

Home Countries' Determinants of Outward Foreign Direct Investment (OFDI) in Developing Economies: Malaysian Case.

Rosfadzimi Mat Saad (rosfadzimi@melaka.uitm.edu.my)
Abd Halim Mohd Noor (drabdhali@bdrmelaka.uitm.edu.my)
University Teknologi MARA
KM 26 Jalan Lendu
Alor Gajah 78000 Melaka
MALAYSIA

Abu Hassan Shaari Md Nor (ahassan@ukm.my)
School of Economics Studies,
Universiti Kebangsaan Malaysia,
43600 Bangi, Selangor Darul Ehsan

ABSTRACT

With the advance of globalization, foreign direct investments, FDIs are no longer limited to the developed nations. Increasingly FDIs between developing countries are rivalling traditional FDIs. Outward Foreign Direct Investment, OFDI is one of the measures to indicate the performance and capability of developing countries enterprises in economic integration where border barriers are eliminated. Malaysia as a developing economy is undertaking OFDI due to the limitation of local resources and to search for new markets. Multinational corporations, MNCs seek from other countries mainly for cheap labour, low resource prices, and new market for their products and services. This paper studies the determinants of OFDI by Malaysian based MNCs. It focuses on domestic factors that push off Malaysian firms to involve in OFDI. It will also be looking at domestic drivers such as market size, export level, cost of skilled labour and the availability of natural resources in determining the factors influencing Malaysian OFDI. Simple multiple regression analysis is used in the study. The period of study is between 1980 and 2009. The findings in this study provide strong corroboration that domestic factors have significant impacts on OFDI performance. Furthermore, the study finds evidence that export and cost of skilled labours are significant contributors of OFDI in Malaysia.

Keywords: Outward FDI, Developing Countries, Determinants of OFDI, Domestic Factors.

INTRODUCTION

Malaysia is among the developing countries in East Asia region that participate vigorously in abroad investment activities. Malaysian companies are also noted as expanding globally and the trends of outward and inward investment are converging with inward FDI increase from 23.4% to 36.5% while OFDI significantly increases from 6% to 34% of GDP in 1990 to 2005. As can be seen in Figure 1, companies cross border acquisition and expansion of businesses lead to a jump in the Malaysia's OFDI to US\$10.98 billion (RM38billion) in 2007 as compared to US\$6.04 billion (RM21billion) in 2006 (Onn, et al., 2009). The positive views on OFDI is seen in some literature such as the study done in Italy by Stefano Federico and Minerva (2008) that look at the impact of Italy's outward foreign direct investment (FDI) on local employment growth and they found that FDI is associated with faster local employment growth. Navaretti et. al also found that increased outward investments bring positive externalities to the home market (Navaretti, Venables, & Barry, 2004). Kayam (2009) found in the study on the impact of foreign competition on OFDI from developing and transition economies that outward FDI from developing countries increases with foreign competition.

According to United Nations Conference on Trade and Development (UNCTAD), the increasing role of developing economies implied the existence of potential opportunities to both home and host country's economies. Recent Outward FDI from developing countries contributes these countries not only in terms of exploring investment opportunities but also developing a competitive position (United Nations,

2006). Malaysia was ranked highly overall as a source of OFDI. In UNCTAD's Outward Performance Index, Malaysia has remained in the top 35 except for the period of 1990 to 1992 when it was ranked at number 42. Malaysia's best performance was for the period 1993-1995 when it was ranked eighth.

In relation to the contemporary economic developments mainly globalization and regionalism issues, in the context of Malaysia as one of the emerging developing countries, identifying the primary determinants contributed to outward FDI of Malaysia is crucial for sustainable growth. In order to encourage increased levels of foreign direct investments from developing economies, it is important for government policymakers and managers at the firm level to understand those country level factors in the home market which influence these investments. This will help to ensure that the correct policies are put forward in place to enhance the increased outflow of investments from these economies in order to maintain the countries' competitiveness in the global economy.

