Abstract

The positive outcomes of FDI inflows from developed or developing countries are well known from the literature. However, the recent declining trend from developed countries and the emergence of FDI from developing countries at a huge amount have triggered our interest on the issue whether (or not) FDI from developed countries are more risk averse than FDI from developing countries. This could imply that FDI from developing countries could be contributing more towards economic development in host developing countries. Focusing on Malaysian manufacturing sector, this study attempts to identify the risk averseness of FDI from developed countries against FDI from developing countries.

Keywords: FDI; Developed Countries; Developing Countries.

1. Introduction

Malaysia has been receiving a huge amount of FDI inflows since 1980s. The country was ranked among the top 10 in the 1980s but no longer able to retain its position today. It was partly due to the emergence of the new economic powers such as China and India as the new attractive location for many multinational corporations (MNCs).

At the same time the growing in size of outward FDI from developing countries is no longer rhetoric. Even countries like China which was targeted by many MNCs and currently among the top capital providers in the world FDI is also among the top FDI provider in the world. The increasing volume and importance of FDI from developing countries have been stressed by Aykut and Ratha (2004) in investigating the growing South-South FDI inflows (developing to developing countries). They found that South-South FDI inflows (developing to developing countries) rose from USD4.6 billion in 1994 to an average of USD54.4 billion between 1997 and 2000. It had grown much faster than the North-South FDI inflows (developed to developing countries). This amount is equivalent to 36% of total FDI inflows to developing economies in 2000. On another note, Giroud (2009) also claims a similar point that South-South FDI has increased sharply during the past two decades, from USD3.7 billion in 1990 to over USD73.8 billion in 2007. On the benefit of FDI from developing countries relative to those from developed, Yeung (1994, p. 297) argues that the
developing countries’ transnational companies (TNCs) have distinctive characteristics in ownership patterns, investment strategies and sectoral composition. They are different from developed countries’ TNCs and due to that, they are perceived as developing countries’ important source of growth, significant transformation engine and more beneficial to host developing countries. Given limited number of studies that deal with this issue, the objective of this study is to investigate the impact of intra-ASEAN inward FDI on Malaysian manufacturing sector.

One of the benefits that had been mentioned by Yeung (1994) is that TNCs from developing is less risk averse and they willing to involve in risky projects in other developing countries. Hence, this study aims at investigating this intuition by testing the implication of risk to FDI inflows from developing countries and developed countries into Malaysian manufacturing sector. The organization of this study is as follows: the next section will briefly discuss on the economic background of Malaysia especially with regards to FDI inflows. Literature review is provided in the third section and followed by research methodology in the fourth section. Section five discusses the findings and section six concludes the study.

2. Background of Malaysia

Malaysia obtained its independence in 1957 and since then, it has been developed rapidly. The economy landscape has changed from a commodity-based to an industrial-based economy. Prior to 1997 economic crisis, the rapid economic growth triggered interest of many and the country was classified as the second tier industrializing economies alongside Thailand and Indonesia. Table 1 highlights the changing of economic structure of Malaysia since 1970. The share of agriculture declined from 29 percent of GDP in 1970 to about 7.5 percent in 2008. In contrast, the share of manufacturing sector improved from 14 percent in 1970 to 33 percent in 2000 and 29 percent in 2008.

Table 1. Sectoral share of GDP (in %)

|          | 1970  | 1980  | 1990  | 2000  | 2005  | 2008  |
|----------|-------|-------|-------|-------|-------|-------|
| Agriculture | 29.0  | 22.9  | 18.7  | 9.6   | 8.3   | 7.5   |
| Mining    | 13.7  | 10.1  | 9.7   | 8.0   | 6.7   | 7.9   |
| Manufacturing | 13.9  | 19.7  | 33.1  | 32.7  | 31.6  | 28.9  |
| Construction | 3.8   | 4.8   | 4.5   | 3.6   | 2.7   | 3.1   |
| Services  | 36.2  | 43.5  | 44.3  | 46.1  | 50.7  | 52.6  |

Source: Ariff (1998) and Department of Statistics Malaysia (2011).

This successful economic transformation which are reflected by a higher income level currently enjoyed by Malaysian can be attributed to the openness policy practiced by the Malaysian government. Not limited to imports of capital goods, Malaysia also allowed foreign capital (mainly FDI) to flow into the country. The inflows assisted the development of Malaysian economy through in the form of funds and skills. As shown in Figure 1, total FDI stock of FDI has been growing between year 1980 and year 2009, signify the country’s success in promoting the country as an attractive location for FDI. Despite the growth, the FDI stock took a dip in 2005. This was due to uncertainties in most of the main FDI contributors (USA, Europe and Japan).

