

0849256

# Leveraging Trade Opportunities with Non-Traditional Partners: The Malaysia-GCC Perspective

By

**Evelyn S. Devadason, Ahmad Zubaidi Baharumshah  
and  
Thirunaukarasu Subramaniam**

Paper presented at the **International Conference on International Trade and Investment** held on 19-21 December 2011 in Mauritius

RISALAH

Perpustakaan Universiti Malaya



A514754614

## Leveraging Trade Opportunities with Non-Traditional Partners: The Malaysia-GCC Perspective \*

Evelyn S. Devadason<sup>a</sup>, Ahmad Zubaidi Baharumshah<sup>b</sup>, Thirunaukarasu Subramaniam<sup>c</sup>

<sup>a</sup>Department of Economics, University of Malaya, Kuala Lumpur

<sup>b</sup>Graduate School of Management, Universiti Putra Malaysia, Serdang

<sup>c</sup>Department of Southeast Asian Studies, University of Malaya, Kuala Lumpur

*This paper examines the impact of economic factors on bilateral trade flows between Malaysia and the GCC through estimations of panel data using a gravity model. In particular, the paper compares the determinants of bilateral trade between Malaysia and two regions, the non-traditional Gulf alliance and the traditional ASEAN counterpart, to provide insights for leveraging opportunities through trade with the former. The gravity estimates imply the importance of size effects, similarities in GDP and differences in factor endowments as drivers of trade flows between Malaysia and the GCC, underlying the fact that inter-industry trade dominates these flows. The opposite holds in the case for the Malaysia-ASEAN trade. The Gulf region therefore provides opportunities for Malaysia to export quantity-based final (end-use) products and to diversify its exporting strategy away from quality-based parts and components.*

**Keywords:** trade structure, inter-industry trade, panel gravity, GCC, Malaysia

**JEL Classification:** F10, F14

### 1. INTRODUCTION

The Association of the South East Asian Nations (ASEAN) has moved forward toward enhancing regional economic cooperation with the Gulf Cooperation Council (GCC)<sup>1</sup>, following the ASEAN-GCC two-year action plan (2010-2012) that was endorsed in June 2010. The total trade between ASEAN and the GCC, comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE), was valued at USD83 billion in 2010. Within ASEAN, trade connectivity between Malaysia with the GCC region has likewise expanded over the recent years, culminating to the GCC-Malaysia agreement that was sealed in January 2011. The framework agreement allows for both parties to explore and leverage on areas of huge potential in trade and investment to set the stage for the eventual finalizing of a free trade agreement (FTA)<sup>2</sup>. Latest estimates indicate that trade between Malaysia and the GCC reached USD11 billion in 2010 (MATRADE, 2011).

Notwithstanding the above, the GCC still remains an insignificant trading partner of Malaysia (see also Abu-Hussin, 2010; EIU, 2011). However, networking with this emerging market is of tremendous importance to the small but highly trade dependent Malaysia for the following three reasons. First, the recent economic global downturn has exposed the vulnerabilities of the country's over-reliance on traditional partners such as the United States (US), Europe and Japan. In pursuit of trade diversification<sup>3</sup>, it has now become the Malaysian national policy (BNM, 2010; NEAC, 2010) to orientate international trading strategies towards non traditional trading partners in West Asian markets, particularly with the GCC. Second, there is currently a growing body of literature and policy prescriptions emphasizing the importance

of trade among developing countries—the so-called South-South trade. It is believed that the gains from South-South trade could exceed that of the North-South, thus offering reasons to exploit trade opportunities between Malaysia and the GCC, which is at a nascent stage<sup>4</sup>, as both parties seek to diversify their export markets. Third, the GCC is actively negotiating FTAs with many countries, including the European Union (EU), China, Japan, New Zealand, Singapore, and India. In addition, the US is also working towards the completion of a Middle East FTA, concluding bilateral FTAs with Oman and Bahrain, and working on agreements with other countries in the region. Unless action is taken, these developments raise the prospects of Malaysia facing a less than favourable business climate condition in the GCC relative to her competitors. Malaysia, cannot afford this as she also has substantial export interests in the fast growing region of the GCC.

In view of the importance of Malaysia's political and economic relationship with the GCC, it is timely to take stock of the trends, drivers and policy challenges for this emerging Malaysia-GCC trade pact. The paper first examines analytically Malaysia-GCC trade patterns spanning the period 1990-2010, and compares them with that of the ASEAN. Thereafter, the econometric exercise seeks to estimate the determinants of bilateral trading relationships between Malaysia-GCC and Malaysia-ASEAN, to draw parallels with the differences (or similarities) that prevail in the trade orientation (trade shares, product and market concentration) and trade structure (nature and composition of trade) with both regions. Finally, the paper examines the opportunities for increasing trade connectivity between Malaysia and the GCC.

The rest of the paper is organized as follows. Section 2 profiles and compares Malaysia's trade with two regions, the GCC and the ASEAN, to set the background of the study. Section 3 presents the econometric specification, describes the data sources and the construction of each of the variables considered as potential determinants of bilateral trade. Section 4 presents the empirical results. Section 5 discusses some prospects and challenges that exist for Malaysia-GCC trade cooperation. Section 6 concludes.

## **2. MALAYSIA-GCC: CONTOURS OF TRADE COOPERATION**

The Malaysia-GCC trade seems to be of a quite smaller order of magnitude when compared to that of Malaysia-ASEAN (Figure 1). Total trade between Malaysia and the GCC rose from USD627 million to USD10,419 million in 2000, whilst trade with the ASEAN increased from USD14,264 million to USD95,078 for the same period. Despite the fact that trade with the GCC is approximately one-fifth of trade with the ASEAN and that the Gulf region only constitutes less than 3 per cent of Malaysia's trade with the rest of the world (see Table 1), trade between Malaysia and the former grew at a healthy annual average rate of 18 per cent (see also Abu-Hussin, 2010) vis-à-vis only 9 per cent with the ASEAN since 2003. However, surpluses remain in favour of Malaysia in trade with both regions.

<Figure 1 here>

By broad product groups, there is no difference in the products traded between Malaysia with the GCC and that of the ASEAN. Industrial products appear to dominate trade flows between Malaysia and both the regions (Table 1). Nevertheless, this should not be misconstrued that similar types of industrial products are exchanged between Malaysia and the GCC vis-à-vis

that with the ASEAN, or that their trade structures are similar. Based on the diversification indices of merchandise exports, there is a smaller difference between structure of trade of Malaysia and the world average. However, the differences in the trade structures of individual GCC economies with that of the world average are astoundingly high<sup>5</sup>. Thus, one can expect that the trade structures between Malaysia and the GCC to be also somewhat different.

<Table 1 here>

There is also a high degree of trade concentration with specific economies within both regions. Within ASEAN, Singapore and Thailand are the major markets for Malaysia, whilst the UAE and Saudi Arabia are of utmost importance within the GCC. Malaysia's exports to the GCC is highly concentrated in the UAE, as the UAE is a cost-competitive location for offshoring the manufacture of advanced technological products, to serve both regional and international markets.

Though similarities are noted in terms of product- and market concentration for Malaysia's trade with both regions respectively, the same cannot be said for the structure and composition of trade. Table 2 presents the Grubel-Lloyd (GL, 1975) index<sup>6</sup> as a measure of Malaysia's trade structure with both regions. It is rather obvious that the Malaysia-GCC trade is one of inter-industry (IT) trade, whilst intra-industry trade (IIT<sup>7</sup>), mainly that of parts and components<sup>8</sup> (see for example Jongwanich, 2010), dominates in the case of trade in manufactures between Malaysia and ASEAN (particularly with the pioneer ASEAN member economies). This is not surprising as there is no trade overlap in the exchanges between Malaysia and the GCC. For example, Malaysia's major exports to the UAE consists of electrical and electronic products (SITC 7), followed by jewellery (SITC 8), palm oil and wood products<sup>9</sup>. Conversely, her major imports from the UAE include crude petroleum, metal and refined petroleum. In contrast, Malaysia's exports of manufactures to ASEAN and her corresponding imports are both concentrated in SITC 7 products. This again lends support to the fact that Malaysia-ASEAN trade involves similar exchanges.

<Table 2 here>

Malaysia's exports to the GCC are more diversified vis-à-vis her corresponding imports, thereby highlighting further the importance on tapping the Gulf market for expanding the export base. Thus, special attention is given to the trade structure (nature and composition of trade) in identifying the opportunities that prevail in networking with the Gulf economies, as this seems to be the main factor underlying the differences in Malaysia-GCC trade patterns from that of Malaysia-ASEAN.

