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Re-examining the Determinants of Malaysia's Outward FDI

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ABSTRACT

While Malaysia is well known as an attractive destination for foreign direct investment (FDI), the country is also becoming a significant source of outward FDI (OFDI) as it has become a net exporter of capital since 2007. The increase in the outward investment may be due to the attractiveness of foreign host countries relative to Malaysia's domestic constraints. Consequently, outward investment may be used as one of the strategies to overcome domestic constraints in Malaysia. This paper examines the push and pull factors influencing Malaysia's investment abroad based on the country's top 15 destination countries that accounted for approximately 65 percent of Malaysia's OFDI from 2003 to 2011. The empirical determinants of OFDI, from the perspectives of pull and push factors, were tested using macroeconomic data in a gravity model. Since OFDI activities are still relatively new in Malaysia, this study is exploratory in nature. The value added of this paper is to fill the research gap by providing a more comprehensive understanding on the factors that drive OFDI from Malaysia compared to the relative attractiveness of Malaysia as a host economy. The findings in this paper indicate that Malaysia's outward investments are significantly influenced by relative market size, tax rates, openness, distance and cultural proximity. In addition, the results indicate that OFDI from Malaysia is likely to be horizontal or market seeking.

Keywords: Outward FDI, Dunning's OLI eclectic paradigm, location advantages, gravity model, pull and push factors

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INTRODUCTION

Outward foreign direct investment (OFDI) from Malaysia can be observed from the mid-1970s, albeit these flows are rather small. As a developing country, the priority was on attracting FDI into

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Malaysia compared to encouraging OFDI. The strategic location of Malaysia complemented the government's efforts in attracting inward FDI (IFDI) through export-oriented industries. This policy has contributed towards making Malaysia a well-known investment destination in Southeast Asia.

However, Malaysia's OFDI has increased since early 1993 due to the pull factors of foreign countries, which include among others, increasing liberalisation in other developing economies such as Vietnam, Cambodia, Laos, East Asia, Middle East and Africa that progressively reduced barriers in capital flows to these countries (Ragayah, 1999; Tham, 2005). Besides, the emergence of countries with high growth and large domestic markets such as China and India also added to the attraction for outward flows (Ragayah, 1999; Tham, 2005). The attractiveness of increasingly open door policies in labour surplus economies such as Vietnam and China also served to attract investment to these countries (Ragayah, 1999; Tham, 2005). The push factors have led to strong economic and industrial growth after the economic crisis of the mid-1980s, supported by government's incentives for Malaysian companies to expand their trade and investment opportunities abroad by exploring new markets OFDI (Tham, 2005). For instance, tax exemption was given on income earned overseas and remitted back to Malaysia's (Ragayah, 1999). The efforts in promoting OFDI became more prevalent when it was

outlined in Malaysia's long-term planning in Outline Perspective Plan III in 2001 (Ariff & Lopez, 2007).

UNCTAD Statistics indicated that the stock of 1980 - 2011 OFDI from Southeast Asian countries increased by eight fold in the world's total. Apart from Singapore, Malaysia is one of the key countries in Southeast Asia that is actively involved in OFDI activities. While predominantly a host economy for inward FDI, Malaysia has slowly moved into becoming a significant source of OFDI as well. According to UNCTAD (2006), PETRONAS, YTL Corporation Berhad and MISC Berhad are among the top 100 non-financial transnational corporations in 2004 that have invested aggressively in foreign countries. Malaysia became a net exporter of capital when OFDI flows surpassed IFDI flows for the first time in 2007 and consecutively to date.

Consequently, examining the key determinants of OFDI from the perspective of both pull and push factors is necessary to formulate appropriate FDI policies. A comparative approach is required to provide a more comprehensive understanding of the factors that drive OFDI from Malaysia compared to the relative attractiveness of Malaysia as a host economy. As such, the aim of this study is to re-examine the determinants of Malaysia's OFDI from these two perspectives. Dunning's OLI eclectic paradigm (Dunning, 1980) was adopted, where the locational or "L" advantages of the paradigm were the focus in this empirical study. This study focused

on the top 15 selected host countries for Malaysian investment, namely, Singapore, Indonesia, Australia, Mauritius, United Kingdom, Virgin Islands (British), Viet Nam, Thailand, Cayman Islands, Hong Kong, China, Taiwan, Germany, Netherlands, and India, for the period between 2003 and 2011, based on the availability of data at the time of research.

A REVIEW OF THEORETICAL PERSPECTIVES

There are several theories on the development and motivation of FDI that are relevant for explaining OFDI. According to the International Production Theory (Dunning 1980), the choice of investing abroad is dependent on the relative advantage of investing in different host countries compared to investing at home. Internalisation Theory, on the other hand, examines FDI versus other alternatives such as exports and licensing in the presence of market imperfections, namely, transaction costs, non-physical assets (intangible assets) and government regulations (Buckley & Casson, 1981; Hennart, 1982) for accessing foreign markets.

