

## **AIA, AFTA and Domestic Private Investment: Evidence from Malaysia**

Tajul Ariffin Masron\* [tams@usm.my](mailto:tams@usm.my)  
School of Management  
Universiti Sains Malaysia

Abu Hassan Shaari Mohd Nor  
Pusat Pengajian Ekonomi  
Fakulti Ekonomi dan Pengurusan  
Universiti Kebangsaan Malaysia

### **ABSTRACT**

ASEAN Free Trade Area (AFTA) has been proposed in 1992 and subsequent to AFTA, ASEAN Investment Area (AIA) has been introduced in 1998. Both are meant to promote regional economic prosperity through improvement in regional trade and investment. Unfortunately, until today there is no clear sign that both AFTA and AIA can really trigger regional economic activities and thus spur the regional economic development. One biggest point that always missing in the literature when anyone discusses the implication of AFTA and AIA is the role and development of domestic private investment. In other words, AFTA and AIA will only bring in positive and sustainable economic impact on regional economic development if it happens to be followed or supported by the development of domestic private investment (DPI) in each ASEAN member. Hence, for a start, this study aims to investigate the implication on AFTA and AIA on Malaysian DPI.

Keywords: AFTA; AIA; Domestic Private Investment

### **INTRODUCTION**

In growth theories, investment is the main important factor in growth process because it determines the rate at which physical capital is accumulated and thus, plays an essential role in the expansion of an economy's production capacity. Investment can also be part of the business fluctuating factor. Neoclassical growth theory emphasizes on investment as one of the important elements in the production process with the simplest expression that the main sources of growth are the autonomous factor (A) and the growth of capital per labor (K/L). The effect of the rate of physical capital accumulation depending on whether there are externalities to capital accumulation. For example Arrow (1962) and Romer (1986) suggested that private returns to scale might experience diminishing trend while social returns may be constant or even increasing, and thus reflect spillovers of knowledge or other externalities. For example, if introduction of new capital lead to better organization, it will then help in more efficient production technique.

The year 2011 marked the implementation of several key initiatives such as the Economic Transformation Programme (ETP) and the 10th Malaysia Plan (10MP) by the Government, laying the foundation for the country's transformation into a high income economy as envisioned in the New Economic Model (NEM). As part of the possible implications of these initiatives, and in the midst of world economy uncertainty, Malaysia has successfully generated a positive economic growth in 2010. As shown in Table 1, the performance of Malaysian economic growth is impressive but a bit volatile. Starting from remarkable economic performance prior to the 1997 economic crisis, quick recovery from the severe consequence of the 1997 crisis has allowed Malaysia to record a slightly low level of growth rate of 8.8 percent in 2000. High dependence on external sector, particularly exports and thus, very sensitive to economic conditions of USA and several European countries is being reflected in slow economic growth in the mid of 2000 due to several crises that struck the West. Nonetheless, 2010 has witnessed Malaysian success in preserving its vision to be a high income country by 2020.

---

\* Corresponding author's address: School of Management, Universiti Sains Malaysia, 11800 Minden, Penang, Malaysia. E-mail: [tams@usm.my](mailto:tams@usm.my). Tel no: +604-6535158. Fax no: +604-6577448.

TABLE 1: Growth, Gross Fixed Capital Formation (as % of GDP) &amp; FDI (as % of GDP)

	1980	1985	1990	1995	2000	2005	2010
GROWTH		-1.122	9.010	9.829	8.859	5.332	7.194
GFCF	29.945	28.709	33.043	43.586	25.292	20.516	20.313
FDI	3.745	2.187	5.298	4.704	4.038	2.875	3.855

Source: World Development Indicators (World Bank, 2012).