### **3. METHODOLOGY AND DATA**

#### **3.1 Model Specification and Theoretical Underpinnings**

This paper employs the extended gravity model, developed by Chengang *et al.* (2010) based on Baltagi *et al.* (2003)<sup>10</sup>, to investigate the influence of simple economic factors on bilateral trade flows between Malaysia with the GCC and the ASEAN economies. Using a panel data framework, the equation is specified as follows:

$$\ln X_{ijt} = \beta_1 \ln GDPT_{ijt} + \beta_2 SIMGDP_{ijt} + \beta_3 \ln GD_{ij} + \beta_4 \ln FDST_{ijt} + \beta_5 SIMFDS_{ijt} + \beta_6 RLFAC_{ijt} + \beta_7 DUMContig_{ij} + \beta_8 DUMLand_{ij} + \beta_9 DUMComlang_{ij} + \beta_{10} DUMComreligion_{ij} + \zeta_t + \varepsilon_{ijt} \quad (1)$$

$$\ln TRADE_{ijt} = \beta_1 \ln GDPT_{ijt} + \beta_2 SIMGDP_{ijt} + \beta_3 \ln GD_{ij} + \beta_4 \ln FDST_{ijt} + \beta_5 SIMFDS_{ijt} + \beta_6 RLFAC_{ijt} + \beta_7 DUMContig_{ij} + \beta_8 DUMLand_{ij} + \beta_9 DUMComlang_{ij} + \beta_{10} DUMComreligion_{ij} + \zeta_t + \varepsilon_{ijt} \quad (2)$$

where  $X_{ijt}$  is country  $i$ 's (reporter) exports to country  $j$  (partner) in year  $t$ . Since this study examines one-way bilateral trade flows, country  $i$  or the reporter country refers specifically to Malaysia<sup>11</sup>.  $X_{ijt}$  is used interchangeable with  $TRADE_{ijt}$ , which represents total trade (summation of exports and imports) of country  $i$  to country  $j$ . The other variables are as defined below.

$GDPT$  = total GDP of countries  $i$  and  $j$

$SIMGDP$  = similarity in the levels of GDP in  $i$  and  $j$

$GD$  = geographical distance between  $i$  and  $j$

$FDST$  = total inward FDI stock of  $i$  and  $j$

$SIMFDS$  = similarity in inward FDI stocks in  $i$  and  $j$

$RLFAC$  = relative factor endowments in  $i$  and  $j$

$DUMContig$  = dummy variable set equal to 1 if  $i$  and  $j$  are contiguous, and 0 otherwise

$DUMLand$  = dummy variable set equal to 1 if either  $i$  or  $j$  is a landlocked country, and 0 otherwise (refers to Laos in the sample of countries)

$DUMComlang$  = dummy variable set equal to 1 if  $i$  and  $j$  share a common official language, and 0 otherwise

$DUMComreligion$  = dummy variable set equal to 1 if  $i$  and  $j$  share the same official/dominant religion (in this case it is the Islamic religion), and 0 otherwise

In equations (1) and (2),  $\beta$ 's represent the coefficient estimates,  $\zeta_t$  is time effects and  $\varepsilon_{ijt}$  is a white-noise disturbance term.

The above equation follows from a standard gravity model comprising gross domestic product ( $GDP$ ) and geographical distance ( $GD$ ) between countries, augmented with the stocks of inward foreign direct investment ( $FDS$ ) and relative factor endowments ( $RLFAC$ ) on the basis that the latter two variables are closely related to a country's trade capabilities and transaction costs respectively. The following explains the theories that underlie the selection of the explanatory variables in equations (1) and (2), beginning with the core variables of the gravity model.

The level of GDP of both reporter and partner countries are supposed to positively affect their trade. Instead of using the levels of GDP of both countries independently, the total GDP of both partners,  $GDPT$ , is included in the estimations to jointly capture economies of scale or the size effect. The higher the  $GDPT$ , the larger the trade flows, given that a greater division of labour and specialization becomes feasible under a larger scale of operation.

However, Baltagi *et al.* (2003) and Chengang *et al.* (2010) argue further that the level of GDP alone may not be sufficient to explain trade as the similarities of the two trading partners

GDPs are of no less importance. From a theoretical perspective, similarity in the level of GDP (*SIMGDP*) or convergence in income levels (or tastes) is likely to increase trade either through the expansions in trade in manufactures or the increase in scope for product diversity.

The next core argument of the gravity model is the *GD* variable. *GD* remains important for considerations of transport costs (Egger, 2000), transaction costs (Bergstrand, 1985; Edmonds et al., 2008) and timeliness in delivery (see also Rojid, 2006), and is included in the estimations. Thus, the expectations are for  $\beta_5 < 0$  (Tinbergen, 1962; Poyhonen, 1963).

Based on the explanation of Chengang *et al.* (2010), foreign direct investment (FDI) contributes to intra-firm trade through global production networks and the increase in product variety in the host economy. This in turn increases the volume of trade, mainly through IIT. However, if FDI and trade are substitutes, for example if FDI is mainly channeled into domestic production of the host economy, then, it does not necessarily contribute to expansions in exports. As such, the relationship between *FDS* and international trade remains inconclusive.

The distribution of *FDS* amongst trade partners is also considered important for international trade. If the size of *FDS* is similar between trade partners, one may expect similar volumes and varieties of bilateral exports from the partner countries. Following which, the import capabilities of both partner countries are also likely to be similar, leading to expansions in bilateral trade. Conversely, if the size of *FDS* is uneven between trade partners, the country with a smaller stock, offers less export capabilities and likewise smaller import capabilities, resulting in lower expansions in bilateral trade. Based on this reasoning, a positive relationship is envisaged between *SIMFDS* and exports.

Differences in factor endowments or factor intensity (capital-labour ratio or K/L) do matter for international trade (see Bergstrand, 1990; Frankel *et al.*, 1995; Baltagi *et al.*, 2003; Debaere, 2003; Ghosh and Yamarik, 2005; Chan-Hyun, 2005; Baxter and Kouparitsas, 2006; Cieslik, 2009). Traditional neoclassical trade theories suggest that comparative advantages based on differences in factor endowments explain basically IT. Alternatively, newer trade theories based on economies of scale and product differentiation attribute similarities in factor endowments to trade expansions through IIT. Thus, the differences and similarities of factor endowments (apart from *SIMGDP*) are closely linked to the structure of trade. If the structure of trade is IT-based, differences in factor endowments<sup>12</sup> will most likely facilitate trade expansion vis-à-vis similarities in factor endowments. We therefore do not expect new trade theories based on product differentiation to be relevant for the Malaysia-GCC trade. In this respect, the expected sign for  $\beta_6$  will be positive (negative) if IT (IIT) dominates.

Finally, border or contiguity effects (*DUMContig*), landlocked effects (*DUMLand*), common language (*DUMComlang*) and common or dominant religion (*DUMComreligion*) are included in the baseline estimations. Both common language and religion are considered a measure of cultural distance. Religious affinity, the Islamic faith in the case of Muslim countries, is expected to influence trade policies and consumption preferences (Mehanna, 2003).

### 3.2 Data Sources and Variable Construction

Our dataset includes Malaysia's trade with 15 countries, 6 countries of the GCC (Bahrain, Kuwait, Oman, Saudi Arabia, Qatar and UAE) and 9 countries of the ASEAN (Singapore, Thailand, Philippines, Indonesia, Brunei, Cambodia, Laos, Myanmar and Vietnam). The data span the period 1990-2010 (annual).

The primary data on export ( $X$ ) and total trade ( $TRADE$ ) flows based on the Harmonized System (HS) nomenclature is derived from the UN COMTRADE database. The data on  $GDP$ , labour force ( $L$ ) and gross fixed capital formation (GFCF)<sup>13</sup> are sourced from the World Bank Development Indicators and Global Development Finance (online World dataBANK). The data on  $FDS$  is obtained from the online database of the United Nations Conference on Trade and Development (UNCTAD), which is UNCTADstat. Data for  $GD$  on the basis of the average distance between the capitals for country-pairs and the information for country-pair contiguity ( $DUMContig$ ), country-pair common language ( $DUMComlang$ ) and landlocked ( $DUMLand$ ) countries are extracted from the CEPPII database. The definition and measurement of the key variables used in regression analysis are summarized in Appendix Table 1.

The analysis is first conducted combining Malaysia-GCC and Malaysia-ASEAN trade and subsequently, for trade with both regions estimated separately. The empirical estimations constitute a three-dimensional balanced panel of 630 observations (15 country-pairs x 2 product groups x 21 years; the cross-section dimension relates to the country-pair-product group) for the full sample, and 252 observations (6 country-pairs x 2 product groups x 21 years) and 378 observations (9 country-pairs x 2 product groups x 21 years) for the sub-samples of Malaysia-GCC and Malaysia-ASEAN trade respectively. The broad product groups<sup>14</sup> in the cross-sectional dimension refer to agriculture (HS01-HS24) and industrial (HS25-HS97) sectors.