One of the most popular theories on foreign investment used in empirical studies is Dunning's OLI eclectic theory (Dunning, 1980). Dunning combined three important conditions to explain the 'why' and 'where' to invest. First, a firm must have ownership advantages (the "O" advantage in the OLI) in terms of technology, research and development or labour skills. Second, foreign markets must offer the locational advantages (the "L" advantage in the OLI) in terms of production costs in foreign countries for accessing foreign markets than producing goods from the home country. Third, multinationals must have internalisation advantages (the "I" advantage in the OLI) or advantages through own production instead of other forms of arm's length transfer which may involve higher licensing costs (Dunning, 1977, 1981; Erdilek, 1985). In other words, firms will exploit their "O" or "I" advantages through FDI in countries that offer relatively better "L" advantages as an alternative to continuing production at home and exporting goods to foreign markets.

In terms of the multinational theory, it classifies FDI into two broad categories investment, namely. horizontal of FDI and vertical FDI. Horizontal FDI generally occurs between countries with similar factor endowments, income and technology. Horizontal FDI is also known as market seeking type of investment and/ or investment to avoid trade frictions caused by high transportation costs and import protection policies imposed by foreign countries (Markusen, 1983; Enders & Lapan, 1987; Brainard, 1997). Thus, the transfer of a production process to foreign countries mostly involves end products, export substitution or re-import. Hence, FDI tends to substitute exports (Markusen & Venables, 1995; Helpman, Melitz, & Yeaple, 2003; Desai, Foley, & Hines, 2005).

Vertical FDI generally occurs between countries with different factor endowments. It is sometimes known as cost efficiency seeking type of FDI. The objective of this type of FDI is to exploit location specific factors via the relocation of different levels of the production process to different countries with relatively lower factor prices that are driven by differences in factor endowments between home and host country (Konings & Murphy, 2001; Greenaway & Kneller, 2007; Elia, Mariotti, & Piscitello, 2009; Temouri & Driffield, 2009; Yamashita & Fukao, 2009). Production and trade in intermediate goods among foreign affiliates before the end product is shipped back to the home country of investors for export is an example of this type of investment. Hence, FDI tends to complement exports.

The objectives for conducting investment abroad can be categorised in four main groups: market seeking, efficiency seeking, resources seeking and strategic asset seeking. Market seeking FDI aims at serving the local market of a foreign or a neighbouring country. At the same time, this type of FDI maybe seeking new market or expanding the existing market following the success of exports. Market seeking FDI is usually associated with high transportation costs or government regulations (Dunning, 1993).

As mentioned before, the main objective of efficiency seeking FDI is to enhance the efficiency in production cost by relocating either partially or the whole production processes to the foreign country that offers cheaper labour costs. This is primarily due to the differences in factor endowments, economies of scale and scope (Dunning, 1993).

Resource-seeking FDI aims to acquire specific resources abroad at lower prices as

compared at home. The three main types of resource-seeking FDI are: (i) physical or natural resource-seeking, which tend to be location specific such as minerals, raw materials and agricultural products. Thus, the investment needs to be conducted in a specific location to guarantee a cheap and safe supply of some natural resources (Dunning 1993); (ii) cheap and well-motivated unskilled or semi-skilled labour-seeking; and (iii) technological-capacity, management or market expertise and organisational skillsseeking (Dunning, 1993, pp. 57).

Lastly, strategic asset-seeking FDI aims to obtain strategic assets (tangible or intangible) for their long-term strategy, including sustaining or enhancing their international competitiveness. The strategic asset seeker aims to capitalise on the advantages of some common ownership of network activities to capitalise in diverse environments (Dunning, 1993, pp. 60).

DATA AND METHODOLOGY

The choice of the estimation period is based on the availability of OFDI data from 2003 to 2011 and by country. A panel data is applied in this study because it allows us to take into account different country specific features over time (Ramanathan, 2001).

MODEL SPECIFICATION

Based on the above theoretical discussion, a gravity model is used as studies using this type of model have achieved empirical success in explaining various types of inter-regional and international flows including international trade (Cheng & Wall, 2005) and FDI (Ellingsen, Likumahuwa, & Nunnenkamp, 2006; Kayam & Hisarciklilar, 2009; Shen, 2009). The popularity of the gravity model is highlighted by Eichengreen and Irwin (1998, pp. 33), who name it as the "workhorse for empirical studies of (regional) to the virtual exclusion of other approaches" (Cheng & Wall, 2005).

An augmented gravity model is applied in this study by taking into account both pull and push factors. A relative comparison method is used here by comparing the relative locational advantage of foreign country (pull factors) with locational disadvantages of home country (push factors), which is different from previous studies. This method provides a more comprehensive understanding in terms of explaining the extent to which the advantage of foreign countries relative to Malaysia is able to attract OFDI from Malaysia. However, trade cost and similar communication language dummy variables were excluded from using the comparison due to the characteristics of data which could not be measured by comparison.

The empirical model in this paper is shown in the following equation:

$$\begin{split} & lnSOFDID_{ij} = \alpha + \beta_1 lnGDPPC_{ji} \\ & + \beta_2 lnULCI_{ji} + \beta_3 DSG*lnULCI_{ji} \\ & + \beta_4 DINDO*lnULCI_{ji} + \beta_5 DAU*lnULCI_{ji} \\ & + \beta_6 DCHN*lnULCI_{ji} + \beta_7 lnOIL_{ji} \\ & + \beta_8 DSG*lnOIL_{ji} + \beta_9 DINDO*lnOIL_{ji} \\ & + \beta_{10} DAU*lnOIL_{ji} + \beta_{11} DCHN*lnOIL_{ji} \\ & + \beta_{12} lnTAX_{ji} + \beta_{13} lnOPENN_{ji} + \beta_{14} lnDIST_{ij} \\ & + \beta_{15} LANG_{ji} + \epsilon_{ji} \end{split}$$

Where *i*, is Malaysia, *j* is the host country and ε_i is the error term.