Figure 1. Stock of FDI in Malaysia

Source: UNCTAD (2011).

3. Literature Review – The role of Institutions
Institutions, which constitute the effectiveness of property rights, economic freedom, a regulatory system (i.e. tax system, corruption, transparency) and bureaucracy framework, matter in explaining economic growth. Among the earliest attempts to address this relationship is Rodrik (1999). In searching for the answer of ‘where did all the growth go’, Rodrik (1999) added social conflict as one of the explanatory variables. As part of the conclusion, Rodrik (1999) confirms that the sharp drop in growth after 1975 can be partly explained by a divided society and weak institutions. Therefore, what actually matters are the rules of the game in a society, as defined by prevailing explicit and implicit behavioral norms and their ability to create appropriate incentives for desirable economic behavior (Rodrik and Subramanian, 2003). Whether or not bi-directional causality exists between income growth and institutions are still a matter of debate. Studies like Kaufmann and Kray (2008) and Acemoglu, Johnson and Robinson (2004), albeit providing support that institutions can stimulate economic growth, do not find evidence for reverse causality. However, theoretically, Rodrik and Subramanian (2003) demonstrate that there could be a bi-directional causality running between income growth and institutions. Income growth requires good institutions, whereas good institutions will result in higher income growth.

Consequently, as foreign direct investment is also well-recognized as one major determinant of income growth, there is growing interest regarding the link between institutions and FDI inflows. Daniele and Marani (2006) discuss three potential channels through which institutions may affect FDI inflows. First, the presence of good institutions tends to improve factor productivity and subsequently stimulates investments, regardless of whether they are domestic or external. Second, good institutions will result in a reduction in investment related transaction costs (i.e. corruption-related costs). Finally, by definition, FDI generally involves high sunk costs. Therefore, with good institutions (i.e. proper property rights enforcement and effective legal systems) will give more security to multinational firms.

However on the empirical side, there have been no researches done in linking FDI inflows with institutional quality or political risk. Masron and Abdullah (2010) investigated the role of institutional quality in attracting FDI inflows into ASEAN and found a significant positive relationship. This implies that the effort to improve the level of institutional quality could be the area that requires attention. Successful in doing so will make the country attractive and conducive in doing business and subsequently expected to attract more FDI to inflows. In the case of African countries, Dupasquier and Osakwe (2006) demonstrated that one of the detrimental factors that led African region to receive very minimum FDI inflows is political instability. Therefore, in line with the suggestion made by Ashiedu (2006), Dupasquier and Osakwe (2006) argued that the creation of incentives for foreign investors to venture into business in African region requires a concerted effort among the members of African region. In a more comprehensive approach, Busse and Hefeker (2007) investigated several indicators of institutional quality such as government stability, internal and external conflict, corruption and ethnic tensions, law and order, democratic accountability of government, and quality of bureaucracy and their implication on FDI inflows for 83 developing countries. Busse and Hefeker (2007) found that those variables are highly significant determinants of foreign investment inflows. In short, political risk (which is part of the components of institutional quality) plays great role in influencing the decision of multinational corporations (MNCs) whether to invest or not. Nonetheless, we cannot over stress this role as several studies found minimum impact of political risk relative to other incentives or attractions. For instance, Egger and Winner (2006) concluded that the impact of corruption on FDI inflows is negligible compared to the attraction offered by other indicators representing prospect of profitable business such as economic growth.

4. Methodology

4.1 Model Specification

In assessing the possible implication of country’s risk on the inflows of FDI from developing countries and advanced countries to Malaysia, we provide two possible explanatory variables which capture, in one hand, the potential revenue to be obtained and on the other hand, the risk facing those FDI in operating in that particular country. GDP is used to represent the benefit that can be reaped by FDI. It can be in the form of market size, infrastructure development, educational level or skilled labor, and so on. Meanwhile, apart from the direct cost that each MNC has to bear, the most worrying type of cost would be the hidden or unanticipated risk of doing business in the host country. Hence, this study utilizes political risk (PRISK) as one of the hidden risk that could be huge in the case of developing countries and could act as a potential barrier for FDI inflows. We are fully alert that this model could be too short to capture all determinants of FDI. Nonetheless, given limited information to bank in, we strongly believe that the model is sufficed. In short, our model looks as follows:

\[DFDI_{it} = \alpha_0 + \alpha_1 GDP_{i,t} + \alpha_2 PRISK_{i,t} + \epsilon_i \]

(1)
\[ AFDI_{i,t} = \beta_0 + \beta_1 GDP_{i,t} + \beta_2 PRISK_{i,t} + \eta_t \]  

(2)

Where \( DFDI \) stands for FDI from developing countries and \( AFDI \) denotes FDI from advanced countries. All variables enter into the equation in logarithmic form.

