroeconomic and "Doing Business" Indicators Affecting Intra-ASEAN Foreign Direct Investment Inflows

Panel regression equations using data from nine ASEAN countries over a five-year period (45 observations) are estimated. Table 3 shows the two panel regression results, which attempt to capture the impact of key macroeconomic and "doing business" indicators on intra-ASEAN FDI inflows.

The first column lists the independent variables. The second column presents the panel regression results using fixed effects with robust (HAC) standard errors. The third column shows the random-effects regression results. Diagnostics for the goodness of fit and test of assumptions are shown on the last four rows of the table.

Based on the results, the explanatory variables that significantly affect intra-ASEAN FDI inflows are GDPDOLLAR, GDP_CAPITA, CAPX_GOVT, FOREX, START, PROTECT, and TRADING. Table 3 shows the complete panel regression results of the best fitting models.

Table 3. Dependent Variable, Intra-ASEAN FDI

	Fixed-Effects Robust (HAC) Standard Errors	Random effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	0.00291163 (0.0008384) 0.9993	-6.63817 (-3.631) 0.0008***
GDP DOLLAR	0.0478682 (2.998) 0.0055***	0.0257654 (5.472) 3.02e-06***
GDP_CAPITA	0.00050024 (4.517) 9.70e-05***	0.000148706 (4.842) 2.17e-05***
CAPX_GOVT	n.a.	6.63726 (2.106) 0.0418**
INFLA	-0.00782610 (-0.1695) 0.8666	n.a.
FOREX	7.33811e-05 (0.4795) 0.6352	0.000178857 (3.492) 0.0012***
START	-0.0433247 (-4.250) 0.0002***	0.00439526 (0.5269) 0.6013
EASE	n.a.	0.0133956 (1.532) 0.1338
PROTECT	-0.0761578 (-2.212) 0.0350**	n.a.
TRADING	0.0312579 (4.101) 0.0003***	n.a.
Adjusted R^2	0.747892	n.a.
p-Value (F)	1.36e-07	n.a.
Test for differing group intercepts *p*-value	0.000454714	n.a.
Breusch–Pagan test *p*-value	n.a.	0.0561181
Hausman test *p*-value	n.a.	2.08273e-009
Wald test *p*-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

The value of real GDP in US dollars represents the market size of each ASEAN member country. Its positive coefficient confirms that ASEAN countries with larger markets attract more intra-ASEAN FDIs.

Income earned by residents in each ASEAN member country, GDP per capita, also becomes a factor that positively influences the entry of intra-ASEAN FDI inflows. High GDP per capita indicates that the ASEAN member country's residents can spend more—signaling greater opportunities for business and attracting more intra-ASEAN FDI.

The proportion of capital outlays from total government spending—with a positive coefficient—denotes infrastructure support. Higher proportions indicate greater efforts to provide more infrastructure support and, thus, attract larger intra-ASEAN FDI.

The foreign exchange rate is positive, signifying that larger values for ASEAN member countries require more local currency to purchase one US$. Hence, ASEAN goods and services are relatively cheaper for foreign investors, reducing the cost of doing business, and encouraging more intra-ASEAN FDI.

The explanatory variables START, PROTECT, and TRADING are "doing business" indicators each expressed as a number between 1 and 189. A lower number indicates a higher rank, while a larger number implies a more inauspicious business environment due to unfavorable regulations and weak institutions. These indicators should have negative coefficients signifying that as ranks rise, conditions to start businesses improve—bringing in more intra-ASEAN FDI.

The ease of starting business and protecting investors variables are negative and significant. However, trading across borders is positive and significant, implying that more intra-ASEAN FDI inflows go to ASEAN countries with lower ranks. Singapore is the only ASEAN country that has consistently topped the "doing business" rankings (number 1 from 2008 to 2011). In 2011, Indonesia (ranked 47), Thailand (ranked 12), Malaysia (ranked 37), and Vietnam (ranked 63) performed poorly in terms of trading across borders but drew considerable intra-ASEAN FDI inflows. Accordingly, other features of these countries are more likely responsible for attracting significant intra-ASEAN FDI inflows.