### 3.3 Data Characteristics

There is substantial variation in all the variables, with the exception for  $\ln GD$ . More interestingly, the two variables of interest that capture the influences of trade structure,  $SIMGDP$  and  $SIMFDS$ , display extremely high levels of variation. The plots of the variables, caricatured in Appendix Table 2 further depict the differing trends in both variables over the period 1990-2010. It can be inferred from these plots that there is growing convergence in country size and FDI stock between Malaysia and the GCC, whilst the opposite holds true with that for the ASEAN. There is no discernible trend for  $SIMFDS$  in the case of Malaysia-ASEAN. More importantly, the upward trend in the  $RLFAC$  for Malaysia-GCC implies growing factor endowment heterogeneity relative to the Malaysia-ASEAN case.

Prior to conducting the panel gravity estimates, the panel unit root tests are performed to ascertain the stationarity of the variables. We employed the IPS (Im *et al.*, 2003), LLC (Levin *et al.*, 2002) and MW (Maddala and Wu, 1999) panel unit root tests, adding an intercept and a linear trend (see Appendix Table 3). Based on the IPS and MW tests, the null hypothesis of a unit root can be rejected at the conventional significance levels only for  $\ln X$  and  $\ln TRADE$ . These variables are therefore stationary. In the case of the LLC test, all variables are stationary with the exception for  $\ln GDPT$  and  $RLFAC$ . Since the IPS and MW tests, which

assume the individual unit root process, are more powerful than the LLC, we may conclude that most of the variables under investigation are I(1).

We however note here that these panel unit root tests may be misleading as recent studies have shown that cross dependency, which is a common characteristic in panel data studies, may favour the nonstationary null. With this in mind, we performed the Kao's (1999) cointegration test for residuals and found that the null hypothesis of no cointegration can be rejected at the 1 per cent significance level for Malaysia-ASEAN, but not in the case of Malaysia-GCC exports (see Appendix Table 4). The panel cointegration tests therefore point to the existence of a long-run relationship between variables for the case of Malaysia-ASEAN exports (and trade) and Malaysia-GCC trade.

#### 4. EMPIRICAL RESULTS: INSIGHTS FROM THE GRAVITY MODEL

Table 3 presents the results of the Random Effects (RE) models. The Breusch-Pagan (1980) Lagrange Multiplier (LM) test is employed to determine whether RE Generalized Least Squares (GLS) is appropriate and the simple pooling can be rejected. The LM statistics are overwhelmingly significant and support the appropriateness of the panel GLS model for all specifications.

<Table 3 here>

The RE estimator is chosen for the following reasons, despite the fact that the Fixed Effects (FE) estimator is much more common in gravity models than the RE estimator (see Egger, 2000). The RE estimator has the advantage of not requiring the exclusion of variables that are time invariant. In this case, both the distance (*GD*), border or contiguity effects (*DUMContig*), landlocked effects (*DUMLand*), common language (*DUMComlang*) and common or dominant religion (*DUMComreligion*) are invariant across time periods, and these variables are of considerable interest to this study. Furthermore, all of the variables exhibit more variation in the data across country-pair-product group (between variation) than over time (within variation). This is not surprising given the large number of cross-section entities (based on country-pair-product groups) used for the estimations, which are believed to have some influence on bilateral exports. As such, a FE may not work well for data with minimal within variation or for variables that change slowly over time.

As expected, the combined total size of Malaysia with her trading partners positively affects the volume of trade activity. The size effect is however non-significant for the Malaysia-ASEAN trade flows. The estimated coefficient,  $\beta_1$ , in the full sample fits the higher end of the 0.75-0.95 range, as derived in various studies (Chan-Hyun, 2005). However, the coefficient of the product of GDPs is undeniably high for Malaysia-GCC trade flows, indicating that an increased size has a more than proportional effect on exports. One plausible reason why the increase in bilateral trade volume is more than proportionate to the increase in GDP is the smaller home-bias effect. The Malaysian local distribution network is limited given the small market base for final goods. From this, we can conjecture that Malaysia's trade with the GCC depends more on exporting quantity-based final products that are sensitive to overall market size.



The coefficients for *FDST* and *SIMFDS* are generally positive but insignificant for the GCC sub-sample, whilst it is negative for the ASEAN case. The results imply weak evidence in support of substitute effects between FDI and total trade in the Malaysia-ASEAN case. Interestingly, the negative relationship between *SIMFDS* and trade for both Malaysia-GCC and Malaysia-ASEAN trade flows suggest that similar sizes of FDS have lowered bilateral trade, concurring with theory. In the case of the GCC, the possible explanation for this negative relationship is that the GCC states have already an abundance of capital and ultimately do not depend on FDI to boost trade. Rather, they seek FDI selectively, particularly those which brings technology transfer given their limited research and development (R&D) capabilities (EIU, 2011).

More importantly, is the trade impact of *SIMGDP* and *RLFAC*, which explains the underlying trade structure. We find that if Malaysia is similar in size with her GCC trading partner, she exports more, whilst the opposite holds when the trading partner is an ASEAN counterpart. Given the structure of IT trade between Malaysia and the GCC, it is therefore not surprising to note that the significant (albeit weak) positive impact of *RLFAC* on trade. We posit that comparative advantage based on differences in factor endowments is most likely to explain trade behaviour between Malaysia and the GCC.

Finally, geographical distance is not a resistance factor for the Malaysia-GCC trade. Likewise, cultural distances (common language and religious affinity) also do not significantly influence trade (see also Abu-Hussin, 2010; see also Insel and Tekce, 2010 for GCC's trade with the rest of the world). One plausible reason for this is the type of goods traded between Malaysia and the GCC and the geographical location of the GCC region. The GCC imports manufactured goods that are not produced by the regional or neighbouring economies (see Table 2), as the region is surrounded either by countries that also have an abundance of oil reserves or low income countries. Thus, those dummy variables are excluded from the estimation in Table 3.

Since FDI and new growth theories suggest that *GDPT* and *FDST* are likely to be endogenous, the Hausman and Taylor's estimator (henceforth HT, 1981) technique is employed. Qualitatively, the HT results in Table 4 are similar to the RE estimates. Likewise, the estimations are conducted solely for Malaysia-GCC and Malaysia-ASEAN trade in manufactures<sup>15</sup>, since this sector dominates in trade flows with both regions. The results are again found to be remarkably robust in terms of the signs and significance of the coefficient estimates.

Overall, the gravity estimates clearly imply the importance of the size effect, similarities in GDP and differences in factor endowments as drivers of trade flows between Malaysia and the GCC.

## 5. OPPORTUNITIES AND CHALLENGES FOR MALAYSIA-GCC

At the outset, the GCC-Malaysia (and the ASEAN-GCC) agreement seem to contend with the view that economic regionalism is increasing along civilization lines, that is trade pacts are bordering on common culture and religion. However, the gravity estimates have clearly pointed out that these factors are not significant to increasing bilateral trade. For example, most distributors of halal products are not from Muslim countries, with many international

producers having recognised the potential of the market and investing accordingly. In fact, although Malaysia has taken the lead in developing and modernising this sector, she has essentially lost out to competitors from the West. Meat and halal products are now being imported by GCC from many countries, including Australia, New Zealand, Ireland, Brazil, Canada and the US. Further, regional producers have increased production and are slowly reducing the Gulf region's import dependence. Companies such as the UAE-based al-Islami Foods have started to assume the regional mantle.

Following which, non cultural factors are more likely to play an influential role in enhancing bilateral trade between Malaysia and the GCC. From the discussion in the preceding sections, Malaysia obviously needs to capitalize on high degrees of IT and differences in factor endowments with the GCC to promote exports to the latter. The lack of production base in capital and equipment goods in the GCC more specifically provide avenues for the expansion of Malaysia's trade in manufactures<sup>16</sup>.

Notwithstanding the above mentioned opportunities, there are some challenges, outside the purview of the empirical estimations of this paper, which warrant attention. (Appendix Table 5 provides an idea on the overall business climate in the GCC based on major trade and investment policies). One such issue is the political tensions that prevail in the Gulf region. Trade and investment relationships with Bahrain, for example, are unlikely to take stronghold given the current large-scale anti-government demonstrations in the latter. Moreover, if the government of Bahrain remains focused on short-term survival, then, efforts at diversifying away from the hydrocarbon sector could also slow.