4.2 Estimation and Data Collection

Considering limited data available for this study, we choose to employ panel static effect method to analyze equation (1) and (2). We start with panel OLS and gradually control for time specific effect as well as cross specific effect. We also test also the equation using random fixed effect model. Based on the estimated model criteria, we choose the one suggested as the best out of many competing model. Data are collected from ASEAN Secretariat (2011), World Development Indicators (World Bank, 2012) and International Country Risk Guide (ICGR, 2012). The major limitation to this study is that we failed to gather long observation for \( AFDI \) and \( DFDI \). We only managed to obtain the information for the period between 1999 and 2004. Fortunately, we obtained the aggregate value data of FDI inflows into manufacturing sector in Malaysia and at several sectoral levels at 3 digits of industrial classification. Under 3 digits industrial classification, we end up with 23 sub-sectors within manufacturing sector. These information allowed us to get a deeper insight about the hypothesis set out by Yeung (1994), where firms from developing countries are less risk averse than those from developed countries. Regarding the choice of risk, we focus on the political risk estimated by ICGR as the measurement captures various aspect of political risk. We only present the results which utilized data from ICGR (2012) as a proxy for political risk. We also check the results if other indicators such as World Governance Indicators by World Bank are used and found that the results are robust. These findings are available upon request in order to conserve space.

5. Results and Discussion

Table 2 presents the descriptive analysis of the variables. As expected, the amount of FDI inflows from advanced countries (\( AFDI \)) is always higher than those from developing countries (\( DFDI \)). The average value of 5-year information is about USD132.29 million for \( AFDI \) and merely USD15.14 million in the case of \( DFDI \). Level of political risk is also a bit high in the case of Malaysia as it closes to 100 (high political risk). Even the minimum value recorded within the years under study is only 67. Regarding the output of each sub-sector within manufacturing sector, we observe a big gap over the period as well as across the sub-sectors.

Table 2. Descriptive Analysis

|        | DFDI     | AFDI     | GDP     | PRISK   |
|--------|----------|----------|---------|---------|
| Mean   | 15.1423  | 132.2856 | 39.9063 | 70.5493 |
| Max    | 109.7200 | 1260.7800| 376.3300| 72.0000 |
| Min    | 0.0000   | 0.0000   | 11.2005 | 67.0000 |
| Std. Dev. | 21.1498 | 244.2177 | 61.1495 | 2.0163  |

Table 3 demonstrates the results of correlation analysis. Generally, we found a very low correlation between ln\( GDP \) and ln\( PRISK \), implying almost no issue of endogeneity in our model. Hence, standard OLS procedure is valid. A relatively higher association between ln\( PRISK \) and ln\( DFDI \) relative to ln\( AFDI \) is consistent with standard argument that DFDI tends to search for a better location with less risky perspective. High correlation between ln\( DFDI \) and ln\( GDP \) could suggest that profitability prospects in Malaysia, particularly its manufacturing sector has become among the primary attractiveness. Meanwhile, low correlation between ln\( GDP \) and ln\( AFDI \) could imply that MNCs from developed countries may no longer be predicted a high profitability prospect of investment done in Malaysia.

Table 3. Correlation Analysis

|         | ln\( GDP \)  | ln\( PRISK \) |
|---------|--------------|---------------|
| ln\( DFDI \) | 0.5935       | -0.1142       |
| ln\( AFDI \) | 0.4452       | -0.0652       |
| ln\( GDP \) | 1.0000       | -0.1086       |
| ln\( PRISK \) | -0.1086      | 1.0000        |
Finally, in order to confirm the above intuition (whether or not DF DI is more risk averse than AFDI) we conduct a statistical inference based on the cross fixed-effect model (CFEM). Before we conclude whether this specification as the best, we conducted several tests to check its validity or superiority relative to other competing models. The Hausmann test results suggest that CFEM tends to perform better than random effect model for both equations. Similarly, F-statistics (redundant test) demonstrates that CFEM has a tendency to outperform the pooled model.

Overall, the results shown in Table 4 confirmed our intuition that DF DI is less risk averse than AFDI. The impact of PRISK on AFDI is significantly negative and its impact on DF DI is significant and positive. Hence, this study provide additional support to the intuition brought by Yeung (1994) that FDI from developing countries could be more contributive to development of host developing countries as they tend to venture into the area in which risk involved is likely high.