Therefore, this study aims to investigate selected macroeconomic determinants of Malaysia's outward FDI, namely GDP level, technical knowledge, and economic openness. This paper attempts to formally model the Malaysian OFDI in the context of home countries'. After observing the trends and patterns of the recent Malaysian OFDI wave, this study considers the model developed by Rashmi Banga (2005) in modelling Malaysian OFDI following the theory of OFDI using the three factors of trade-related, capability-related, and domestic drivers. Then the analysis of the results follows before the ending of conclusion and recommendations.

LITERATURE REVIEW

Foreign Direct Investment (FDI) is defined in the IMF Balance of Payments manual (5th edition) as 'investment that involves a long term relationship reflecting a lasting interest of a resident entity in one economy (direct investor) in an entity resident in an economy other than that of the investor's. The direct investor's purpose is to exert a significance degree of influence on the management of the enterprise resident in the other economy' (M. Ariff & G. P. Lopez, 2008; Dunning J.H. , 1993).

Starting from the mid-1970s there has been record on Malaysian companies' investment abroad. However, in the early 1990s with the changes in the global economic order that came about with end of the Cold War, the intensities of Malaysian OFDI became more significant. Among the factors identified in prompting Malaysian OFDI are globally; the completion of the GATT/WTO Uruguay Round that began in 1986 and completed in 1994, regionally; the formation of the ASEAN Free Trade Area (AFTA) in 1992 and domestically; the economic liberalisation processes that begins in the mid 1980s (M. Ariff & G. P. Lopez, 2008).

Generally OFDI is not being comprehensively studied in Malaysia (M. Ariff & G. P. Lopez, 2008). There have only been two notable studies on Malaysian OFDI by Ragayah Mat Zin and Tham Siew Yean. Factors such as business, production, management and corporate strategy influencing Malaysian Transnational Corporations, (TNCs) decision to invest abroad is the topic of investigation under Ragayah (1999). The trends, patterns and policy issues of Malaysian OFDI is evaluated by Tham (2006). These studies used a case study approach due to lack of secondary data on OFDI.

Malaysian OFDI from an enterprise perspective had been analysed by Zainal (2005). Major finding of Ragayah was that to expand and to find new markets for growth are found to be the main reason for Malaysian companies investing abroad. On the other hand, Tham's paper had a myriad of findings on why Malaysians invest overseas. Jomo K.S. provided an insight on corporate behaviour of Malaysian transnational corporations (TNCs) abroad in The "Ugly Malaysian? South – South Investment Abused" whereby Malaysian OFDI were generally described as being exploitative in nature (Jomo, 2002).

More recently, Bank Negara Malaysia (BNM) had compiled a report on Malaysian OFDI for the period of 1999 to 2005; describing trends, patterns and determinants of Malaysian OFDI (Malaysia, 2006). A number of international organizations have conducted studies that looked at OFDI from Malaysia as part of the ASEAN region such as Hiratsuka (2006) and international organisations such as UNCTAD and ASEAN Development Bank, ADB(Hiratsuka, 2006). Jajri (2009) uses the cointegration techniques to check on the impact of FDI to economic growth and it is found that FDI has significant influence on the growth rate of the Malaysian economy.

Debates over job losses, skills transfer, lower productivity, among other things arises whenever national firms make the decision to set up subsidiaries overseas. The issue is whether local firm's outward investment strengthens or weakens the remaining economic activities at home. Immediate reaction to this

contention is that it leads to production and employment to be shifted abroad. Evidence on this claim is however, mixed (Navaretti, et al., 2004). The majority of the arguments seem to support OFDI (ibid). That is, outward foreign direct investments is generally seen as strengthening economic activities at home by the ways of increasing output, competitiveness, home employment, skill of labour, efficiency, and profit.

Firms that involve in outward investment to gain some cost savings in production may lead to stronger operations in the home market as the firms are able to reap greater profits due to reduction in production costs. If the firm invests overseas in order to gain some savings in distributing its product to these overseas markets, increased output at home will be the resultant effect. In addition to that, if foreign production is complementary to home production, the foreign subsidiary will be using inputs from home to produce its outputs abroad. This will lead to an increase in domestic output. Thus, the greater the number of foreign plants the greater will be the level of output in the home market. Logically we can deduce that, if foreign production is complementary to home production, output at home will rise and employment will also rise directly or indirectly.