Regarding the sources of growth, often cited in literature that openness policies, either those related to foreign capital or international trade, has played great role. Particularly FDI, which has been credited by many (see Mirza and Giroud, 2003) as growth-enhancing has always been the focus or target in order to further boost economic growth. However, over reliance to FDI may not be a wise long-term strategy for at least two reasons. Firstly, looking at the motives of FDI inflows which are market-seeking, resource-seeking and efficiency-seeking, Malaysia is no longer having sufficient attraction in all aspects. Too small size of Malaysian economy relative to China and India, depleted natural resources as well as increasing labor cost have all revealed that Malaysia cannot be too proud of the past as among the top recipient of FDI in the world. Secondly, the expected positive spillover effect of FDI is also being questioned by studies such as Mirza and Giroud (2003). According to Mirza and Giroud (2003), there is less evidence to conclude that spillover effect. Masron, Zulkafli and Haslindar (2012) provided a mix result of FDI impact on Malaysian manufacturing sector. Based on Masron et al. (2012), although they observed some positive spillover effects to happen due to FDI inflows, several negative consequences as well as low positive effects have overshadowed the growth-enhancing prospect of FDI inflows. In conclusion, Masron et al. (2012) argued that the role of FDI is likely being exaggerated in the past. Taking into account the above two weaknesses of FDI, Table 1 also shares view. Malaysia most probably has reached its maximum reliance on FDI and timely to shift its focus on domestically available resources. With small ratio of FDI to total gross fixed capital formation (GFCF) since 1980, combined with the emergence of China and India as an attractive location for world FDI, it is not too strange to conclude that inevitably focusing on promoting domestic private investment could be the possible way out from the slowing down of FDI inflows in the recent years.

At national level, several policies seem to have promoted domestic private investment (DPI) to champion the economic development in Malaysia and is expected to continue playing great role in the future. Nevertheless, increasing competitiveness of DPI cannot be fully supported by small economic size of Malaysia. In addition, to ensure that the development of DPI can really benefit the Malaysian, its efficiency in production can be confirmed through its ability to participate in world market. In short, DPI can only be beneficial in the sense that it produces goods and services at low cost possible domestically, which later on to be sold to domestic consumers at their affordable price. Hence, for a start, the creation of ASEAN free trade area (AFTA) in 1992 and followed by the proposal of ASEAN Investment Area (AIA) in 1998, ASEAN region can be the first international arena through which DPI to be encouraged to be more active via regional competition. Therefore, it is of the interest of many to know the implication of AIA and AFTA, especially when the revision of AIA policies do not discriminate foreign investors as the potential beneficiary, instead of regional investors, of the AIA and AFTA outcomes. With this objective in mind, this study attempts to investigate the effect of AIA and AFTA on Malaysian DPI.

The organization of this study is as follows: Next section offers brief discussion on the relative share of DPI against FDI in Malaysian economy during the recent years. Section three will provide several possible determinants of DPI based on several studies in the past. Section four devotes on methodology to be employed in this study and section five reveals and discusses the findings of this study. Finally, section six concludes this study.