Second, is the issue of corruption, notable in Saudi Arabia and Qatar. In Saudi, bribes and the use of commission is widespread. As for Qatar, the intellectual property right (IPR) protection regime is still found to be inadequate. The US trade negotiators have noted that Qatar has encountered some difficulties in enforcing copyright laws and has suggested that IPR legislation may not be in full conformity with Qatar's Trade-Related Aspects of Intellectual Property Rights (TRIPs) requirements under its WTO membership. Apart from corruption, is the extensive bureaucracy, which is a major drawback for companies doing business especially in Saudi Arabia. Heightened security precautions, lengthy and arduous tendering processes and difficult visa procedures all present problems for foreign firms who view red tape as a significant obstacle to investment in the kingdom. Likewise, in Kuwait, highly bureaucratic application hinder Kuwait's business climate and foreign companies still report numerous delays in getting approval<sup>17</sup> to operate in Kuwait.

Third, is the broadly restrictive trade and investment regime in specific Gulf economies. Saudi commercial law remains undeveloped and the legal system can be heavily weighted against foreign investors, with Saudi partners free to remove foreigners' exit visas while courts can impose precautionary restraint of personal property, pending the adjudication of a commercial dispute. Indeed, foreign firms' major complaints centre on the inadequate dispute settlement mechanisms in Saudi Arabia, which remain slow and uncertain. There is little overall protection for foreign investors within the legal system. Investors therefore question the ability of Saudi courts to enforce contracts efficiently. Though the government has in recent years updated the Trademark Law, the Copyright Law and the Patent Law, enforcement of these new laws is weak and procedures inconsistent. Following which, capital inflows to the GCC (except for Qatar) generally remain weak.

That said, there are individual GCC economies that offer better prospects in terms of trade and investment networking opportunities for Malaysia. Here, we would like to mention three countries of the six-member group, Oman, Qatar and the UAE. Oman, for its pro-business stance and, lacking the hydrocarbons endowment of other Gulf states, is actively seeking to court FDI in key strategic areas of its diversifying economy: the gas sector and the downstream gas industries. Qatar, with its less domestic political challenges, is one of only a few states in the GCC (along with the UAE) to accommodate those investors put off by the weakening political risk profile of the region. Qatar remains an attractive destination in the Middle East for foreign investment as there are few security risks and a wealth of attractive opportunities and incentives for foreign investment in both the oil and non-oil sectors. The UAE, with one of the most liberal trade regimes in the Gulf - more than three-quarters of goods entering the country duty free - has also some of the best physical infrastructure (World Bank, 2010) in the Gulf region. It has thus established itself as a major trade hub within the GCC.

The high income economies of the GCC can therefore provide the base to attract market-seeking FDI, as size effects (based on the gravity estimates of this paper) and technology know-how<sup>18</sup> (EIU, 2010) matter for Malaysia-GCC trade. From the Malaysian perspective instead, FDI from the GCC still record less than 1 per cent of total FDI inflows to the manufacturing sector (Figure 2), whilst the ASEAN countries contribute 8 per cent of the total. In total, only 31 projects from the GCC were approved by Malaysia vis-à-vis 3,188 projects from the ASEAN for the period 1990-2010. The spike in FDI inflow from GCC in 2003 is represented by only 2 major projects totaling RM3,952 million. The approved investments from the GCC may not involve many projects, but the quantum of investment per project is substantially higher relative to that from the ASEAN.

<Figure 2 here>

By country, Saudi Arabia and the UAE are major investors from the Gulf<sup>19</sup>. Both these Gulf investors are drawn to invest mainly in the Iskandar Development Region, Southern Peninsular Malaysia, given its proximity to Singapore. Table 4 compares the approved investments in the manufacturing sector with GCC and ASEAN participation for the period 1990-2010. Prior to 2005, Saudi Arabia was the only investor from the Gulf, and since then, UAE has emerged as the top investor, commanding a share of 78 per cent of total GCC projects approved in Malaysia. Most of the investments from the UAE flowed into machinery equipment, followed by petroleum and chemical industries, which are considered potential areas of investments for the Gulf countries in Malaysia. Likewise, Singapore is the largest investor in Malaysia within the ASEAN regional context.

< Table 4 here>

From the above discussion, it is obvious that the opportunities that prevail from trade and investment with the GCC are likely to be disproportionate across individual Gulf economies, as the GCC in itself is a grouping of unequal partners with different strengths. Trade and investment networking between Malaysia and the GCC region is therefore more likely to intensify with "core" regional economies. The UAE in particular is poised to take on this role, having a strong re-exporting business in the Middle East (Abu-Hussin, 2010; World Bank, 2010) with manufactures representing twice the shares in each of the other Gulf economies, and having the strongest trade (see Table 1) and investment (see Table 4) links

with Malaysia. The importance of a “core” economy is not something new as it is also very much relevant for trade within the ASEAN context, though the networking opportunities in this region are somewhat different from that of the GCC. Common to both the GCC and ASEAN regions, is the influential role of China. China is at the “core” of the ASEAN regional production networks, sourcing components from within the region, and China<sup>20</sup> also maintains strong trade relations with all GCC economies. Consumer goods remain the GCC’s major imports, of which the sector is dominated by China (EIU, 2011). China exports electrical machinery, textiles, iron and steel to China. The GCC demand for consumption goods from China thus provides an alternative to demand from developed markets in the West, and this in turn could witness a rise in input sourcing by China from the ASEAN region. Therefore Malaysia (and the other ASEAN countries) is also expected to benefit from China’s direct trading relationship with the GCC.

## 6. CONCLUDING REMARKS

This paper is intended to be a purely empirical investigation, attempting to assess, and compare Malaysia’s trade with GCC relative to that of ASEAN, to present opportunities for Malaysia that prevail in trade with the former. The following summarizes the salient results.

Malaysia’s trade flows to the GCC depend on economies of scale (size effect), similar country size (similar preferences) and differences in factor endowments. Conversely, trade flows to the ASEAN depend on dissimilar country size and similarities in factor endowments. Broadly, this reflects the differences in the trade structure that underlies Malaysia-GCC from that of Malaysia-ASEAN. In the case of the former, IT dominates whilst trade flows with the latter depend on IIT.

Thus, the Gulf region provides opportunities for Malaysia to export quantity-based final (end-use) products and to diversify its exporting strategy away from quality-based parts and components, whose end-use is external. The latter trade flows are subject to external demand, outside the ASEAN market, and are therefore subject to shocks emanating from outside the region. This volatility exposure can be mitigated through diversification. The highly trade dependent Malaysia therefore needs to find new markets for exporting *final goods* to ensure continued export dynamisms, and in this respect, the Gulf provides an avenue for both product and market diversification. The present low trade level between Malaysia and the GCC emerging market may well represent unexplored trade opportunity.

**Table 1. Share and Concentration of Malaysia-GCC and Malaysia-ASEAN Trade  
(in per cent)**

Product Group/ Country	Exports			Imports			Total Trade		
	1990	2000	2010	1990	2000	2010	1990	2000	2010
<i>Malaysia-GCC (% of Malaysia-ROW trade)</i>									
All Products	1.18	1.37	2.66	0.95	1.80	3.12	1.07	1.57	2.87
Manufactures	1.01	1.25	2.58	1.01	1.88	3.38	1.01	1.53	2.95
Agricultural	2.40	3.58	3.28	0.26	0.21	0.15	1.60	2.19	2.14
<i>Malaysia-ASEAN (% of Malaysia-ROW trade)</i>									
All Products	29.27	0.27	25.40	19.30	0.24	27.09	24.30	0.26	26.17
Manufactures	29.56	26.53	26.08	18.75	24.28	26.09	24.03	25.51	26.08
Agricultural	27.04	26.50	20.11	26.47	23.87	38.67	26.83	25.42	26.90
<i>Product Concentration (% of Malaysia-GCC trade)</i>									
Manufactures	75.83	86.23	85.91	98.04	99.48	99.62	85.73	93.15	92.67
Agricultural	24.17	13.77	14.09	1.96	0.52	0.38	14.27	6.85	7.33
<i>Product Concentration (% of Malaysia-ASEAN trade)</i>									
Manufactures	89.05	94.74	90.98	90.21	95.62	88.65	89.51	95.12	89.89
Agricultural	10.95	5.26	9.02	9.79	4.38	11.35	10.49	4.88	10.11
<i>Market Concentration (% of Malaysia-GCC trade)</i>									
Bahrain	3.52	2.21	1.30	5.80	3.63	2.25	4.54	2.95	1.77
Kuwait	5.10	5.11	3.40	11.15	4.26	8.93	7.79	4.66	6.13
Oman	4.92	3.30	3.42	0.14	25.39	1.66	2.79	14.82	2.55
Saudi Arabia	43.56	24.00	16.93	52.47	43.10	36.66	47.53	33.97	26.66
Qatar	2.84	1.50	3.15	4.06	3.12	4.62	3.38	2.35	3.87
UAE	40.06	63.89	71.80	26.39	20.50	45.87	33.97	41.25	59.01
<i>Market Concentration (% of Malaysia-ASEAN trade)</i>									
Singapore	77.83	69.25	52.58	77.71	59.64	42.02	77.78	65.11	47.63
Thailand	11.97	13.62	21.05	12.46	16.00	23.03	12.16	14.64	21.98
Philippines	4.57	6.62	6.16	2.80	10.09	7.90	3.87	8.12	6.97
Indonesia	3.97	6.55	11.15	5.60	11.51	20.53	4.61	8.68	15.55
Brunei	0.98	0.97	0.89	0.02	0.02	0.11	0.60	0.56	0.52
Cambodia	---	0.27	0.39	0.29	0.09	0.07	0.12	0.19	0.24
Laos	0.01	0.01	0.03	---	---	0.01	---	---	0.02
Myanmar	0.60	0.89	0.73	0.31	0.35	0.51	0.48	0.66	0.63
Vietnam	0.07	1.82	7.02	0.80	2.31	5.83	0.36	2.03	6.46