- SOFDID_{ij}- Malaysia's outward FDI stocks in country *j*,
- GDPPC_{ji} relative market size of country *j* to Malaysia *i*,
- ULCI_{ji} relative labour costs of the country *j* to Malaysia *i*,
- DSG*InULCI_{ji} interaction of Singapore country dummy with relative labour costs of the country *j* to Malaysia *i*,
- DINDO*lnULCI_{ji}- interaction of Indonesia country dummy with relative labour costs of the country *j* to Malaysia *i*,
- DAU*lnULCI_{ji} interaction of Australia country dummy with relative labour costs of the country *j* to Malaysia *i*,
- DCHN*InULCI_{ji} interaction of China country dummy with relative labour costs of the country *j* to Malaysia *i*,
- OIL_{ji} relative crude oil proved reserves of the country *j* to Malaysia *i*,
- DSG*lnOIL_{ji} interaction of Singapore country dummy with relative crude oil proved reserves of the country *j* to Malaysia *i*,
- DINDO*InOIL_{ji} interaction of Indonesia country dummy with relative crude oil proved reserves of the country *j* to Malaysia *i*,
- DAU*lnOIL_{ji} interaction of Australia country dummy with relative crude oil proved reserves of the country *j* to Malaysia *i*,
- DCHN*InOIL_{ji} interaction of China country dummy with relative crude oil proved reserves of the country *j* to Malaysia *i*,
- TAX_{ji}- relative corporate tax rates of country *j* to Malaysia *i*,
- OPENN_{ji}- relative trade liberalisation of country *j* to Malaysia *i*,

- DIST_{ij}- distance from capital of Malaysia *i* to country *j*, and
- LANG_{ij}-similar communication languages between Malaysia *i* and country *j*.

A description of the variables is shown in Table 1.

This study focused on the top-15 foreign countries that received the most investments from Malaysia for the time

period of this study. These included Singapore, Indonesia, Australia, Mauritius, United Kingdom, Virgin Islands (British), Viet Nam, Thailand, Cayman Islands, Hong Kong, China, Taiwan, Germany, the Netherlands and India for the period of 2003 to 2011. Together, they accounted for approximately 64.5 percent of Malaysia's total OFDI stock.

TABLE 1

Description of the Variables

Variables	Definitions	Sources	Expected Signs (+/-)
SOFDID _{ij}	Outward FDI stocks of Malaysia (i) in host country (j), (US\$mil.)	Department of Statistics Malaysia (DOSM)	
GDPPC _{ji}	Relative market size is proxied by gross domestic product per capita of host country (j)to Malaysia (i), (US\$ nominal)	EIU country data, https://eiu.bvdep.com/	(+)
$\begin{array}{c} ULCI_{ji} \\ (DSG*lnULCI_{ji}; \\ DINDO*lnULCI_{ji}; \\ DAU*lnULCI_{ji}; \\ DCHN*lnULCI_{ji}) \end{array}$	Relative labour costs is proxied by ratio of unit labour costs index of host country (j) to Malaysia (i)	<i>EIU country data</i> , https://eiu.bvdep.com/	(-)
OIL _{ji} (DSG*lnOIL _{ji} ; DINDO*lnOIL _{ji} ; DAU*lnOIL _{ji} ; DCHN*lnOIL _{ji})	Relative natural resources is proxied by ratio of crude oil proved reserves of host country (j) to Malaysia (i), (billion barrels)	U.S. Energy Information Administration, http://www.eia.gov	(+)
TAX _{ji}	Relative government policy is proxied by ratio of corporate tax rates of host country (j) to Malaysia (i), (%)	KPMG, Corporate and Indirect Tax Survey 2011, http://www.gfmag.com	(-)
OPENN _{ji}	Relative trade liberalisation is proxied by ratio of (total trade/ nominal GDP) of host country (j) to Malaysia (i), (US\$ mil.)	EIU country data, https://eiu.bvdep.com/	(+)
DIST _{ij}	Transportation costs is proxied by capital distance from Malaysia (i) to host country (j) , (km)	http://www.globefeed.co m/World_Distance_Calc ulator.asp	(+/-)
LANG _{ij}	Cultural proximity is proxied by similar communication languages, dummy variable D=1 if English, Malay, Mandarin or Tamil/Hindu are official languages, D=0 if not.	Central Intelligence Agency, The World Factbook, https://www .cia.gov/library/publicati ons/the-world-factbook/ fields/2098.html	(+)

Notes:

i. $DSG*lnULCI_{ji}$, $DINDO*lnULCI_{ji}$, $DAU*lnULCI_{ji}$ and $DCHN*lnULCI_{ji}$ are respectively the interaction of j = Singapore, Indonesia, Australia and China country dummy with relative labour costs to Malaysia.

ii. $DSG*lnOIL_{ji}$, $DINDO*lnOIL_{ji}$, $DAU*lnOIL_{ji}$ and $DCHN*lnOIL_{ji}$ are respectively the interaction of j = Singapore, Indonesia, Australia and China country dummy with relative natural resources to Malaysia.