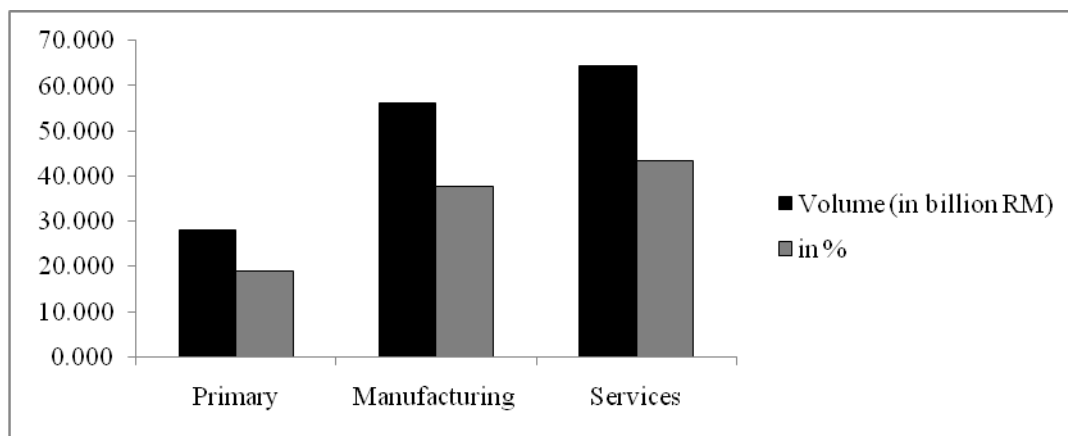
## BACKGROUND

### Investment in Malaysia

As shown in Figure 1, investment has been improved to RM148.6 billion in 2011. Out of total, investment in services has been the largest with the value of RM64.4 billion, followed by manufacturing sector (RM56.1 billion) and primary sector (RM28.1 billion). Service sectors has continuously become the leading sector, particularly since the liberalization of the sector recently and therefore, is expected to increase further in 2012 (MIDA, 2012). What is interesting to note is that, DPI constitutes 78.4 percent or 48.3 percent in overall investment activities throughout 2011, implying the growing important role played by DPI in Malaysian economic development over the time. DPI in

manufacturing sector for 2011 represents only 39 percent of total but this figure has been in increasing mode relative to performance in 2010. In 2010, the value of DPI is about RM18.1 billion and has improved to RM21.9 billion in 2011, surged by about 21 percent.

FIGURE 1: Total investment approved by sectors in 2011 (in billion RM)



Source: Malaysian Industrial Development Authority (2012).

### ***AFTA and AIA***

The progression of AFTA towards full implementation can be observed through the concept of common effective preferential tariffs (CEPT). As shown in Table 2 below, there is a promising progression towards AFTA. Singapore is by nature an open economy with no restriction of entrance is being imposed. Other ASEAN members, particularly those the core ASEAN members such as Malaysia, Thailand and Indonesia are also in the process of relaxing the restrictions prevail in the economy. Low restriction of entry among ASEAN members can be manipulated by ASEAN investors to gradually move abroad to compete regionally among them. This will to certain degree signify the gradual improvement of competitiveness among ASEAN investors to eventually compete at international or global market.

TABLE 2: CEPT in the selected ASEAN

	Brunei	Cambodia	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
1998	1.58	12.29	7.06	3.46	7.22	0	10.24	3.95
2000	1.26	10.39	4.76	3.32	5.18	0	6.12	7.25
2002	0.96	8.89	3.69	2.62	4.13	0	4.97	6.92
2004	0.89	6.99	1.86	1.67	3.27	0	3.97	5.51
2006	0.65	5.09	1.37	1.23	2.41	0	2.92	4.05
2009	0.41	2.24	0.86	0.77	1.51	0	1.84	2.55

Source: ASEAN Secretariat (2011).

In addition, as part of the efforts to promote regional investments, ASEAN governments have agreed to introduce AIA to add attraction for more active investment activities to take place in the region. In general, the benefits which can be derived through the initiatives under AIA can be summarized as follows:

- i. By opening up all industries, investors could enjoy more investment access to the economic sectors and industries, if they qualify as ASEAN investors;
- ii. If investors qualify as ASEAN investors, they will be awarded national treatment;
- iii. Investors could expect more investment opportunities, greater transparency, ease of access to information and awareness for investments in the region;
- iv. More competitive investment regimes that are more liberal; and
- v. Cost of transaction that is lower for business across the region.

With all advantages offered, AIA is anticipated to boost regional investment.

## LITERATURE REVIEW

Rodrik (1999) argues that investment (as well as other macroeconomic policies) remains the key to economic growth. However, this conclusion been challenged by Bhagwati and Srinivasan (1999) who state that it is danger to rely exclusively on the Rodrik's remark since the experience of Soviet bloc countries, in which there was a macroeconomic stability as well as huge investment before they collapsed, and India's poor economic growth records in 1980s despite macroeconomic stability and raising investment did tells us something different. Sun and Parikh (2001) examine the underlying theoretical model of Feder (1982) with the data on the 29 Chinese provinces for the period of 1985 to 1995 found that investment as a ratio of GDP as having positive impact on economic growth<sup>1</sup>. Neir-Reichert and Weinhold (2001) found a significant causal relationship between domestic investment and economic growth in 24 developing countries in their study. However, it is not generally a strong caused determinant of future growth. Another interesting result for the role of domestic investment is the decline in the economic growth returns of extra domestic investment with the increased in trade (openness) based on the coefficient of interacted variable of domestic investment with the level of trade (openness). Khan and Reinhart (1990) developed a simple growth model that allowed private investment and public investment to exert differential impact on output growth. They found that private investment and public investment do appear to have different effects on the long run rate of economic growth. In other word, the marginal productivities of private and public investment differ in developing countries, with private investment playing a more important role in growth process than public investment.