Outward investment can also result in massive technology transfers for home country firms and thus leading to greater competitiveness of the home economy. If foreign subsidiaries are located in an area with a high intensity high-tech activities, they can become an effective channel for transferring technological knowledge to home by ways of positive spillovers. There will also be movement of employees from subsidiaries to national firms at home. If subsidiaries use inputs from home for their production process, this may result in improved infrastructure at home and may also lead to improved demand conditions in the home market. Thus, the quality of demand conditions in the home market is seen as an important indicator of national competitiveness for a country (Porter, 1998). As a result, it can be clearly seen that outward FDI is an important source of improved national competitiveness.

The evidence regarding the impact of outward investment on skill intensity and employment in the home economy is biased towards a positive relationship (Navaretti, et al., 2004). As discussed earlier, if output at home increases as a result of outward investments, *ceteris paribus*, employment at home should increase as well. Researchers such as Navaretti et al have shown that the employment dynamics of firms that invest abroad do not differ from those that remain local (Navaretti & Castellani; Navaretti & Tarr, 2000). The inference is that even if employment declines in firms that open foreign subsidiaries, the decline is not larger and in some cases smaller than what it would have been if the firms did not invest abroad. In the case of vertical investment if the firm had not invested abroad the next best alternative would have been to go out of business (Navaretti, et al., 2004). The implication of this action for employment is clear.

Positive impact of foreign investments on the skill intensity at home is reflected in the way things are produced in the domestic market between skilled and un-skilled labour. Researchers such as Berman et al have argued that the relocation of activities may change the division of labour in the multinational firm leading for example, to a concentration of skilled-labour intensive activities at home (Berman, Bound, & Griliches, 1994). In addition to that, if the relocation leads to a more efficient use of resources, efficiency and profits at home may also increase. This will result in the economy becoming highly specialized in one type of production over the other. As an example, if the relocation leads to more skilled-labour remaining at home, then the home economy will be more specialized in production of high quality labour intensive goods and services. Thus it can be concluded that foreign direct investments whether inward or outward, are good for an economy.

METHODOLOGY

In order to determine the factors influencing Malaysian OFDI we will be using a model framework that will test the home macroeconomics factors. Basically the studies on OFDI use the production function approach and apply various methods in analysing the data such as Granger causality test, panel data estimation, and error correction model. There are several theories in the literature which provide details of determinants of FDI inflows that can be divided into micro and macro perspectives. While the micro perspective includes industrial organization, transaction cost theory, internalization theory and the eclectic paradigm, the macro level theory includes orthodox trade theory, Kemp-MacDougall theory and product cycle theory. In addition to that, there are still other specific determinants such as exchange rates, market size, government policies and incentives, political risk, cost of labour, labour skills, trade openness and export orientation policy, and infrastructure (Jajri, 2009).

Dunning suggested that the main factors that lead to FDI inflows are the need to have market access, the opportunities presented by large scale privatization processes and the degree of economic and political stability. The above eclectic paradigm (also known as the Ownership, Location and Internalization (OLI) theorem) describes outward FDI in terms of ownership and internalization advantages of TNCs and locational advantages of host economies (Dunning and Lundan, 2008). This approach, integrates various theories of the firm, organization and trade. In undertaking foreign direct investment, firms must possess the advantages of ownership (O), location (L), and internalization (I). Ownership advantage is the advantage that MNCs have over domestic firms. It includes both tangible and intangible assets such as manpower, capital, technology, and organizational skills. These advantages arise from the firm's size and access to markets and resources, the firm's ability to coordinate complementary activities like manufacturing and distribution, and the ability to exploit differences between countries.

Rashmi Banga (2005) on the other hand introduces another framework of OFDI explanation on the occurrence of OFDI emerging from developing to developed countries. He explains that trend using three factors of trade-related, capability-related, and domestic drivers.

The Determinants of Malaysian OFDI

Based upon theories and previous research, the hypothesis on Malaysian OFDI will concentrate on the home country (main) determinants or push factors of OFDI flows such as level of FDI, GDP, export, productivity, primary energy consumption of oil, and income per capita. This study will emulate Rashmi Banga's (2005) view on OFDI utilizing the trade-related, capability-related, and domestic drivers.