Table 4. Regression Analysis - CFEM

|         | lnDFDI   | lnAFDI   |
|---------|----------|----------|
| Constant| -3.1604**| 12.8821***|
|         | (-2.2958)| (4.0178) |
| lnGDP   | 1.0365***| 0.3632***|
|         | (67.1282)| (5.0248) |
| lnPRISK | 0.5433*  | -2.3476***|
|         | (1.6841) | (-3.3071) |

Adjusted-R² 0.9070 0.8701
S.E. of Reg 0.4236 1.0963
D-W statistics 2.0782 2.1152
F-statistics 1256.94 26.03
(Overall) [0.0000] [0.0000]
F-statistics 39.0880*** 9.9145***
(Overall) [0.0000] [0.0000]
Hausmann Test 10.9763*** 15.0034***
[0.0041] [0.0037]

Note: Asterisks *, ** and *** denote significant at 10%, 5% and 1% critical values, respectively. Figure in ( ) stand for t-value and Figure in [ ] represents p-value.

6. Conclusion

This study investigates whether FDI from developing countries is a truly helpful mean of economic development in the developing countries, compared to FDI from developed countries. Setting Malaysia and its manufacturing sector as the case for the period from 1999 to 2004, we examine the implication of political risk on the inflows of both FDI.

The results tend to support the idea proposed by Yeung (1994) that FDI from developing countries could generate more positive outcome than those from developed or advanced countries. This is particularly true as this study observed that FDI from developing countries tend to be less risk averse than its counterpart from developed countries. Hence, Malaysian efforts to bring in more FDI into a risky sector such as in the area of agriculture could be resolved by encouraging firms from ASEAN, as for a start, to get involve as they are more likely willing to participate in this risky venture business.

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References
Acemoglu, C., Johnson, S. & Robinson, J. (2004). Institutions as the fundamental cause of long-run growth. In Aghion, P. and Durlauf, S. (Eds) *Handbook of Economic Growth*, 1 (6), pp. 405-472. Elsevier North Holland, New York.

Ariff, M. (1998). The Malaysian Economic Experience and Its Relevance for the OIC member Countries. *Islamic Economic Studies*, 6(1), 1-31.

ASEAN Secretariat (2011). ASEAN Statistics. Retrieved on January 2011 from <www.aseansec.org/22122.htm>.

Asiedu, E. (2006). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. *The World Economy*, 29(1), 63-77.

Aykut, A. D. & Ratha, D. (2004). South-South FDI Flows: How Big Are They? *Transnational Corporations*, 13(1).

Busse, M. & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. European Journal of Political Economy, 23, 397-415.

Daniele, V. & Marani, U. (2006). Do institutions matter for FDI? A comparative analysis of the MENA countries. *MPRA Paper No. 2426*.

Department of Statistics Malaysia (2011). *Malaysia Economic Statistics Time Series. DOS: Putrajaya*.

Dupasquier, C. & Osakwe, P.N. (2006). Foreign direct investment in Africa: Performance, challenges, and responsibilities. *Journal of Asian Economics*, 17, 241–260.

Egger, P. & Winner, H. (2006). How Corruption Influences Foreign Direct Investment: A Panel Data Study. *Economic Development and Cultural Change*, 54(2), 459-86.

Giroud, A. (2009). Regional integration and South-South FDI: A global perspective. Presentation submitted to the expert meeting. Trade and Development Board Investment, Enterprise and Development Commission – Multi-year expert meeting on international cooperation: South-South cooperation and regional integration, Geneva, 4-5 February 2009.

ICGR (2012). Political Risk. Retrieved on December 2011 from <www.prsgroup.com>.

Kauffman, D. & Kraay, A. (2008). Governance Indicators: Where Are We, Where Should We Be Going? *The World Bank Research Observer*, 23 (1), 1 – 30.

Masron, T.A. & Abdullah, H. (2010). Institutional Quality as a Determinant for FDI Inflows: Evidence from ASEAN. *World Journal of Management*, 2(3), 115 – 128.

Rodrik, D. (1999). Where did all the growth go? External shocks, social conflict and growth collapses. *Journal of Economic Growth*, 4, 385-412.

Rodrik, D. & Subramanian, A. (2003) The Primacy of Institutions (and what this does and does not mean). *Finance & Development*, 40 (2), 31-34.

UNCTAD (2011). UNCTAD Statistics. Retrieved on January 2011 from <http://unctadstat.unctad.org>.

World Bank (2012a). *World Development Indicators*. Retrieved on January 2012 from <http://data.worldbank.org/data-catalog/world-development-indicators>.

World Bank (2012b). *World Governance Indicators*. Retrieved on January 2012 from <http://data.worldbank.org/data-catalog/worldwide-governance-indicators>.

Yeung, H.W.-C. (1994). Third World Multinationals Revisited: A Research Critique and Future Agenda. *Third World Quarterly*, 15(2), 297-317.