Note: --- less than 0.05 per cent.

Source: Calculated from UN COMTRADE.

**Table 2. Structure of Malaysia-GCC and Malaysia-ASEAN Trade (in per cent)**

	All Products			Agricultural			Manufactures		
	2000	2005	2010	2000	2005	2010	2000	2005	2010
<b>GCC</b>	GL Index (%)								
Bahrain	0.200	0.277	0.371	0	0	0.043	0.372	0.522	0.796
Kuwait	0.105	0.100	0.048	0.046	0	0.007	0.135	0.272	0.134
Oman	0.004	0.280	0.852	0.004	0.004	0.119	0	0.278	1.217
Saudi Arabia	0.566	0.240	0.767	0.092	0.021	0.021	1.587	0.842	1.980
Qatar	0.000	0.771	1.407	0	0	0.001	0	0.819	2.558
UAE	1.518	1.382	1.811	0.170	0.851	0.424	2.024	1.563	2.859
<b>ASEAN</b>									
Singapore	45.113	43.352	38.159	29.396	8.369	10.828	47.717	47.237	43.061
Thailand	38.113	32.642	33.329	7.247	8.212	8.139	48.692	40.454	41.481
Philippines	26.400	22.351	23.391	4.934	6.552	9.077	28.808	25.478	32.405
Indonesia	25.317	20.590	16.094	19.314	8.226	8.727	28.418	27.796	22.370
Brunei	1.050	3.120	3.330	0.280	5.480	2.940	1.870	1.590	3.560
Cambodia	0.880	0.880	1.620	0.200	1.650	2.370	1.330	0.640	1.350
Laos	0.000	0.020	0.120	0.000	0.000	0.000	0.000	0.020	0.130
Myanmar	0.370	0.490	0.700	0.010	0.160	0.170	2.480	1.000	1.920
Vietnam	4.671	8.380	14.919	0.418	2.187	15.922	9.325	14.075	13.952
	Composition of Trade in Manufactures (%)								
<b>GCC</b>	Exports			Imports			Total		
SITC 5	3.370	3.217	4.881	55.314	63.925	48.743	4.573	7.305	9.506
SITC 6	10.508	14.326	11.754	37.853	32.054	39.860	11.500	16.172	13.344
SITC 7	44.106	36.604	46.822	5.351	2.501	7.417	46.268	34.152	43.351
SITC 8	42.016	45.852	36.543	1.482	1.520	3.980	37.659	42.371	33.800
<b>ASEAN</b>									
SITC 5	6.067	10.245	12.649	8.541	13.333	13.556	7.102	11.554	13.048
SITC 6	9.348	11.792	16.525	10.267	13.081	16.245	9.732	12.338	16.402
SITC 7	78.718	68.765	58.191	75.685	67.790	62.554	77.449	68.351	60.110
SITC 8	5.868	9.198	12.635	5.507	5.797	7.645	5.717	7.756	10.440

- Notes: 1. The GL index is calculated at the 5-digit SITC (Standard International Trade Classification) level, prior to aggregation.  
2. The composition of trade in manufactures represent the distribution of trade across the five broad SITC groups.  
3. SITC 5 – chemicals and related products; SITC 6 – manufactured goods classified chiefly by material; SITC 7 – machinery and transport equipment and SITC 8 – miscellaneous manufactured articles.

Source: Calculated from UN COMTRADE.

**Table 3. Determinants of Trade Flows**

	RE				HT				RE				HT					
	Full Sample		GCC		ASEAN		Full Sample		GCC		ASEAN		Full Sample		GCC		ASEAN	
	Dependent Variable: $\ln X$								Dependent Variable: $\ln TRADE$									
<i>lnGDPT</i>	0.899*** (0.185)	2.162*** (0.465)	-0.339 (0.375)	1.105*** (0.273)	2.148*** (0.462)	-0.087 (0.515)	3.223*** (0.617)	0.295 (0.344)	1.057*** (0.282)	3.232*** (0.603)	0.263 (0.519)							
<i>SIMGDP</i>	0.023** (0.010)	0.040*** (0.009)	-0.115** (0.056)	0.025** (0.012)	0.040*** (0.008)	-0.067 (0.048)	0.040*** (0.009)	-0.053 (0.051)	0.048*** (0.012)	0.039*** (0.010)	0.067 (0.049)							
<i>lnGD</i>	-0.085 (0.546)	-6.009 (5.026)	-1.069** (0.462)	-0.376 (0.600)	-5.984 (5.328)	-1.033 (1.106)	-7.884 (9.342)	-1.240** (0.435)	-0.368 (0.676)	-7.886 (6.129)	-1.603 (1.755)							
<i>lnFDST</i>	0.043 (0.208)	0.222 (0.415)	-0.043 (0.279)	-0.047 (0.365)	0.220 (0.322)	-0.023 (0.523)	0.181 (0.482)	-0.476* (0.269)	-0.315 (0.351)	0.175 (0.424)	-0.550 (0.495)							
<i>SIMFDS</i>	0.006* (0.003)	0.002 (0.006)	-0.005 (0.006)	0.005 (0.007)	0.002 (0.005)	-0.008 (0.010)	-0.001 (0.003)	-0.011** (0.005)	-0.001 (0.006)	-0.012* (0.007)	-0.013 (0.010)							
<i>RLFAC</i>	-0.739*** (0.176)	0.451* (0.263)	-1.221*** (0.223)	-0.708*** (0.160)	0.451* (0.244)	-1.429*** (0.264)	0.399 (0.297)	-1.090*** (0.231)	-0.737*** (0.160)	0.396 (0.320)	-1.658*** (0.270)							
constant	-8.438 (11.035)	7.251 (45.066)	39.434** (16.097)	-14.193 (14.379)	7.427 (46.158)	31.460 (21.138)	-2.030 (81.428)	33.310** (16.154)	-0.404 (14.632)	-2.096 (53.080)	38.170* (23.091)							
Year effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
No. of obs.	630	252	378	630	252	378	252	378	630	252	378							
No. of groups	30	12	18	30	12	18	12	18	30	12	18							
R <sup>2</sup> overall	0.436	0.423	0.641				0.457	0.602										
Breusch-Pagan LM test	3654.64	1730.21	1247.34	490.56	798.49	318.95	2001.23	1212.33	507.86	626.14	269.38							
Wald test																		

Notes: 1. The figures in parentheses for the RE model are the standard errors, adjusted for clustering on country-pair-product group. \*\*\*significant at 1%, \*\*significant at 5% and \* significant at 10%.