Panel Regression Results for Key Macroeconomic and "Doing Business" Indicators Affecting Extra-ASEAN Foreign Direct Investment Inflows

The next set of panel regression results use extra-ASEAN FDI inflows as the dependent variable. The significant explanatory variables affecting extra-ASEAN FDI inflows are GDPDOLLAR and ECO_GROWTH. Table 4 shows the complete panel regression results of the best fitting models.

The US dollar value of real GDP for each ASEAN member country reflects market size. It has a positive impact on extra-ASEAN FDI inflows; thus, as the real value of ASEAN country GDP increases, extra-ASEAN FDI inflows also increase.

Economic growth, which has positive coefficients, is the percentage change in GDP that 1) indicates good economic performance, 2) implies macroeconomic stability, and 3) encourages and builds investor confidence in the host country. Fast-growing economies suggest more household and firm spending, which increase business opportunities for investors.

Capital outlays as a proportion of total government expenditure, the inflation rate, the foreign exchange rate, and the "doing business" indicators START and EASE yield insignificant results with coefficient signs consistent with the theoretical expectations.

Table 4. Dependent Variable, Extra-ASEAN FDI

	Fixed-Effects Robust (HAC) Standard Errors	Random Effects (GLS)
Independent variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	-14.2804 (-1.380) 0.1781	-4.85547 (-0.5088) 0.6139
GDP DOLLAR	0.158177 (2.703) 0.0114**	0.0841901 (2.513) 0.0164**
ECO_GROWTH	0.735811 (2.147) 0.0403**	0.840771 (3.143) 0.0033***
CAPX_GOVT	10.6711 (13.4783) 0.4349	19.5720 (0.9059) 0.3708
INFLA	-0.126634 (-1.174) 0.2498	-0.0924483 (-0.4436) 0.6599
FOREX	0.000671922 (1.075) 0.2913	0.000185764 (0.3477) 0.7300
START	-0.0401488 (-1.409) 0.1696	-0.0258680 (-0.4960) 0.6228
EASE	-0.0132346 (-0.2506) 0.8039	-0.0466029 (-0.6286) 0.5335
Adjusted R2	0.793287	n.a.

Table 4 continued...

p-Value (F)	9.43e-09	n.a.
Test for differing group intercepts p-value	1.43127e-005	n.a.
Breusch–Pagan test p-value	n.a.	0.000213198
Hausman test p-value	n.a.	0.155645
Wald test p-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

Panel Regression Results for Key Macroeconomic and "Doing Business" Indicators Affecting ASEAN Mining Foreign Direct Investment Inflows

Mining-sector foreign direct investments provide multinational firms access to the mineral resources of the host country. The complete panel regression results of the best fitting models are presented in Table 5.

Table 5. Dependent Variable, Mining FDI

	Fixed-Effects Robust (HAC) Standard Errors	Random Effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (t-Ratio) p-Value
Constant	1.30488 (0.6626) 0.5125	-1.20332 (-2.583) 0.0135**
GDP DOLLAR	0.009444492 (2.032) 0.0508*	0.00697330 (4.040) 0.0002***
ECO_GROWTH	n.a.	0.0114556 (0.4189) 0.6775
INFLA	-0.00828140 (-0.5669) 0.5748	n.a.
EASE	-0.0123508 (-0.6999) 0.4892	n.a.
PROTECT	-0.0211669 (-1.870) 0.070*	n.a.

Table 5 continued...

TRADING	0.0157453 (2.718) 0.0107**	n.a.
ENFORCE	n.a.	0.00938017 (2.897) 0.0060***
Adjusted R2	0.616620	n.a.
p-Value (F)	0.000011	n.a.
Test for differing group intercepts p-value	0.00075048	n.a.
Breusch–Pagan test p-value	n.a.	0.0575158
Hausman test p-value	n.a.	0.762483
Wald test p-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

The significant explanatory variables affecting mining FDI inflows in each ASEAN member country are GDPDOLLAR, PROTECT, TRADING, and ENFORCE.