Based on equation (1), the following hypotheses were tested.

Hypothesis 1: Relative larger market size in foreign countries is expected to be positively associated with Malaysia's OFDI.

According to Dunning and Narula (1996), a small population size indicates little aggregate consumption. Thus, in order to enjoy economies of scale, domestic firms are forced to seek larger foreign markets abroad. A large market size is not only important for the exploitation of economies of scale and efficient utilisation of resources (Buckley et al., 2007), but also reflects higher potential investment returns. Previous studies found positive relationship between foreign markets' size with Malaysia's OFDI, implying marketseeking investments in the host economies (Kitchen & Syed Zamberi, 2007 Goh & Wong, 2010). Besides, a small domestic market is found as one of the domestic constraints contributing to Malaysia's investment abroad (Ariff & Lopez, 2007; Ragayah, 1999; Tham, 2007). Given the above reasons, the relative market size (GDPPC_{ii}) is expected to positively affect Malaysia's outward FDI stocks in country j (SOFDID_{ii}) if OFDI is market-seeking. Therefore, the greater the relative market size in foreign countries (GDPPC_{ii}), the larger the amount of SOFDID_{ii} is expected to be attracted to these countries.

Hypothesis 2: Relative higher labour cost in foreign countries is expected to be negatively associated with Malaysia's OFDI.

Some studies have shown that domestic labour increasing cost is another factor pushing Malaysia's OFDI to countries with relatively lower labour cost. This is especially relevant for labourintensive activities or for vertical type of investment in order to sustain or enhance competitiveness (Ragayah, 1999; Ariff & Lopez, 2007; Tham, 2007). Ariff and Lopez (2007) highlighted Malaysia's investments in Laos, Cambodia, Indonesia, Vietnam and China as driven by the low cost factors available in these countries, particularly in labour-intensive manufacturing activities such as textiles. Tham (2007) also shared a similar finding, i.e. one of the main objectives of OFDI by Malaysia's manufacturing firms is to exploit low wage costs, in addition to other domestic push factors such as a small domestic market as well as increasing competition in the domestic market.

A case study by Ragayah (1999) indicated market-seeking and natural resource-seeking as the main objectives of Malaysia's companies for investing abroad, while increasing labour cost is not necessarily a major determinant depending on the type of investments. Given the above findings, relative labour cost was included in this study in order to ascertain the extent to which it influenced Malaysia's investment abroad. Relative labour cost (ULCI_{ii}) is expected to be negatively related with SOFDID if OFDI is motivated by efficiencyseeking. The ULCI_{ii} is interacted with Malaysia's top three OFDI host economies

dummies (Singapore, DSG*lnULCI_{;;}; DINDO*lnULCI, Indonesia and Australia, DAU*lnULCI_{ii}) and China¹ (DCHN*lnULCI_{ii}) to examine further whether OFDI to these countries is significantly influenced by relatively lower factor prices. The lower the relative labour cost (ULCI_{ii}), the larger the amount of SOFDID_{ii} is expected to be attracted to these countries.

Hypothesis 3: Relative abundance of natural resources in foreign countries is expected to be positively associated with Malaysia's OFDID

Natural resource-seeking FDI tends to be location specific. Investments have to be made in natural resource-abundant countries to ensure a cheap supply of natural resources. Findings from the previous studies by Ariff and Lopez (2007), Kitchen and Syed Zamberi (2007) and Rasiah, Gammeltoft, and Yang (2010) have indicated that Malaysia's OFDI is also driven by natural resource-seeking motivations. According to Ariff and Lopez (2007) and Kitchen and Syed Zamberi (2007),Petroliam Nasional Berhad (PETRONAS) and plantation companies actively invest abroad to seek for natural resources due to diminishing supply of these resources in Malaysia (such as oil fields and arable land) in Malaysia. PETRONAS has also invested heavily in Sudan and

Chad (UNCTAD, 2006). Rosfadzimi, Abd. Halim and Abu Hassan (2012) also found that the diminishing supply of natural resources in Malaysia to be one of the push factors for Malaysia's OFDI. As a result, the relative abundance of natural resources is significant as a determinant of Malaysia's OFDI. The relative abundance of natural resources (OIL_{ii}) is expected to be positively related with SOFDID, if OFDI is motivated by natural resourceseeking. Since it is location specific, the indicator will be interacted with Malaysia's OFDI country dummies. top three namely. Singapore (DSG*lnOIL_{ii}), Indonesia (DINDO*InOIL_{ii}) and Australia (DAU*lnOIL_{ii}). China (DCHN*lnOIL_{ii}) is also included to further examine whether OFDI to these countries is significantly influenced by natural resource-seeking The larger the relative arguments. abundance of natural resources (OIL_{ii}), the more SOFDID_{ii} is expected to be attracted to these countries.