Accordingly, the model is estimated as follows:

$$\text{OFDI}_{it} = f [(\text{trade-related factors})_{it}, (\text{capability-related factors})_{it}, (\text{domestic factors})_{it}]$$

where i stands for the developing economy and t stands for the time period (1980-2009).

Trade related factor included in the model is EXPORT LEVEL.

Capability-related factor included in the model is inflow of FDI LEVEL.

Domestic factors included in the model are:

- a. Market size, that is GDP or Income per capita, INCOME/CAP,
- b. Cost of skilled labour, that is, productivity of labour - PRODUCTIVITY,
- c. Natural resources availability, that is OIL CONS.

Trade-related drivers

Total exports are a general proxy for the international competitiveness and revenues of Malaysian firms. Based on the traditional product cycle theory a complementary relationship between trade and investment exists; with exports dominating early stages of foreign market penetration, and investment the later stages (Vernon, 1966). However, this sequencing has become increasingly truncated and therefore TNCs of all countries increasingly serve foreign markets through exports and FDI simultaneously, and in a manner that trade immediately reinforces outward FDI. This relationship is expected to be particularly strong in the case of emerging-country TNCs, which often leapfrog to a global status in very short time (UN, 1996).

OFDI and export can be viewed as alternative strategies for firms to either produce at home and export, or produce abroad and substitute local sales of foreign affiliates for exports. The current phenomenon of high OFDI from developing countries may be caused by this trade-related driver since high export levels can assure firms of access to existing markets, lowering investment risks and uncertainties; hence promoting OFDI.

Hypothesis 1: Malaysian OFDI is associated positively with Malaysian export level.

Capability-related drivers

In addition to having the trade-related drivers that may provide opportunities for developing countries to undertake OFDI, the economy must have the capability of undertaking outward investments, since OFDI requires knowledge and information of the host, managerial, marketing and entrepreneurial skills and cutting-edge technology. The capability-related driver refers to the necessary skills, technology, information and capital, which are needed to undertake outward FDI. Inward FDI flows may be a potential factor that may influence the capability of domestic investors to undertake outward FDI.

FDI is also associated with advancement of the technological standards, efficiency and competitiveness of the domestic industry. In addition to that, OFDI from developing economies to the developed countries may also take place in an effort to seek technology. An example is the national car company, PROTON that acquired a British automobile company, which has acted as an R&D centre and also import and distribution centres of cars and parts in the U.K.

Hypothesis 2: Malaysian OFDI is associated positively with Malaysian inward FDI level.

Domestic drivers

The domestic market-related variables are identified in the literature as the most important factors that may affect the FDI flows. Small market size and potential risk of losing market share may act as push factors for outward FDI. These domestic constraints such as poor infrastructure in the home country, rigid labor laws, expensive capital, costly skilled labour, and small market that correspond to costs and returns on investments may be important determinants of OFDI. With the current existence of low tariff barriers and integrated markets, competition has increased considerably and for investments to be competitive and efficient, low-cost factors of production are necessary. Without these conducive conditions, firms from the developing economies will be pushed to involve in OFDI activities. Small market size may be the push factor for outward FDI. GDP level and Income per capita are used as proxies for market size and it is expected that they will have negative relationship with OFDI level.

Hypothesis 3a: Malaysian OFDI is associated negatively with Malaysian income level.

Other domestic drivers include the cost of labour and the availability of natural resources. Cost factors can influence the choice of an investment location for the resource-seeking and efficiency-seeking FDI significantly. The availability of skilled labour proxied by the productivity of labour, where the productivity of labour is defined as value added per unit of labour and it is expected to have positive relationship with level of OFDI.

Hypothesis 3b: Malaysian OFDI is associated positively with cost of labour.

It is expected that the lower the availability of natural resources, the higher will be the costs, pushing up outward FDI. Different studies have used different measures to capture the availability and cost of infrastructure and the variables used are land and property rents, fuel costs, index of infrastructure, transport costs and share of transport and communication to GDP. This study uses primary energy consumption of oil and this proxy reflects both the availability and cost of oil in the home country.