The finding regarding trading across borders' relationship with mining FDI (positive) is not consistent with a priori expectations (negative), implying that as country rankings deteriorate, mining FDI in ASEAN countries increase. Perhaps ASEAN countries receiving large amounts of mining FDI are able to partially offset the difficulties in trading across borders by the abundance of mineral reserves that foreign firms can utilize.

Likewise, the enforcement of contracts is significant and positive but contradicts theoretical expectations. ASEAN countries with improved rankings should attract more mining FDI resulting to a negative relationship. A positive coefficient implies that as rankings for contract enforcement deteriorate, more mining FDI flows into the country. Countries like China and the US have been known to invest in developing countries where mineral reserves are abundant even if government enforcement of contracts are weak. Investors willingly assume these risks for as long as they can mitigate them by 1) building strong personal and business relationships with government officials who will have a stake or claim in the investments and 2) using foreign aid and loans as leverage to protect their investments (O'Neil, 2013).

Panel Regression Results for Key Macroeconomic and "Doing Business" Indicators Affecting ASEAN Manufacturing Foreign Direct Investments Inflows

After several panel regression runs, the results of the best fitting models explaining movements in manufacturing foreign direct investment inflows into ASEAN are presented in Table 6. It shows that ASEAN manufacturing FDI inflows are significantly affected by GDPDOLLAR, ECO_GROWTH, FOREX, and EASE with coefficient signs consistent with a priori expectations. The explanatory variables INFLA and TRADING have coefficient signs consistent with the theoretical expectations but show insignificant results.

Table 6. Dependent Variable, Manufacturing FDI

	Fixed-Effects Robust (HAC) Standard Errors	Random Effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	2.73182 (0.7362) 0.4670	2.09966 (2.148) 0.0381**
GDP DOLLAR	0.0279981 (0.9758) 0.3365	0.00839510 (2.122) 0.0404**
ECO_GROWTH	0.238433 (2.188) 0.0360**	0.248349 (2.781) 0.0084***
INFLA	-0.0171149 (-0.1927) 0.8484	-0.00845098 (-0.1177) 0.9070
FOREX	n.a.	0.000123002 (1.971) 0.0561*
EASE	-0.0540423 (-1.981) 0.0563*	-0.0248790 (-3.275) 0.0023***
TRADING	n.a.	-0.00508624 (-0.5117) 0.6119
Adjusted R2	0.540692	n.a.
p-Value (F)	0.000075	n.a.
Test for differing group intercepts *p*-value	0.484204	n.a.

Table 6 continued...

Breusch–Pagan test p-value	n.a.	0.0646318
Hausman test p-value	n.a.	0.56914
Wald test *p*-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

These results reinforce the view that 1) faster economic growth creates more business opportunities for MNCs, thus encouraging the establishment of production plants to meet rising demand, and 2) exchange rate depreciations reduce the cost of doing business. Refer to Table 6 for the regression results.

Panel Regression Results for Key Macroeconomic and "Doing Business" Indicators Affecting ASEAN Financial Sector Foreign Direct Investment Inflows

Presented in Table 7 are the results of the best fitting models for the determinants of foreign direct investments in the financial sector of the ASEAN member countries.

Table 7. Dependent Variable, Finance FDI

	Fixed effects Robust (HAC) standard errors	Random effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	1.5939 (0.4192) 0.6779	-0.0900267 (-0.1304) 0.8969
ECO_GROWTH	0.396062 (1.965) 0.0584*	0.463605 (6.483) 1.11e-07***
GDP_CAPITA	0.000354905 (6.614) 2.16E-07***	0.000135818 (5.772) 1.08e-06***
INFLA	-0.0611537 (-0.8866) 0.3821	-0.0354221 (-0.6511) 0.5188
EASE	-0.0429806 (-1.649) 0.1093	-0.0113617 (-1.676) 0.1018

Table 7 continued...