Hypothesis 4: Relative higher corporate tax rate is expected to be negatively associated with Malaysia's OFDID

Caves (1971) and Gordon and Hines (2002) argued that tax factors could influence the decision of firms whether to produce at home country or in foreign countries; it also influences the amount and the choice of OFDI's location. Duanmu and Guney (2009) found that China and India's investments abroad are attracted to countries with low corporate tax rates. As low tax rates represent a higher net return

¹China is chosen as it is well known as a low labour cost country. All four countries accounted for more than half of Malaysia's total OFDI during the period of this study.

from investments, they are considered to be more competitive in attracting FDI, *ceteris paribus*. This is supported by Aminian, Fung and Lin (2007) who found that 'tax haven' countries are commonly sought by investors. Therefore, the relative tax rate (TAX_{ji}) is expected to be negatively related with SOFDID_{ij}, or the higher foreign corporate tax rates in foreign countries as compared to Malaysia's tax rate (TAX_{ji}), the less amount of SOFDID_{ij} is expected to be lured away from Malaysia.

Hypothesis 5: Relative trade liberalization is hypothesised to be positively related with Malaysia's OFDI.

As stated by the theory of internalisation, high trade costs (such as transport costs and tariffs) tend to replace exports with FDI (Buckley & Casson, 1981; Markusen, 1995). Thus, trade liberalisation is expected to attract more foreign investment. The higher the degree of trade liberalisation, the more foreign investment is expected to be attracted into a country. In addition to the elimination or reduction of both tariff and non-tariff barriers², trade agreements also provide increased market access to large integrated markets (Banga, 2007). Trade liberalisation is found as one of the factors that pushes Malaysia's investment abroad (Ariff & Lopez, 2007; Kueh, Puah, & Apoi, 2008; Goh & Wong, 2010). Given the above reasons, the relative trade liberalisation

variable (OPENN_{ji}) is expected to be positively linked with $SOFDID_{ij}$. Therefore, Malaysian OFDI depends on the relatively greater trade liberalisation in other countries (OPENN_{ii}).

- Hypothesis 6a: Transportation cost is hypothesised to be positively related with Malaysia's OFDI if it is horizontal type of FDI.
- Hypothesis 6b: Transportation cost is hypothesised to be negatively related with Malaysia's OFDI if it is vertical type of FDI.

transportation Although cost is generally negatively related to trade in gravity models, the relationship between transportation costs and FDI varies, depending on the type of FDI (horizontal or vertical) (Duanmu & Guney, 2009; Egger, 2008; Fung, Garcia-Herrero, & Siu, 2009). Horizontal FDI occurs when MNEs conduct similar production activities in different countries (Helpman et al., 2003, Wong, 2005). Matsuura and Hayakawa (2012) showed that a decrease in trade costs does not increase horizontal FDI because investors prefer exporting compared to investing directly in geographically closer destinations (Buckley & Casson, 1981). On the other hand, vertical FDI occurs when MNEs fragment the production process across border to different countries with the objective of minimising production costs or increasing access to externalities such as knowledge spillovers (Helpman et al., 2003; Wong, 2005).

² Tariff includes duties and surcharges. Nontariff barriers include licensing regulations, quotas and other requirements

Decrease in trade costs induces vertical FDI (Matsuura & Hayakawa, 2012). This is because the reduction in production costs (via lower labour costs) needs to outweigh the increase in the cost for investing abroad. Thus, vertical FDI is likely to be conducted with countries with lower wages and lower trade costs. Given the above, the distance variable, $(DIST_{ji})$ is expected to be positively or negatively linked with SOFDID_{ij}. A positive relationship is expected for horizontal type of OFDI, while a negative relationship is expected for the vertical type.

Hypothesis 7: Cultural proximity is hypothesised to be positively related with Malaysia's OFDI.

As discussed earlier, cultural proximity is expected to attract more FDI as it compensates investment risks. The model of firm internationalisation by Johanson and Vahlne (1977) states that in the early stages of investment abroad, firms tend to invest in countries with similar cultural backgrounds or well-established networking countries or the trading partners. Harzing (2003) also found that differences in national language could be a barrier to doing business abroad. Thus, the culture variable as proxied by the use of a common communication language (Cheng & Wall, 2005) was tested in this study to ascertain whether this variable influences Malaysia's OFDI. The variable LANG, is hypothesised to be positively related to SOFDID_{ii}, i.e. the use the similar communication languages between the Malaysia (i) and foreign countries (j) is expected to promote the OFDI from Malaysia to foreign country (j).

EMPIRICAL FINDINGS

The Hausman test (Prob>chi2 = 0.0001) indicated fixed effect model is appropriate under this study. The Least Square Dummy Variable (LSDV) model is applied because it allows for time invariant variables to be estimated under the fixed effect. It also takes into account the problem of heterogeneity by incorporating the related dummy variables into the model, such as country dummy variables and similar communication languages dummy variables in this study.

As expected, hypothesis 1 is accepted, in which relative market size is significant and positively influences Malaysia's OFDI. This finding is consistent with that of Goh and Wong (2010), Ragayah (1999) and Tham (2007) who argued that one of the main objectives of Malaysia's OFDI is to seek new markets in order to expand existing market, diversify risks and enhance returns on investment abroad. Furthermore, it is more beneficial to invest in huge markets because large markets provide economies of scale, and higher potential returns on investment due to higher potential demand.

Surprisingly, Table 2 shows that hypothesis 2 is rejected, in which relative labour cost variable positively and significantly influences the OFDI of Malaysia. The interactions with Malaysia's top three recipient countries and China

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show that the OFDI from Malaysia are not significantly driven by relatively lower labour costs, *ceteris paribus*. It is important to note that the result does not imply that OFDI to these countries are not driven by lower labour costs; instead, it merely indicates that lower labour cost is not the primary investment objective into these countries, *ceteris paribus*.