Grossman and Helpman (1991) indicate that protection could raise the long-run growth if government intervention in trade encourages domestic investment along the lines of comparative advantage since otherwise, with the liberalization of capital account as well as inflow of foreign direct investment, it is anticipated that domestic investment will be discouraged due to increase competition. The same conclusion is drawn by Batra and Slottje (1993) and Leamer (1995) who argue that trade will only lead to economic downturns through reduction in the competitiveness of domestic manufacturing goods due to lower in tariff as well as non-tariff barriers. Nam and Kim (2000) who investigates whether there is any systematic links between domestic investment and trade reforms in light of the South Korean experience, beginning with the early 1960s when trade policy shifted from an inward to outward orientation. The evidence from this study suggests that the long-lasting investment boom experienced by South Korea over the 1960-1995 was initiated and maintained to a significant degree by the trade reforms of the 1990s and thereafter. Levine and Renelt (1992) and Wacziarg (2001) suggest that openness and growth relations may establish through investment, and hence increasing openness may raise long-run growth only insofar as openness provides greater access to investment goods. Wacziarg (2001) decomposes the growth factors and by using his newly developed trade liberalization index, he investigated the impact of trade liberalization on growth channels and found that trade liberalization and growth relation may occur through investment and hence increasintg openness may raise long run growth through insofar as openness provides greater access to investment goods.

## METHODOLOGY

We employ similar model as in Ndikumana (2000). Ndikumana (2000) specified the investment model by stating that investment is a function of financial development and several macroeconomic variables which played role as control variables. With limited sample size, in this study, we replace financial development variable with FDI and only choose GDP and government expenditure as macroeconomic control variables. The reason of switching from domestic financial development to Fdi are: (i) short-data availability and (ii) FDI is more pressing in determining the survival of DPI, particularly in the midst of better business climate in Malaysia. In addition, we introduce our focal variables, investment-related initiatives (*INI*) which later on to be proxied by AIA and AFTA into the equation. In short, our model will look like the following:

$$DPI_t = \alpha_0 + \alpha_1 FDI_t + \alpha_2 GDP_t + \alpha_3 GOV_t + \alpha_4 INI_t + \varepsilon_t \quad (1)$$

Where *DPI* stands for domestic private investment as a percentage of GDP, *FDI* denotes domestic financial development, *GDP* represents gross domestic investment, *GOV* stands for government expenditure, *INI* represents investment-related policies. All variables enter in logarithmic form. On the

<sup>1</sup> However, within between estimates of the fixed effect model produces a negative coefficient, although not significant.

measurement of each variable, *FDI* will be proxied by net inflows of FDI as a percentage of GDP, *GOV* is proxied by total government expenditure. For *INI*, *AIA* and *AFTA* will be the proxy. For *AIA* and *AFTA*, we introduce dummy as a proxy for both. In addition, to reflect the gradual progression of *AFTA*, we also utilize *CEPT* as another proxy for *AFTA*. By this approach, we do hope to arrive at a more robust conclusion in our analysis. The use of *AIAM* and *CEPT* is also crucial as they are more reflecting the gradual process rather than the perfect implementation.

In order to estimate the model (1), we employ the fully modified ordinary least square (FMOLS). The primary reason of employing this approach is because the inability for vector error correction model to deal with dummy variable. The period of study is from 1984 to 2010. Data on *DPI* are taken from Department of Statistics Malaysia<sup>2</sup>, *FDEV*, *GDP* and *GOV* are from World Development Indicators (World Bank, 2012), *CEPT* information are from ASEAN Secretariat (2011) and *AIAM* data are recalculated from ASEAN Investment Report (ASEAN Secretariat, various reports).