PROTECT	-0.0111781 (-0.3133) 0.7561	-0.00832298 (-1.554) 0.1283
Adjusted R2	0.737703	n.a.
p-Value (F)	5.17E-08	n.a.
Test for differing group intercepts p-value	0.680477	n.a.
Breusch–Pagan test p-value	n.a.	0.16753
Hausman test p-value	n.a.	0.451538
Wald test *p*-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

Foreign direct investments in the financial sector, which involve setting up new bank and nonbank financial institutions, are significantly affected by ECO_GROWTH and GDP_CAPITA with coefficient signs consistent with a priori expectations.

The explanatory variables INFLA, EASE, and PROTECT have coefficient signs consistent with the theoretical expectations but are insignificant.

The results of the models indicate that 1) sustained growth shows good macroeconomic performance, higher income generated by firms and households, lower investment risks, and more opportunities for bank and nonbank financial intermediation and 2) although per capita income does not consider the actual distribution of income, higher GDP per capita results to more household and firm savings or invests in high yielding financial instruments.

ASEAN Foreign Direct Investment Inflows Impact on Intra- and Extra-ASEAN Trade

ASEAN foreign direct investment inflows are expected to enhance and strengthen international trade within and outside the region. Investments from multinational companies increased the competitiveness of manufactured exports. Foreign investors setting up manufacturing plants in special economic zones or export processing zones took advantage of the infrastructure support and fiscal incentives offered by host countries to exporting companies as well as the 0% to 5% tariff rates within the region (through AFTA). These exports may be final goods destined for consumers

within or outside ASEAN or components or intermediate products to be exported to other ASEAN member countries and used in the assembly of the final goods.

Total ASEAN trade, placed at $2,388.59 billion in 2011, was comprised of 25% intra-ASEAN trade ($598.24 billion) and 75% extra-ASEAN trade ($1,790.35 billion). Singapore received the largest share of intra- and extra-ASEAN trade at $205.67 billion and $569.48 billion, respectively. Thailand ranked second with $111.45 billion intra-ASEAN trade and $347.45 billion extra-ASEAN trade. Malaysia had the third largest value for intra- and extra-ASEAN trade at $108.14 billion and $307.58 billion, respectively (refer to Table 8).

Table 8. Intra- and Extra-ASEAN Trade, 2011 (Value in Million US$; Share in Percent)

Country	Intra-ASEAN Trade	Share to Total Trade	Extra-ASEAN Trade	Share to Total Trade	Total trade
Brunei Darussalam	2,912.1	19.6	11,910.2	80.4	14,822.3
Cambodia	3,003.8	23.4	9,840.3	76.6	12,844.1
Indonesia	99,353.2	26.1	281,579.1	73.9	380,932.3
Lao PDR	2,530.3	64.0	1,425.5	36.0	3,955.9
Malaysia	108,139.7	26.0	307,582.2	74.0	415,721.9
Myanmar	7,207.7	48.3	7,717.4	51.7	14,925.1
Philippines	23,675.6	21.2	88,076.0	78.8	111,751.6
Singapore	205,670.9	26.5	569,481.7	73.5	775,152.6
Thailand	111,450.8	24.3	347,453.5	75.7	458,904.4
Vietnam	34,298.1	17.2	165,284.0	82.8	199,582.1
ASEAN	598,242.2	25.0	1,790,350	75.0	2,388,592.3

Source: ASEAN International Merchandise Trade Statistics Yearbook 2014.

In 2011, total ASEAN exports, which totaled $1,242.29 billion, were comprised of 26.36% intra-ASEAN exports and 73.63% of extra-ASEAN exports. The top three member country exporters were 1) Singapore, the largest intra-ASEAN and extra-ASEAN exporter, at $127.54 billion and $281.90 billion, respectively; 2) Thailand, with $72.23 billion intra-ASEAN exports and $156.60 billion extra-ASEAN exports; and 3) Malaysia at $56.05 billion and $172.13 billion intra- and extra-ASEAN exports, respectively (refer to Table 9).