**Table 4. GCC and ASEAN Participation in Manufacturing, (in per cent)**

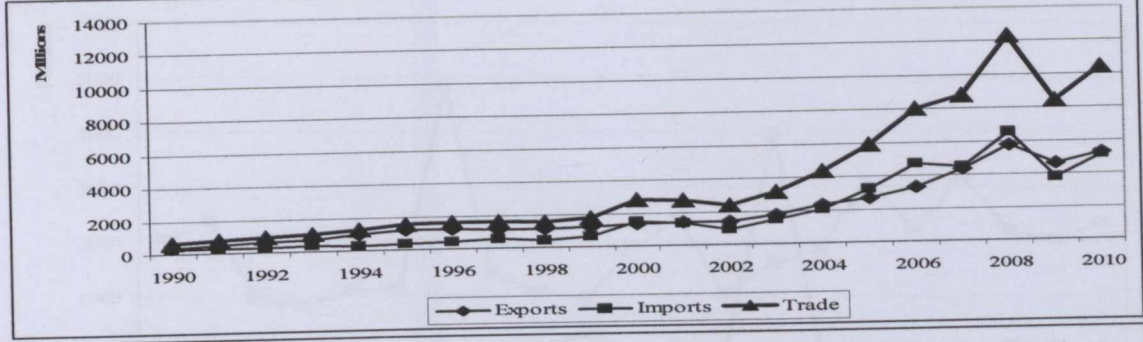
Country	Distribution of country participation (% of total regional FDI Inflow)					1990-2010	
	1990	1995	2000	2005	2010	%	RM million
<b>GCC</b>							
Saudi Arabia	100.00	100.00	100.00	0	7.36	3.45	161.71
Qatar	0	0	0	0	15.12	0.07	3.25
UAE	0	0	0	0	77.53	96.48	4,527.13
<b>ASEAN</b>							
Singapore	44.22	90.04	95.56	93.75	92.49	86.21	34,639.57
Thailand	0.26	1.05	0.88	4.57	6.84	2.85	1,146.79
Philippines	2.00	1.03	0	0	0	0.85	340.97
Indonesia	53.50	7.85	3.56	1.68	0.55	9.97	4,007.64
Brunei	0.01	0.03	0	0	0	0.09	34.36
Myanmar	0	0	0	0	0.12	0.02	9.12
Vietnam	0	0	0	0	0	0.01	3.33

Source: Calculated from unpublished data based on projects approved, MIDA.

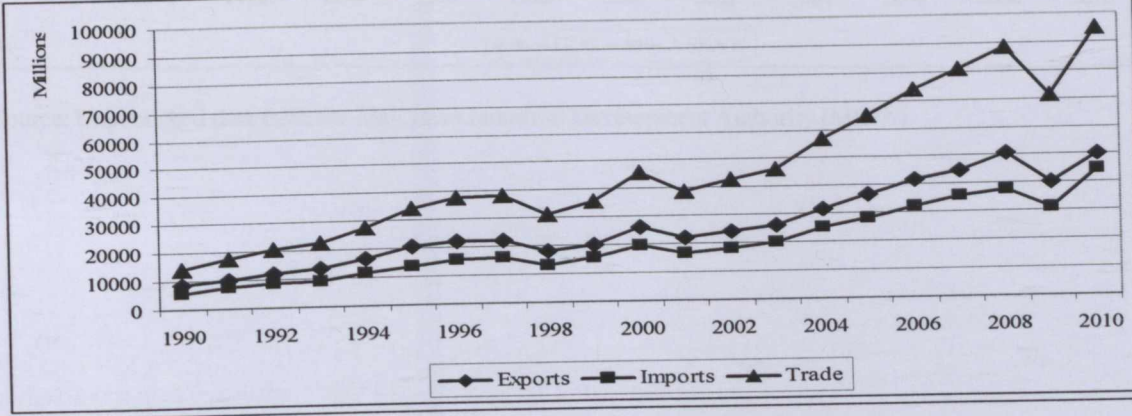


Figure 1. Malaysia-GCC and Malaysia-ASEAN Trade Flows, 1990-2010 (in million)

Malaysia-GCC

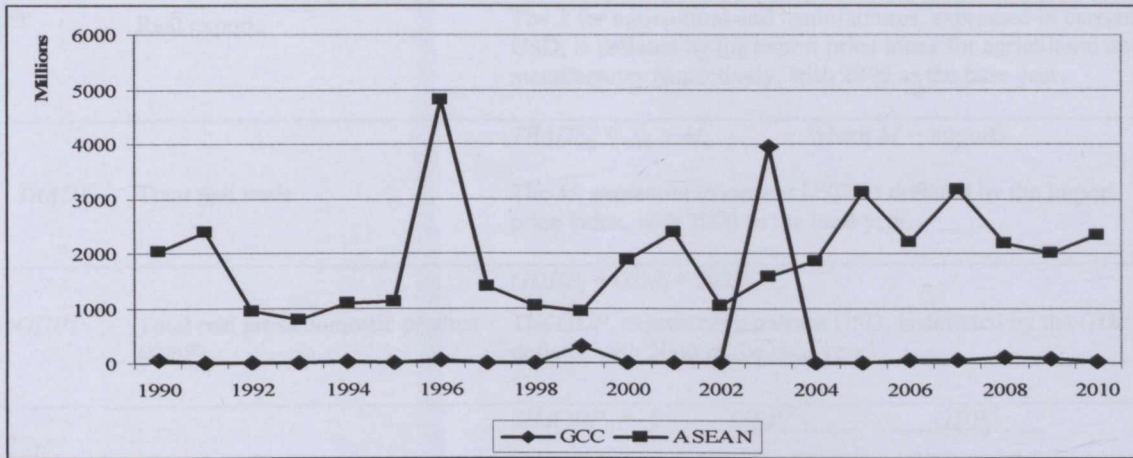


Malaysia-ASEAN



Source: UN COMTRADE.

**Figure 2. FDI Inflows from GCC and ASEAN in Malaysian Manufacturing, 1990-2010  
(in million)**



Source: Unpublished data from the Malaysian Industrial Development Authority (MIDA).

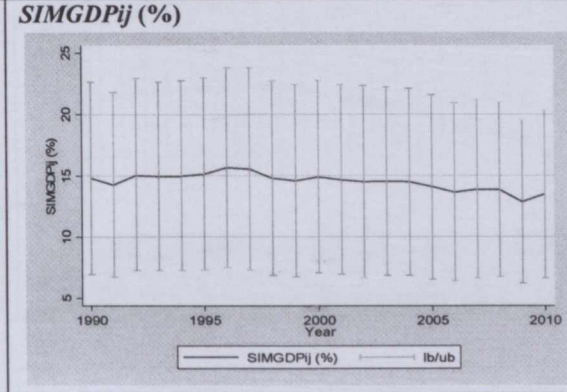
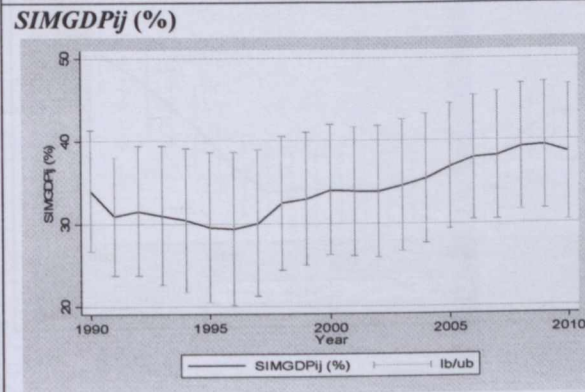
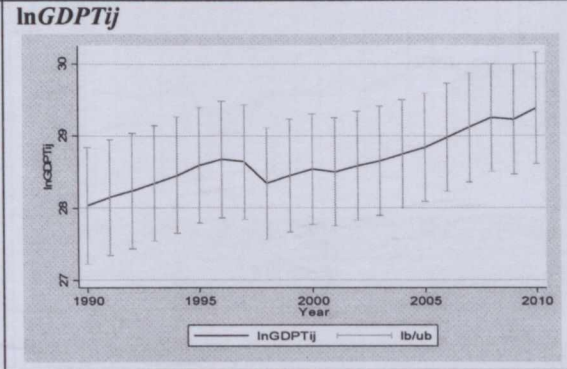
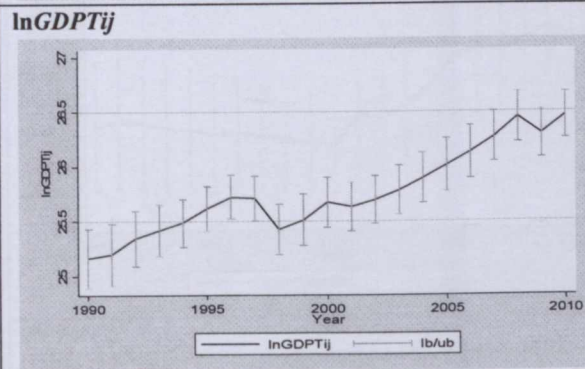
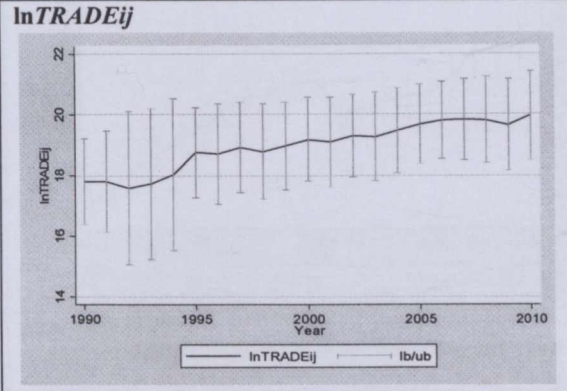
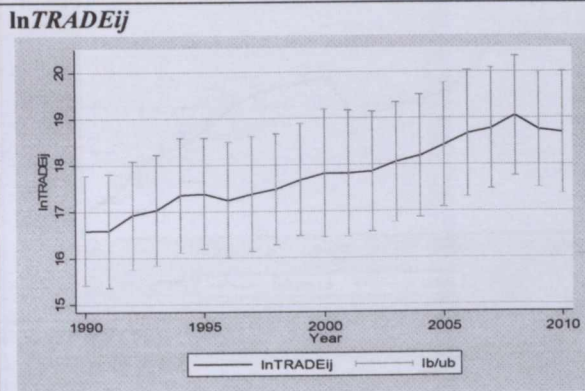
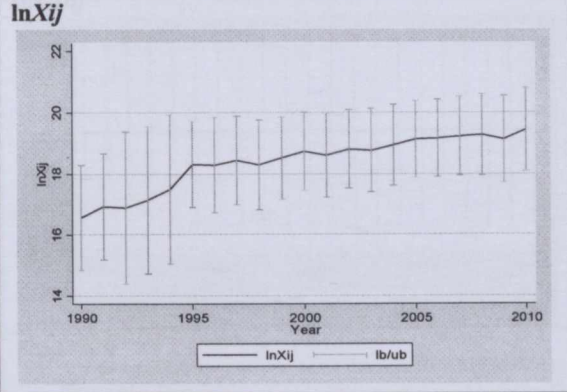
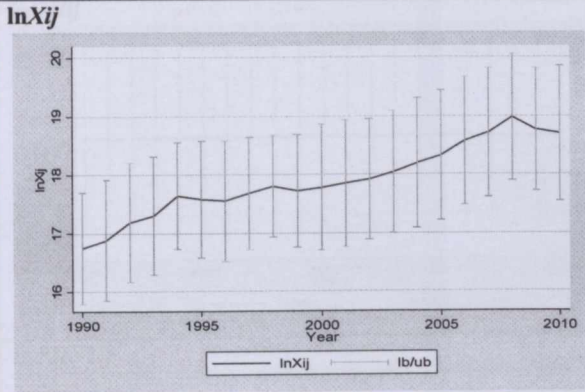
**Appendix Table 1. Definition and Measurement of Variables**