Hypothesis 3c: Malaysian OFDI is associated negatively with level of natural resources.

RESULT AND DISCUSSION

This study uses simple multiple regression analysis using time series data for the period of 1980 to 2009. Mainly data is taken from various sources such as statistics department, UN World Investment Report and Global Market Information Database (GMID). Result of the analysis is presented in Table 1. Diagnostic test is performed on the model. The estimated residuals have normal distribution pattern, homoscedasticity variances, linearly correlated and well specified. CUSUM test indicates that the model is stable as the cumulative sums revolve around zero within its confidence bound as can be seen in Figure 2.

In relation to the trade-related drivers, the results show that export level is a significant driver of OFDI from Malaysia. As postulated, exports can positively influence OFDI, as they ensure markets and encourage vertical FDI. The results with respect to exports are found to be robust across all models. Capability-related driver - inward FDI flows also positively influence OFDI as it brings with it more up-to-date technology, skills and information to the home economies thus helping to improve the capability of the domestic firms to undertake outward FDI.

The domestic factor proxied by GDP level can be important push factors for outward FDI. The impact of the home economy's market size on outward FDI is estimated to reflect the "market-seeking" motivation of outward FDI. The results show that this variable, proxied by GDP level is significant in Model 2 and it follows the expected negative relationship between market size and OFDI level in all model.

Other domestic push factors that may operate with respect to OFDI are labour-related. The results show that, labour productivity is a highly significant variable in the home economy and have significant positive impact on OFDI as the result is found significant in all models. High productivity level indicates the technical capabilities by local firms to involve in overseas production.

Another push factor with respect to outward FDI in developing countries is the existence of natural resources, which may influence the cost of production. The negative sign in Model 1 and Model 3 indicates that the lower consumption of primary energy, oil leads to higher outward FDI in Malaysia reflecting more resources needed to be outsourced. Higher energy consumption reflects abundance of natural resources, thus reducing the needs to outsource.

To sum up, the results of the analysis indicate that EXPORT LEVEL especially the lag(2) in Model 2 has acted as a very strong driver of outward FDI in Malaysia. The rising volumes of exports reflect the increasing competitiveness of the Malaysian economy. Another strong driver of Malaysia's OFDI is PRODUCTIVITY. The higher the productivity level, the higher is the capability of the economy to undertake investments. Market size and natural resources availability are also important domestic drivers of outward FDI from developing economies. The capability of undertaking outward FDI has also improved due to higher FDI inflows and rising imports of technology.

CONCLUSIONS

OFDI from developing economies is a relatively new phenomenon, especially when these investments go to developed countries. The article attempts to identify the drivers of outward FDI from Malaysia in the period 1980-2009. An empirical analysis is undertaken using time-series data. An attempt is made to conceptualize the process of outward FDI from developing economies using three sets of drivers: trade-related drivers; capability-related drivers; and domestic drivers.

The results of the analysis show that OFDI from Malaysia has been greatly facilitated by export and cost of labour. Greater integration of markets has made outward FDI and exports complementary in nature since larger markets increase the possibility of vertical OFDI integration. However, trade in itself may not be able to boost outward FDI if the domestic investors lack the capability to invest abroad.

Inward FDI flows have been identified as one of the drivers of outward FDI, which improve the capabilities to undertake OFDI. Better technology, better skills and information regarding the home economies of inward FDI are all necessary ingredients for enhancing domestic competitiveness. Push factors in terms of domestic constraints of market size, low availability of natural resources and high productivity level have also been identified as significant drivers of outward FDI.

The decision makers especially in developing economies should be looking forward to an increase in outward foreign direct investments from their economies. Policymakers should undertake these investments and policies should be designed in place to encourage local firms to invest abroad. In addition to that, policymakers will have to be aware of the motivating factors in the home environment that motivate these investments such as export and productivity level in order to design effective policies. This knowledge will prevent them from outlining inappropriate or incorrect stimuli to firms in order to encourage more outward foreign direct investments.