Explanation for these not significant interaction terms can be due to Malaysia's investment activities to Singapore that are dominated by finance services, while Malaysia's investments in Indonesia are dominated by finance and plantation activities (DOSM unpublished). Malaysia's investment into Australia is dominated by mining activities (DOSM unpublished). The study, however, is unable to ascertain the impact of relative labour costs on investment into China. The insignificant interaction sign may reflect that domestic market size that outweighs low-cost labour in driving Malaysia's OFDI to China. This is supported by Zhang (2012) who found that China's labour costs in the urban manufacturing sector registered a compound growth rate of 13.8% per employee per year from 2003 to 2010. Zhang (2012) further added that China's costs are growing at a faster rate than other low manufacturing costs countries such as Vietnam, India, and Mexico³. Hence, contrary to previous studies, China's labour cost competitiveness may not be the main driving force for Malaysia OFDI there.

Hypothesis 3 is rejected for the overall results when a negative and significant sign was found when controlling for the overall relative natural resources variables. However, regression result also suggests that only OFDI to Australia is significantly driven by natural resource-seeking. The negative and significant signs indicate that OFDI to Singapore is not driven by natural resources-seeking, and as stated before, OFDI to Singapore is dominated by finance services. Indonesia's restrictive rules impede foreign investors to invest into their mining and quarrying sector. Table 2 indicates the main objectives for Malaysia OFDI into China is also not driven by natural resources-seeking, ceteris paribus.

TABLE 2	
Regression	Results

		Number of obs = 108	
1nSOFDID	Coefficient	t	P> t
1nGDPPCji	1.510	2.03	0.046
1nULCIji	1.833	1.78	0.079
DSG*InULCIji	-6.060	-1.65	0.102
DINDO*lnULCIji	-3.013	-0.8	0.425
DAU*lnULCIji	2.359	1.57	0.120
DCHN*1nULCIji	-0.091	-0.03	0.979
1nOILRji	-1.106	-2.45	0.016
DSG*1nOILRji	-4.126	-1.69	0.094
DINDO*1nOILRji	-2.182	-1.56	0.122
DAU*lnOILRji	1.344	2.5	0.014
DCHN*1nOILRji	1.442	1.04	0.302
InTAXji	-1.875	-2.47	0.016
1nOPENNji	5.325	8.74	0.000
1nDISTji	23.184	2.67	0.009
LANG	31.365	3.44	0.001

A high tax rate represents lesser net returns from investment. Therefore, in terms of relative government policies, a significant negative relation is shown between relative corporate tax rates

³ For example, an entrepreneur claimed that only a smaller factory is kept in China to serve America and China's domestic market due to increasing labor costs which have doubled in the past four years at his factories in Guangdong (The Economist 2012).

 (TAX_{ji}) and OFDI of Malaysia, and thus, hypothesis 4 is accepted. Table 2 also indicates more competitive tax policies of foreign countries compared to Malaysia attract more Malaysia's investment there.

Relative trade liberalisation (OPENN_{ji}) also affects the OFDI of Malaysia positively and significantly at 99 percent confidence level, and hence, hypothesis 5 is accepted. This finding shows that the higher the degree of integration of a foreign country with the world relative to Malaysia, the more likely the country will receive more investment from Malaysia.

In terms of transportation costs, the distance variable ($DIST_{ij}$) is found to affect the stock of Malaysia's OFDI (SOFDID_{ij}) positively, supporting hypothesis 6a. The positive sign of $DIST_{ij}$ implies that investments tend to be horizontal in nature, or market seeking type of investment. Therefore, the main motivation for OFDI from Malaysia is to seek for new markets or to expand existing markets.

In Table 2, cultural proximity affects stock of OFDI positively, and thus, hypothesis 7 is accepted. The result shows that similar communication languages will influence the locational choices of investments from Malaysia.

CONCLUSION

Overall, the findings imply that Malaysia's OFDI tends to be horizontal in nature. Relative market size, government policies, trade liberalisation and corporate tax rates are the main drivers for Malaysia to invest abroad. Natural resource-seeking OFDI is, however, very country specific due to its nature. Only OFDI to Australia is significantly driven by natural resource-seeking. Interestingly, the findings of this study show that overall, Malaysia's OFDI is not driven by relative cheap labour costs; instead, market seeking factor is relatively more important, *ceteris paribus*. As for China, the findings indicate relative lower labour cost is not the main driver for Malaysia's OFDI to China due to the rising labour costs particularly since 2003. Instead, the findings indicate the larger market domestic size in China outweighs the relatively lower labour cost advantage in the country.

Investing abroad to enhance the market reach of Malaysia's investors can be beneficial to the domestic economy through the repatriation of profits. Policies that facilitate the repatriation of profits are therefore important. The government can also facilitate a greater market reach for domestic investors who may not have the capacity to invest outside the country by encouraging exports through increasing market access to other countries. Given the current doldrums in multilateral liberalisation, forging deeper integration within ASEAN is another option for increasing the market reach of domestic investors.

REFERENCES

Aminian, N., Fung, K. C., & Lin, C. C. (2008). Outward FDI from East Asia: The Experience of Hong Kong and Taiwan. In R. S. Rajan, R. Kumar, & N. Virgill (Eds.), New Dimensions of Economic Globalization: Surge of Outward Foreign Direct Investment from Asia (pp. 171-208). Singapore: World Scientific Publishing.