Variable	Definition	Measurement
<i>X</i>	Real exports	The <i>X</i> for agricultural and manufactures, expressed in current USD, is deflated by the export price index for agricultural and manufactures respectively, with 2000 as the base year.
		$TRADE_{ij} = X_{ij} + M_{ij}$ where <i>M</i> = imports
<i>TRADE</i>	Total real trade	The <i>M</i> , expressed in current USD, is deflated by the import price index, with 2000 as the base year.
		$GDPT_{ij} = GDP_i + GDP_j$
<i>GDPT</i>	Total real gross domestic product (GDP)	The <i>GDP</i> , expressed in current USD, is deflated by the <i>GDP</i> deflator with 2000 as the base year.
		$SIMGDP_{ij} = 1 - \frac{GDP_i^2}{(GDP_i + GDP_j)^2} - \frac{GDP_j^2}{(GDP_i + GDP_j)^2}$
<i>SIMGDP</i>	Similarity in the levels of GDP or relative size of trade partners	where $0 \leq SIMGDP_{ij} \leq 0.5$ If $SIMGDP_{ij} = 0$ (absolute divergence in size) $SIMGDP_{ij} = 0.5$ (equal country size)
		$FDST_{ij} = FDS_i + FDS_j$
<i>FDST</i>	Total real inward foreign direct investment (FDI) stock	For associate and subsidiary enterprises, it is the value of the share of their capital and reserves (including retained profits) attributable to the parent enterprise (this is equal to total assets minus total liabilities), plus the net indebtedness of the associate or subsidiary to the parent firm. For branches, it is the value of fixed assets and the value of current assets and investments, excluding amounts due from the parent, less liabilities to third parties. The <i>FDS</i> , expressed in current USD, is deflated by the CPI index with 2000 as the base year.
		$SIMFDS_{ij} = 1 - \frac{FDS_i^2}{(FDS_i + FDS_j)^2} - \frac{FDS_j^2}{(FDS_i + FDS_j)^2}$
<i>SIMFDS</i>	Similarity in the inward FDI stock of trade partners	
		$RLFAC_{ij} =  \ln(K_{jt}/L_{jt}) - \ln(K_{it}/L_{it}) $
<i>RLFAC</i>	Similarity in capital-labour ratios or the distance between countries in terms of relative factor endowments	where <i>K</i> = capital stock; and <i>L</i> = labour force If $RLFAC_{ij} = 0$ (same proportion of factor endowments) Total labour force comprises people ages 15 and older who meet the International Labour Organization definition of the economically active population. Capital stock is estimated from the GFCF using the standard perpetual inventory calculation method (see footnote 1). The GFCF consists of outlays on additions to the fixed assets (land improvements; plant, machinery and equipment purchases; construction of roads, railways and the like) of the economy plus net changes in the level of inventories. The GFCF, expressed in current USD, is deflated by the CPI index with 2000 as the base year.
<i>GD</i>	Geographical distance	The average distance (in kilometres) between the capitals of <i>i</i> and <i>j</i> .

Appendix Table 2. Plots of Variables

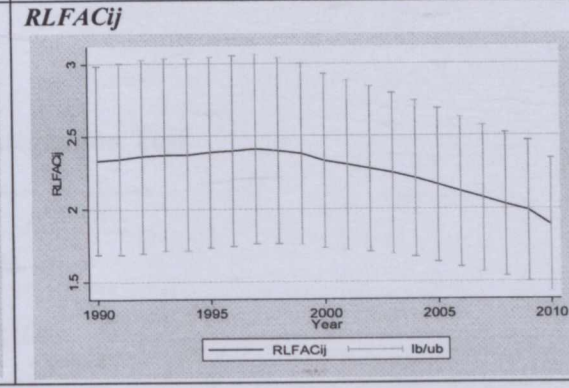
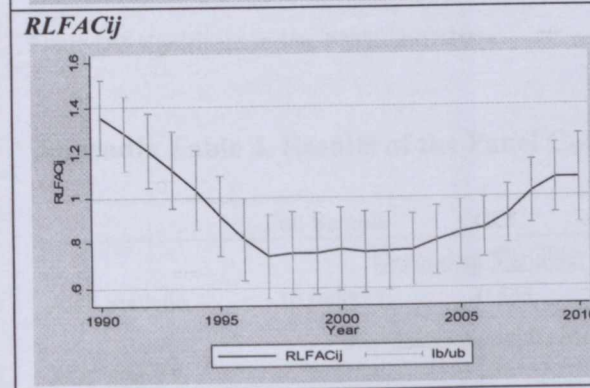
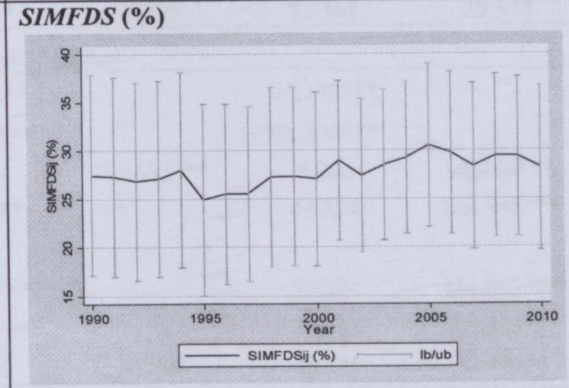
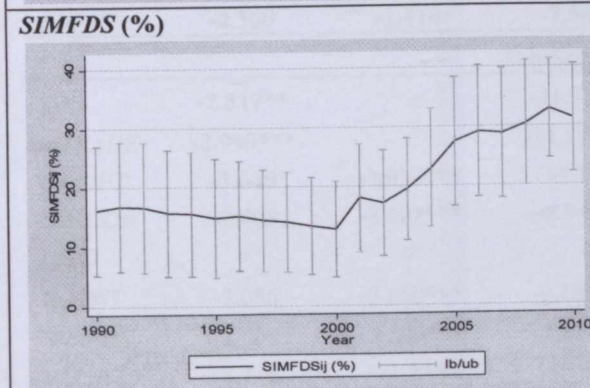
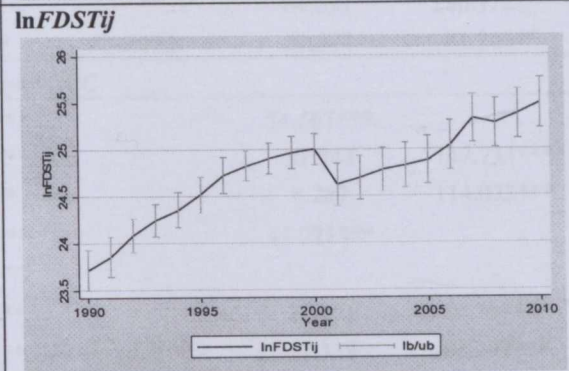
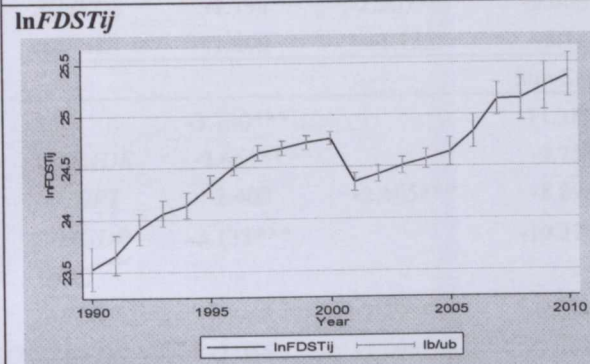
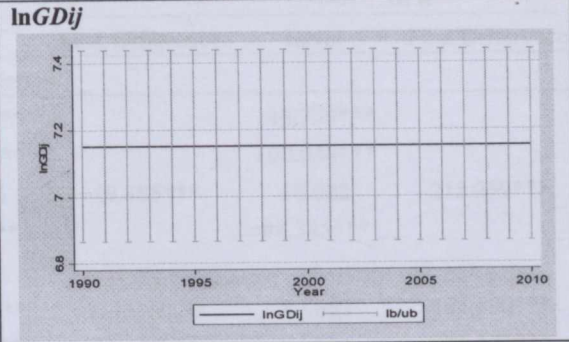
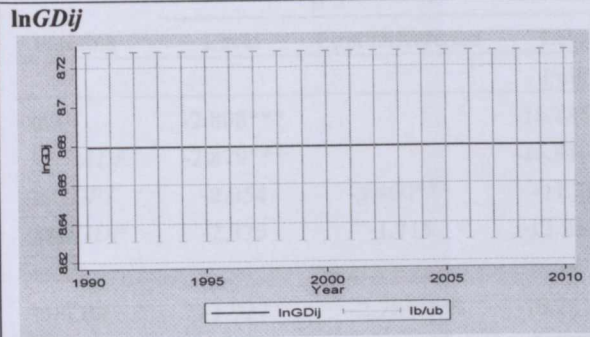
Malaysia-GCC