REFERENCES

- Ariff, M. and G. Lopez, (2008). *Outward FDI from Southeast Asia: the Malaysian Experience*. New Dimensions of Economic Globalization: Surge of Outward Foreign Direct Investment from Asia, p. 251.
- Banga, R. (2005). *Drivers of Outward Foreign Direct Investment from Developing Economies*. Indian Council for Research in International Economic Relations.
- Bank Negara Malaysia, (2006). *Quarterly Bulletin*.
- Berman, E., J. Bound, and Z. Griliches, (1994). *Changes in the Demand for Skilled Labour within US Manufacturing: Evidence from the Annual Survey of Manufacturers*. The Quarterly Journal of Economics, 109(2): p. 367-397.
- Dunning J.H., (1993). *Multinational Enterprises and the Global Economy*. London: Addison-Wesley Publishers Ltd.
- Dunning, J.H. and S. Lundan, (2008). *Multinational Enterprises and the Global Economy*. 2nd ed. Cheltenham: Edward Elgar.
- Hanson, G., et al. (2001). *Should Countries Promote Foreign Direct Investment?* United Nations.
- Hiratsuka, D., (2006). *Outward FDI from ASEAN and Intraregional FDI in ASEAN: Trends and Drivers*. Discussion Paper Institute of Developing Economies, 77.
- International Monetary Fund (1993). *Balance of Payments Manual* 5th Edition, Washington DC.
- Jajri, I., (2009). *Foreign Direct Investment and Economic Growth: Cointegration Techniques*. The IUP Journal of Managerial Economics, 7(3 and 4): p. 7-18.
- Jomo, K.S., (2002). *Ugly Malaysians? South - South Investments Abused*. Institute for Black Research: Durban South Africa.
- Kayam, S.S., (2009). *Impact of Foreign Competition on Outward FDI from Developing and Transition Economies*.
- Navaretti, G., A. Venables, and F. Barry, (2004). *Multinational Firms in the World Economy*. Princeton Univ Press.
- Onn, L., et al., (2009). *THE ASEAN-10*. Regional Outlook, p. 89.
- Porter, M., (1998). *The Competitive Advantage of Nations: With a New Introduction*. Free press.
- Ragayah, M.Z., (1999). *Malaysian Reverse Investments: Trends and Strategies*. Asia Pacific Journal of Management 16(3).
- Stefano Federico and Gaetano Alfredo Minerva, (2008). *Outward FDI and Local Employment Growth in Italy*. Review of World Economics, 144(2): p. 295-324.
- Tham S. Y., (2006). *Outward Foreign Direct Investment from Malaysia: Trends, Patterns and Policy Issues*, in "Key Issues of FDI: Outward FDI from Asia. ASEAN-UNCTAD seminar. Chiang Mai.
- United Nations, (1996, 1998, 2006). *World Investment Report 1996, 1998, 2006 (various issues)*
- Vernon, R., (1966). *International Trade and International Investment in the Product Cycle*. Quarterly Journal of Economics, 80(2): p. 190-207.
- Williams, D., (2009). *Determinants of Outward Foreign Direct Investments from Small Island Developing States*. American Journal of Economics and Business Administration, 1(2): p. 45-54.
- Wint, A., (1995). *Corporate Management in Developing Countries: the Challenge of International Competitiveness*. Greenwood Publishing Group.
- Zainal, A.Y., (2005). *Outward Foreign Direct Investment by Malaysian Enterprises*, in UNCTAD Expert Meeting on Enhancing the Productive Capacity of Developing Country Firms through Internationalization. Geneva.