## RESULTS AND DISCUSSION

Table 3 presents the correlation among variables under study. The negative association between *DPI*-*GDP* and *DPI*-*GOV* is a bit surprising. The negative link between *DPI*-*GOV* can still be understandable as many big private companies in Malaysia has to certain degree association with government, or normally called government-linked companies (GLCs). The positive correlation between *DPI*-*FDI* could signify the benefit of FDI inflows on *DPI*. Consistent with *DPI*-*FDI*, *AIAM*-*DPI* does also have a positive correlation, implying that although the new investment-related measures may attract and benefit FDI inflows, the FDI inflows are in turn generating positive spillover effect on *DPI*. Overall, we observe several variables are having high correlation among them such as *CEPT*-*GOV* and *CEPT*-*GDP*. Hence, the use of ordinary least square (OLS) may create bias and thus, the estimated results is no longer reliable.

Table 3: Correlation Analysis

	<i>lnDPI</i>	<i>lnFDI</i>	<i>lnGDP</i>	<i>lnGOV</i>
<i>lnDPI</i>	1.0000			
<i>lnFDI</i>	0.3519	1.0000		
<i>lnGDP</i>	-0.5088	-0.1054	1.0000	
<i>lnGOV</i>	-0.6196	-0.2151	0.9641	1.0000
<i>lnCEPT</i>	0.6291	0.2601	-0.9469	-0.9810

In order to avoid endogeneity problem, we estimate the model by using FMOLS. The results are presented at Table 4. The impact of *FDI* is in line with many studies such as Mirza and Giroud (2003) that it exerts a positive as well significant impact on *DPI*. The implication of *GDP* is also positive, implying that domestic market plays great role in supporting the development of *DPI* in Malaysia. However, the effect of *GOV* on *DPI* is found to be negative in all models, albeit insignificant in the model 3. As suggested by Masron (2006), the government could probably has a tendency to go beyond its capacity and capability, leading to inefficiency.

Table 4: Regression results [DV = *lnDPI*]

	Model 1	Model 2	Model 3
Constant	-5.0573*** (-4.4638)	16.3121 (2.2876)	-4.2421 (-1.1182)
<i>lnFDI</i>	0.0486*** (3.4574)	0.0591 (1.0413)	0.0812** (2.1949)
<i>lnGDP</i>	0.4588*** (6.8952)	-0.4096 (-1.0837)	0.5434*** (3.1354)
<i>lnGOV</i>	-0.2822*** (-5.1087)	-0.3044 (-1.3683)	-0.5762*** (-3.3401)
AIA:			
<i>DAIA</i>	0.4451*** (13.0918)		-
AFTA:			

<sup>2</sup> The data are gathered upon special request to Department of Statistics Malaysia.

<i>DAFTA</i>	-	0.6133*** (3.8145)	-
<i>lnCEPT</i>	-		0.0576 (0.6320)
Adjusted-R <sup>2</sup>	0.5999	0.4022	0.3679
S.E. of Reg.	0.1685	0.2060	0.2118

Note: Asterisk \*, \*\* and \*\*\* denote significant at 10%, 5% and 1% critical value, respectively.

Finally, on the implication of *AIA* and *AFTA*, we observed that all proxies, except for *CEPT* has played a highly significant contribution in promoting *DPI*. More importantly, the dummy variables (*DAIA* and *DAFTA*) found to be exerting stronger impact. This could justify the maximum benefit of *AIA* and *AFTA* can only be enjoyed by Malaysia provided they are fully implemented. The *CEPT*, although demonstrate a positive impact but at lower size of coefficient. In summary, the results in Table 4 reveal the potential benefits of *AIA* and *AFTA* if ASEAN can fully materialize the concepts.

## CONCLUSION

This study argues the importance of domestic private investment as the primary growth engine of ASEAN countries, particularly Malaysia in the long run. With this as the baseline, we attempt to gauge the implication of *AFTA* and *AIA* in boosting regional investment. Regional investment, on the other hand, is the outcome of *DPI* that activated at each ASEAN countries. In short, this study aims at examining the effect of *AFTA* and *AIA* on *DPI* in Malaysia for the period between 1981 to 2009.