Table 9. Intra- and Extra-ASEAN Exports, 2011 (Value in Million US$; Share in Percent)

Country	Intra-ASEAN Exports	Share to Total Exports	Extra-ASEAN Exports	Share to Total Exports	Total ASEAN Exports
Brunei Darussalam	1,721.1	13.9	10,641.2	86.1	12,362.3
Cambodia	833.7	12.4	5,876.8	87.6	6,710.6
Indonesia	42,098.9	20.7	161,397.8	79.3	203,496.7
Lao PDR	959.8	55.0	786.7	45.0	1,746.5
Malaysia	56,049.7	24.6	172,129.5	75.4	228,179.1
Myanmar	3,957.4	48.7	4,161.8	51.3	8,119.2
Philippines	8,635.3	18.0	39,406.9	82.0	48,042.2
Singapore	127,544.5	31.2	281,899.0	68.8	409,443.5
Thailand	72,226.6	31.6	156,594.1	68.4	228,820.7
Vietnam	13,504.8	14.2	81,860.7	85.8	95,365.6
ASEAN	327,531.8	26.4	914,754.6	73.6	1,242,286.4

Source: ASEAN International Merchandise Trade Statistics Yearbook 2014.

ASEAN imports in 2011, placed at $1,146.31 billion, consisted of $270.71 billion intra-ASEAN imports (23.62%) and $875.60 billion extra-ASEAN imports (76.38%). Singapore was the largest intra- and extra-ASEAN importer at $78.13 billion and $287.58 billion, respectively—followed by Indonesia at $57.25 billion and Malaysia at $52.09 billion. Extra-ASEAN imports showed a slightly different result, with Thailand being the second largest importer at $190.86 billion, followed by Malaysia at $135.45 billion (refer to Table 10)

Table 10. Intra- and Extra-ASEAN Imports, 2011 (Value in Million US$; Share in Percent)

Country	Intra-ASEAN Imports	Share to Total Imports	Extra-ASEAN Imports	Share to Total Imports	Total ASEAN Imports
Brunei Darussalam	1,191.1	48.4	1,268.9	51.6	2,460.0
Cambodia	2,170.1	35.4	3,963.5	64.6	6,133.6
Indonesia	57,254.3	32.3	120,181.3	67.7	177,435.6
Lao PDR	1,570.5	71.1	638.8	28.9	2,209.4
Malaysia	52,090.0	27.8	135,452.8	72.2	187,542.8

Table 10 continued...

Myanmar	3,250.3	47.8	3,555.6	52.2	6,805.9
Philippines	15,040.3	23.6	48,669.1	76.4	63,709.4
Singapore	78,126.4	21.4	287,582.7	78.6	365,709.1
Thailand	39,224.2	17.0	190,859.5	83.0	230,083.6
Vietnam	20,793.2	20.0	83,423.3	80.0	104,216.5
ASEAN	270,710.4	23.6	875,595.5	76.4	1,146,305.9

Source: ASEAN International Merchandise Trade Statistics Yearbook 2014.

Panel Regression Results for ASEAN Foreign Direct Investments and "Doing Business" Indicators Affecting Intra-ASEAN Trade

Using intra-ASEAN trade data for the nine ASEAN countries from 2007 to 2011, panel regression runs were conducted with the macroeconomic and doing business indicators as explanatory variables. Table 11, which contains the results of the best fitting models, shows that intra-ASEAN FDIs are significantly affected by ASEAN_FDI, TRADING, and PROTECT with coefficient signs consistent with a priori expectations.

The results bear out that 1) ASEAN FDI, the sum of intra- and extra-ASEAN FDI for each member country, increases intra-ASEAN trade owing to more competitive exports generated by MNCs in various ASEAN countries and the increased intra-industry ASEAN trade attributed to the operations of global production networks; 2) easier conditions in the facilitation of trade across borders encourage more intra-ASEAN trade; and 3) improvements in investment protection encourage more FDI that induce more intra-ASEAN trade, particularly in the export sector.