- Ariff, M., & Lopez, G. P. (2007). Outward foreign direct investment: The Malaysian experience.
 Paper presented at the International Workshop on "Intra-Asian FDI Flows: Magnitude, Trends, Prospects and Policy Implications. Organized by Indian Council for Research on International Economic Relations (ICRIER), New Delhi 3, India, 25-26 April. Retrieved May 21, 2012, from http://www.icrier.org/pdf/Mohamed% 20Ariff%20 and%20 Greg%20Lopez.pdf.
- Banga, R. (2007). Drivers of outward foreign direct investment from Asian Developing Economies. In Towards Coherent Trade Policy Frameworks: Understanding Trade and Investment Linkages, Studies in Trade and Investment (pp. 195-215). Thailand: UNESCAP. Retrieved October 10, 2009, from http://www.unescap.org/tid/artnet/ pub/tipub2469_chap7.pdf.
- Brainard, L. S. (1997). An empirical assessment of the proximity-concentration trade-off between multinational sales and trade. *American Economic Review*, 87, 520-544.
- Buckley, P. J., & Casson, M. (1981). The optimal timing of a foreign direct investment. *Economic Journal*, 91, 75-87.
- Buckley, P. J., Clegg, J. L., Cross, A.R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38(4), 499-518.
- Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. *Economica*, 38(149), 1-27. Retrieved December 20, 2012, from http://www.jstor.org.www. ezplib.ukm.my/
- Cheng, I. H., & Wall, H. J. (2005).Controlling for heterogeneity in gravity models of trade and integration. *Federal Reserve Bank of St. Louis Review*, 87(1), 49-63. Retrieved December 20, 2013, from http://ir.nuk.edu.tw: 8080/bitstream/ 31036 0000Q/11970/2/cheng-wall-Review.pdf.

- Desai, M. A., Foley, C. F., & Hines, J. R. (2005). Foreign direct investment and the domestic capital stock. *American Economic Review*, 95(2), 33-38.
- Duanmu, J. L., & Guney, Y. (2009). A panel data analysis of locational determinants of Chinese and Indian outward foreign direct investment. *Journal of Asia Business Studies Spring*, 3(2), 1-15.
- Dunning, J. H. (1977). Trade, location of economic activity and the multinational enterprise: A search for an eclectic approach. In B. Ohlin, P. O. Hesselborn, & P. M. Wijkman (Eds.), *The International Allocation of Economic Activity* (pp. 395-418). London: Macmillan.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9-31.
- Dunning, J. H. (1981). International Production and the Multinational Enterprise. London: George Allen and Unwin.
- Dunning, J. H. (1993). Multinational Enterprises and the Global Economy. Harlow, Essex: Addison-Wesley Publication Company.
- Dunning, J. H., & Narula, R. (1996). The investment development path revisited: some emerging issues. In J. H. Dunning & R. Narula (Eds.), *Foreign Direct Investment and Governments* (pp. 1-41). London: Routledge.
- Egger, P. (2008). On the role of distance for outward FDI. *Annals of Regional Science*, 42(2), 375-389.
- Eichengreen, B., & Irwin, D. A. (1998). The role of history in bilateral trade flows. In A. F. Jeffrey (Ed.), *The Regionalization of the World Economy* (pp. 33-57). Chicago: University of Chicago Press.

- Elia, S., Mariotti, I., & Piscitello, L. (2009). The impact of outward FDI on the home country's labour demand and skill composition. *International Business Review*, 18(4), 357-372.
- Ellingsen, G., Likumahuwa, W., & Nunnenkamp, P. (2006). Outward FDI by Singapore: a different animal? *Transnational Corporations*, 15(2), 1-40.
- Enders, W., & Lapan, H. E. (1987). *International Economics: Theory and Policy*. USA: Prentice-Hall, Inc.
- Erdilek, A. (Ed.). (1985). Multinationals As Mutual Invaders: Intra-Industry Direct Foreign Investment. Australia: Croom Helm Ltd.
- Fung, K. C., Garcia-Herrero, A., & Siu, A. (2009). A comparative empirical examination of outward foreign direct investment from four Asian economies: People's Republic of China; Japan; Republic of Korea and Taipei, China. *Asian Development Review*, 26(2), 86-101.
- Greenaway, D., & Kneller, R. (2007). Firm heterogeneneity, exporting and foreign direct investment. *Economic Journal*, 117(517), F134-F161.
- Goh, S. K., & Wong, K. N. (2010). Malaysia's: The effects of foreign market size and home government policy. *Monash Economics Working Papers* 33/10. Department of Economics, Monash University. Retrieved January 2, 2011, from http://www.buseco.monash.edu.au/eco/ research/papers/ 2010/ 3310malaysiagohwong. pdf.
- Gordon, R. H., & Hines Jr. J. R. (2002). International taxation. NBER Working Paper No. 8854. Retrieved June 25, 2013, from http://www.nber. org/papers/w8854
- Harzing, A. W. K. (2003). The role of culture in entry mode studies: from negligence to myopia? *Advances in International Management*, 15, 75-127.