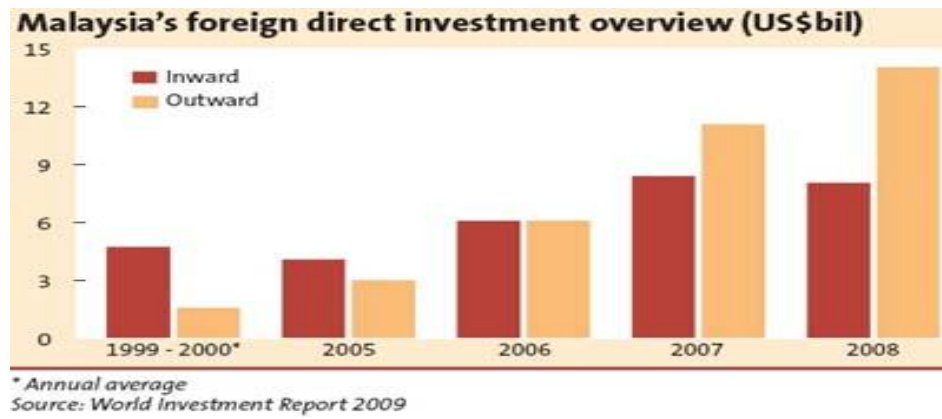


FIGURE 1: Malaysia's Foreign Direct Investment

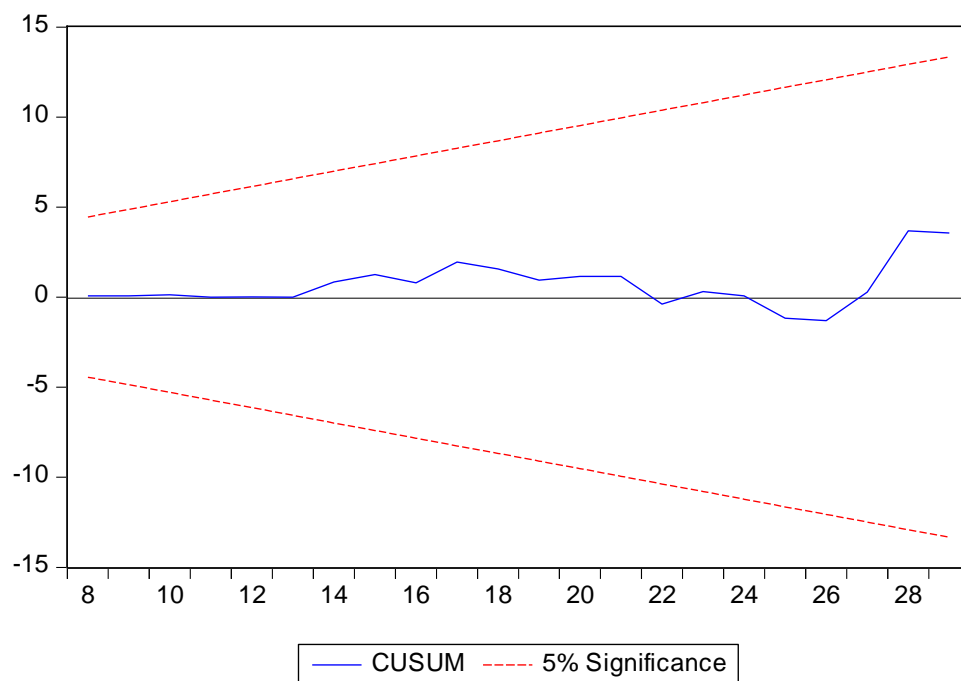


FIGURE 2: CUSUM Stability Test for Outward FDI

TABLE 1: Drivers of Outward FDI in Malaysia, 1980-2009.

VARIABLES	MODEL 1	MODEL 2	MODEL 3
EXPORT LEVEL	0.111372 (3.010448)**	0.089189 (3.327565)**	0.121625 (4.117887)***
EXPORT (-2)		0.089657 (3.581976)***	
FDI LEVEL	0.034409 (0.262931)		
GDP	-0.069751 (-0.994512)	-0.185537 (-3.177684)**	-0.090467 (-1.488632)
INCOME/CAP	-1.090735 (-0.874723)		
PRODUCTIVITY	0.855300 (2.881291)**	1.074105 (5.155218)***	0.800417 (3.657690)**
OIL CONS	-123.9758 (-0.892183)	42.96478 (0.376107)	-83.73245 (-0.681943)
R ²	0.947061	0.965623	0.945190
R ² - adjusted	0.932623	0.957438	0.936055
F-STATISTICS	65.59523	117.9754	103.4695
DW	1.867604	2.539486	1.897685

Dependent Variable: Outward FDI Stock

- Notes:
1. Figures in parentheses are t-statistic.
 2. Results are corrected for autocorrelation and heteroscedasticity.
 3. *** denotes significance at 1%, ** at 5%, and * at 1%.