Our results show that all proxies of *AIA* and *AFTA* have demonstrated a promising impact on *DPI*. With the positive impact of *FDI* on *DPI*, the full realization of *AIA* and *AFTA* is expected to accelerate the *DPI*. *AIA* and *AFTA* open room for Malaysian *DPI* to extent their operation abroad and *FDI* inflows, which are partly also due to *AIA* and *AFTA* have also elevated the performance of *DPI*. In short, *AIA* and *AFTA* are both anticipated to produce a positive effect on *DPI* and effort to accelerate the implementation must be intensified.

## REFERENCES

- Arrow, K. J. (1962). The Economic Implication of Learning by Doing." *Rev. Econ. Studies*, 29, 155–173.
- ASEAN Secretariat. (2011). ASEAN Statistics. Retrieved on March 2012 from < www.aseansec.org >.
- ASEAN Secretariat (Various Years) ASEAN Investment Report. Retrieved on March 2012 from Malaysian Industrial Development Authority. (MIDA, 2012). Malaysian Investment Performance. Retrieved on April 2012 from <>.
- Batra, R. and Slotje, D. J. (1993). Trade policy and poverty in US: Theory and evidence, 1947-1990. *Review of International Economics*, 1, 189-208.
- Bhagwati, J. and Srinivasan, T. N. (1999). Outward-orientation and development: Are revisionists right? *Center Discussion Paper No. 806*.
- Feder, G. (1982). On exports and economic growth, *Journal of Development Economics*, 59-73.
- Grossman, G. and Helpman, E. (1991). *Innovation and Growth in the Global Economy*. Cambridge, MA: The MIT Press.
- Khan, M. S. and Reinhart, C. M. (1990). Private investment and economic growth in developing countries. *World Development*, 18 (1), 19-27
- Levine, R. and Renelt, D. (1992). A sensitivity analysis of cross-country growth regressions, *American Economic Review*, 82 (4), 942-963.
- Masron, T.A., Zulkafli, A.H. and Haslindar, I. (2012). Spillover Effects of *FDI* within Manufacturing Sector in Malaysia. Paper to be presented at The 8th International Strategic Management Conference, Barcelona, Spain, June 21-23, 2012.
- Mirza, H. And Giroud, A. (2003). Regionalisation, Foreign Direct Investment and Poverty Reduction: The Case of ASEAN. Expert's Meeting on Foreign Direct Investment in Developing Asia, Asian Development Bank & OECD Development Centre Paris – Wednesday 26 & Thursday 27 November 2003.
- Nair-Reichert, U. and Weinhold, D. (2001). Causality tests for cross-country panels: A new look at *FDI* and economic growth in developing countries. *Oxford Bulletin of Economic and Statistics*, 63 (1), 153-171.

- Nam, C.-H. and Kim, C.-J. (2000). Capital accumulation and trade policy: The case of Korea. *International Economic Journal*, 14 (1), 111-131.
- Ndikumana, L. (2000). Financial Determinants of Domestic Investment in Sub-Saharan Africa: Evidence from Panel Data. *World Development*, 28 (2), 381 – 400.
- Ramirez, M.D. (1994). Public and Private Investment in Mexico, 1950-90: An Empirical Analysis. *Southern Economic Journal*, 61(1), 1-17.
- Rodrik, D. (1999). Where did all the growth go? External shocks, social conflict, and growth collapses. *Journal of Economic Growth*, 4, 385 – 412.
- Romer, P. M. (1986). Increasing returns and long-run growth, *Journal of Political Economy*, 94, 1002-1037.
- Sun, H. and Parikh, A. (2001). Exports, inward foreign direct investment (FDI) and regional economic growth in China, *Regional Studies*, 35 (3), 187-196.
- Wacziarg, R. (2001). Measuring the Dynamic Gains from Trade. *The World Bank Economic Review*, 15(3), 393-429.
- World Bank. (2012). World Development Indicators. Retrieved on April 2012 from <[data.worldbank.org](http://data.worldbank.org)>