- Helpman, E., Melitz, M., & Yeaple, S. R. (2003). Export versus FDI. *NBER Working Paper* No. 9439. Cambridge, MA: MIT Press.
- Hennart, J. E. (1982). *A Theory of Multinational Enterprise*. Ann Arbor: University of Michigan Press.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm – a model of knowledge development and increasing foreign market commitment. *Journal* of International Business Studies, 8(1), 23-32.
- Kayam, S. S., & Hisarciklilar, M. (2009). Determinants of Turkish FDI abroad. *Munich Personal RePEc Archive Paper No. 17813*. Retrieved October 25, 2014 from: http://mpra. ub.uni-muenchen.de/17813/1/ MPRA_paper_ 17813.pdf.
- Kitchen, P. J., & Syed Zamberi A. (2007). Overseas investment by developing country firms: the case of emerging Malaysian corporations. *International Journal of Business and Management*, 2(4), 122-135. Retrieved January 13, 2009, from http://www.ccsenet.org/journal/ index.php/ijbm/article/view File/2235/3424.
- Konings, J., & Murphy, A. (2001). Do multinational enterprises substitute parent jobs for foreign ones? Evidence from firm level panel data. *University of Michigan Working Paper No. 371*. University of Michigan. Retrieved December 10, 2010, from http://deepblue.lib.umich.edu/ bitstream/ 2027.42/39755/3/wp371.pdf
- Kueh, J. S. H., Puah, C. H., & Apoi, A. (2008). Outward FDI of Malaysia: An empirical examination from macroeconomic perspective. *Economic Bulletin*, 6(28), 1-11. Retrieved March 23, 2013, from http://economicsbulletin. vanderbilt.edu/2008/volume6/ EB-07F20037A. pdf.
- Markusen, J. R. (1983). Factor movements and commodity trade as complements. *Journal of International Economics*, 14(3), 341-356.

- Markusen, J. R. (1995). The boundaries of multinational enterprises and the theory of international trade. *Journal of Economic Perspectives*, 9, 169-189.
- Markusen, J. R., & Venables, A. J. (1995). Multinational firms and the new trade theory. NBER Working Paper, No. 5036. Cambridge: Mass. Retrieved August 8, 2013, from http:// www.nber.org/papers/w5036.pdf?new_ window=1.
- Matsuura, T., & Hayakawa, K. (2012). The role of trade costs in FDI strategy of heterogeneous firms: Evidence from Japanese firm-level data. *ERIA Discussion Paper Series*. Retrieved May 27, 2013, from http://www.eria.org/ERIA-DP-2012-04.pdf
- Ragayah, H. M. Z. (1999). Malaysia reverse investments: trends and strategies. *Asia Pacific Journal of Management*, 16(3), 469-496.
- Ramanathan, R. (2001). Introductory Econometrics with Applications (5th Ed). South-Western: Thomson Learning.
- Rasiah, S., Gammeltoff, P., & Yang, J. (2010). Home government policies for outward FDI from emerging economies: lessons from Asia. *International Journal of Emerging Markets*, 5(3/4), 333-357.
- Rosfadzimi, M. S., Abd Halim, M. N., & Abu Hassan, S. M. N. (2012). Outward foreign direct investment (OFDI) drivers in developing economies: A case of Malaysia. *Business & Management Quarterly Review*, 3(1), 26-34.
- Shen, G. (2009). The predictive capacity of the gravity model of trade on foreign direct investment. Nationalekonomiska Institutionen, Uppsala Universitet. Retrieved October 24, 2010, from http://uu.diva-portal.org/smash/get/ diva2:216318/FULLTEXT01

- Temouri, Y., & Driffield, N. L. (2009). Does German foreign direct investment lead to job losses at home? *Applied Economics Quarterly*, 55(3), 1-21.
- Tham, S. Y. (2005). Japan's response to globalization: Learning from Japanese direct investment. Asia-Pacific Trade and Investment Review, 1(2), 3-26. Retrieved May 23, 2013, from http://www. unescap.org/tid/publication/aptir2383 yean.pdf.
- Tham, S. Y. (2007). Outward foreign direct investment from Malaysia: An exploratory study. Södostasienaktuell, 5, 44-72. Retrieved September 21, 2010, from http://www.gigahamburg.de/openaccess/suedostasienaktuell/ 2007_5/giga_soa_2007_5_tham.pdf
- The Economists. (2012). The end of cheap China: What do soaring Chinese wages mean for global manufacturing? Retrieved January 17, 2015, from http://www.economist.com/ node/21549956
- United Nations Conference on Trade and Development. (2006). FDI from the developing and transition economies: implications for development. *World Investment Report*. New York and Geneva: United Nations.
- Wong, H. T. (2005). The determinants of foreign direct investment in the manufacturing industry of Malaysia. *Journal of Economic Cooperation*, 26(2), 91-110. Retrieved March 5, 2014, from http://www.sesrtcic.org/files/article/89.pdf
- Yamashita, N., & Fukao, K. (2009). Expansion abroad and jobs at home: evidence from Japanese multinational enterprises. *Asia Pacific Economic Papers No. 377.* Australia-Japan Research Centre, Crawford School, Australia National University. Retrieved December 5, 2011, from http://www.crawford. anu.edu.au/ pdf/pep/apep-377.pdf
- Zhang, S. (2012). China's rising costs. China Business Review. Retrieved January 17, 2015 from:http://www.chinabusinessreview.com/ chinas-rising-costs/