Table 11. Dependent Variable, Intra-ASEAN Trade

	Fixed-Effects Robust (HAC) Standard Errors	Random Effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	92.7920 (4.285) 0.0001***	89.8982 (8.640) 8.91e-011***
ASEAN_FDI	0.944854 (3.284) 0.0024***	1.36071 (4.989) 1.16e-05***

Table 10 continued...

TRADING	-0.199988 (-2.869) 0.0071***	-0.280839 (-2.442) 0.0190**
PROTECT	-0.430688 (-1.375) 0.1783	-0.374547 (-3.566) 0.0009***
Adjusted R2	0.955146	n.a.
p-Value (F)	4.86e-21	n.a.
Test for differing group intercepts p-value	5.66032e-008	n.a.
Breusch–Pagan test p-value	n.a.	0.000420743
Hausman test p-value	n.a.	0.000480653
Wald test *p*-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

Panel Regression Results for ASEAN Foreign Direct Investments and "Doing Business" Indicators Affecting Extra-ASEAN Trade

Using extra-ASEAN trade data for the nine ASEAN countries from 2007 to 2011, panel regression runs were conducted. The best fitting model results contained in Table 12 indicate that ASEAN FDI is significant and has a positive impact on extra-ASEAN trade. The coefficients showing the impact of ASEAN FDIs on extra-ASEAN trade are generally larger than those of intra-ASEAN trade, which is expected since extra-ASEAN trade is three times more than intra-ASEAN trade for a majority of the member countries.

The results also verify that 1) as country rankings improve under trading across borders, extra-ASEAN trade increases, and 2) better protection for investors encourages more FDI inflows.

Table 12. Dependent Variable, Extra-ASEAN Trade

	Fixed-Effects Robust (HAC) Standard Errors	Random Effects (GLS)
Independent Variables	Coefficient (*t*-Ratio) *p*-Value	Coefficient (*t*-Ratio) *p*-Value
Constant	188.601 (3.653) 0.0009***	253.001 (7.565) 2.66e-09***

ASEAN_FDI	3.03839 (4.137) 0.0002***	3.59116 (5.089) 8.41e-06***
TRADING	-0.602453 (-3.477) 0.0014***	-0.700071 (-2.111) 0.0409**
PROTECT	-0.210228 (-0.2762) 0.7842	-0.964831 (-2.797) 0.0078***
Adjusted R2	0.956070	n.a.
p-Value (F)	3.46e-21	n.a.
Test for differing group intercepts p-value	9.44561e-009	n.a.
Breusch–Pagan test *p*-value	n.a.	3.49574e-007
Hausman test *p*-value	n.a.	0.0485021
Wald test *p*-value	n.a.	n.a.

*Significant at 10%.
**Significant at 5%.
***Significant at 1%.
n.a., not applicable.

Improving Ease of Doing Business Country Rankings

Except for Singapore, the rest of the ASEAN member countries need to continue improving on investment rules, regulations, and policies. These factors contribute to the ease of doing business in the region and attract not only intra-ASEAN FDIs but also larger shares of global FDI inflows. Singapore is ranked number 1 in the ease of doing business and trading across borders, number 4 in starting a business, number 2 in protecting investors, and number 13 in enforcing contracts (refer to Table 13).

Table 13. Ease of Doing Business for 2011 ASEAN Country Rankings (1 to 189)

Country	Ease of Doing Business (Overall Index)	Starting a Business	Trading Across Borders	Protecting Investors	Enforcing Contracts
Brunei Darussalam	112	133	52	120	159
Cambodia	147	170	118	74	142
Indonesia	121	155	47	44	154
Lao PDR	171	93	170	182	110

Malaysia	21	113	37	4	59
Myanmar	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines	148	156	61	132	118
Singapore	1	4	1	2	13
Thailand	19	95	12	12	25
Vietnam	78	100	63	173	31

Source: Ease of Doing Business Report 2012, World Bank.

However, the rest of the ASEAN member states were generally listed in the bottom half of the 189 countries ranked. Improving the business climate in the former requires modeling their investment policies after those of Singapore but with variations that account for differences in the level of development in the various aspects of the member country economy (i.e., extent of participation in bilateral trade agreements, the need to implement institutional reforms, etc.).

Country and Regional Investment Initiatives

In connection with this, ASEAN member countries have implemented various policies and programs designed to improve their ability to attract more FDIs over the past decade. These include 1) allowing the entry of FDIs into a wider variety of industries with more relaxed equity and leasing arrangements; 2) tax reform, which includes lowering corporate income tax rates; 3) rationalizing the grant of fiscal incentives; 4) reducing bureaucratic procedures in securing investment applications, licenses, and environmental clearances; 5) the creation of more export processing zones and industrial estates with the appropriate infrastructure support; 6) improving customs procedures; and 7) enhancing the capability of institutions to protect property rights and enforce contracts (ASEAN Investment Report, 2012). Initiatives at the regional level are also necessary to strengthen the ASEAN's ability to attract FDIs.

The ASEAN Economic Community (AEC) was initiated with the goal of encouraging more FDI among member states. Achieving the AEC's chief objective by 2015 necessitates the full economic integration of all member countries that includes facilitating the 1) free flow of economic resources and final goods and services and 2) establishment of ASEAN as a competitive economic region, a production base for exports and a single market.

Supporting the AEC are the ASEAN Comprehensive Investment Agreement, the ASEAN Trade in Goods Agreement (ATIGA), and the 1995

ASEAN Framework Agreement on Services (AFAS) (ASEAN Investment Report, 2011, 2012). These agreements are expected to enhance merchandise trade among the ASEAN member countries and motivate investors to establish production plants in each of the member economies.

Conclusions

Panel regression results confirm that market size, sustained economic growth, per capita GDP, infrastructure support, and foreign exchange rate are the key macroeconomic variables that influence the entry of FDIs into the ASEAN region. Intra-ASEAN FDIs are more responsive to the above-mentioned macroeconomic variables, whereas empirical results reveal that extra-ASEAN FDIs are only responsive to market size and economic growth.

However, macroeconomic stability is not solely defined by sustained economic growth. It includes price stability, stable interest rates, and stable exchange rates. Likewise, manageable fiscal deficits reduce the necessity to monetize the public debt—which is mainly responsible for inflation—and keep the economy stable. With low inflation, monetary authorities can continue accommodating economic growth with adequate increases in money supply to maintain low interest rates. In addition, if fiscal deficits are minimized, foreign borrowings are also reduced, which relieves the pressure on exchange rates when foreign debts have to be repaid.

The significant "doing business" indicators are the ease of doing business, starting a business, protecting investors, and trading across borders. Consistent with the a priori expectations, as the ranking of each ASEAN member country improves under these indicators, more FDIs are received.

The doing business indicators are even more significant when used as explanatory variables for intra-ASEAN and extra-ASEAN trade. Trading across borders and protecting investors provided consistent significant results in explaining movements in both intra-ASEAN and extra-ASEAN trade.

Accordingly, reforms concerning investment policies have to be initiated to improve the rankings of ASEAN member countries in the ease of doing business yearly evaluation conducted by the World Bank. Government procedures should be streamlined in connection with securing permits and clearances to start a business, business registration, and the payment of taxes. Trading across borders should be made easier without compromising the security risk involving contraband and technical smuggling, investors' property rights should be protected, contracts should be enforced, and access to credit should be increased.

Given that these reforms will enhance the ASEAN members' ability to attract FDI inflows, it will also be important to consider instituting policy safeguards that will protect the interests of the host country to ensure that the gains from FDIs are maximized and the negative outcomes reduced. Policies that safeguard the host country from MNCs acting as monopolies or collusive oligopolies and controlling output and prices should be addressed by 1) the appropriate antitrust regulations, 2) the protection of sovereignty with regard to land ownership and leasing agreements, 3) minimizing tax evasion practiced through transfer pricing and the inappropriate granting of fiscal incentives, and 4) the protection of the environment from pollution caused by unregulated operations.

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