Malaysia-ASEAN



Malaysia-GCC

Malaysia-ASEAN



**Appendix Table 3. Results of Panel Unit Root Tests**

Variable	IPS		LLC		MW	
	Level	First Difference	Level	First Difference	Level	First Difference
Full Sample						
<i>lnX</i>	-2.808***		-16.186***		149.739***	
<i>lnTRADE</i>	-2.879***		-16.816***		100.048***	
<i>lnGDPT</i>	-2.054	-3.400***	-11.766	-19.485***	16.682	212.259***
<i>SIMGDP</i>	-2.375	-1.715	-13.251**		88.345***	
<i>lnGD</i>	-	-	-	-	-	-
<i>lnFDST</i>	-1.927	-2.784***	-10.281***		47.683	168.590***
<i>SIMFDS</i>	-1.794	-2.907***	-9.602***		64.011	286.172***
<i>RLFAC</i>	-1.409	-1.155	-6.181*	-5.133	51.094	81.260**
Sub-Sample: GCC						
<i>lnX</i>	-3.130***		-11.388***		54.567***	
<i>lnTRADE</i>	-2.664**		-9.753**		31.744	147.734***
<i>lnGDPT</i>	-2.402	-2.465***	-8.895**		8.287	114.073***
<i>SIMGDP</i>	-3.133***		-10.376***		43.771***	
<i>lnGD</i>	-	-	-	-	-	-
<i>lnFDST</i>	-1.718	-2.299***	-6.233***		17.151	56.767***
<i>SIMFDS</i>	-2.066	-2.998***	-7.042***		11.338	83.297***
<i>RLFAC</i>	-2.300	-1.418	-7.568*	-5.729	22.384	20.542
Sub-Sample: ASEAN						
<i>lnX</i>	-2.517**		-11.518**		95.172***	
<i>lnTRADE</i>	-2.990***		-14.178***		68.304***	
<i>lnGDPT</i>	-1.619	-3.039***	-7.174	-13.633***	8.396	98.456***
<i>SIMGDP</i>	-2.405	-3.402***	-8.947**		44.574	186.845***
<i>lnGD</i>	-	-	-	-	-	-
<i>lnFDST</i>	-2.056	-3.050***	-9.184***		32.284	111.823***
<i>SIMFDS</i>	-2.309	-3.399***	-9.239***		31.778	202.875***
<i>RLFAC</i>	-1.148	-1.234	-5.469	-6.287	28.710	50.787**

Note: \*\*\* significant at 1%, \*\*5% and \*10%.

**Appendix Table 4. Results of the Panel Cointegration Test**

	Full Sample	GCC	ASEAN
Dependent Variable: <i>lnX</i>			
ADF Statistic	-10.088***	-0.845	-8.121***
Dependent Variable: <i>lnTRADE</i>			
ADF Statistic	-6.543***	-3.233***	-5.879***

Note: \*\*\* significant at 1%, \*\*5% and \*10%.

**Appendix Table 5. Major Trade and Investment Policies in GCC**

Country	Policy Climate
Bahrain	<ul style="list-style-type: none"> <li>- Investment is encouraged in sectors that are export-oriented and do not compete with established local corporates.</li> <li>- 100 per cent foreign ownership allowed in a range of sectors: New industrial and service companies (that establish representative offices or branches in Bahrain); Regional distribution services (as long as these do not exclusively engage in domestic commercial sales).</li> <li>- Strong intellectual property rights (IPR).</li> <li>- A free transit zone at Mina Sulman, its major port, and an industrial free zone at North Sitra Industrial Estate that offer foreign investors the same terms and tax incentives as local companies.</li> </ul>
Kuwait	<ul style="list-style-type: none"> <li>- Non-Kuwaitis can own up to 100% of local companies in 11 specified sectors.</li> <li>- Foreign investors can now enjoy tax holidays of up to 10 years and have the freedom to import expatriate labour (subject to quotas imposed by the Kuwaitisation programme - foreign investors will be able to obtain the benefits of the new regime only if they employ a percentage of Kuwaiti nationals in the new venture).</li> <li>- A 15% protective tariff prevails where imports are in competition with domestically made goods in 'infant industries.' There are a number of areas where authorities can impose discretionary tariffs, such as tobacco, where a 70% tariff applies.</li> <li>- Weak IPR protection and other non-tariff barriers (NTBs) in the form of testing and inspection.</li> <li>- One Free Trade Zone (FTZ) at Shuwaikh, and planning another FTZ at Bubiyan Island.</li> </ul>
Oman	<ul style="list-style-type: none"> <li>- Automatic approval is granted to major projects with up to 70% foreign ownership, while 100% foreign ownership of investment projects is allowed so long as this is approved by the Ministry of Commerce &amp; Industry.</li> <li>- Industrial incentives include 5-year tax holidays, renewable by another 5 years; and exemption from customs duties on equipment and raw materials during the first 10 years of a project.</li> <li>- Some luxury items have a 20% duty. There is a 100% duty levied on alcohol, tobacco, limes and pork products.</li> <li>- A FTZ exists at a border crossing point with Yemen.</li> </ul>
Saudi Arabia	<ul style="list-style-type: none"> <li>- 100% ownership and also equalised treatment with national companies through investment incentives.</li> <li>- A negative list bars foreign investment in three manufacturing categories - oil and gas exploration and production.</li> <li>- Only Saudis are allowed to participate in trading activities or act as commercial agents.</li> <li>- Tariffs of 12-20% imposed on a list of more than 800 'protected commodities' and a number of Saudi 'infant industries' enjoy tariff protection, including furniture, cooking salt, mineral water and plastic pipes. Cigarettes, wheat, flour, dates and long-life milk imports have a 100% tariff.</li> <li>- No FTZs.</li> </ul>

Country	Policy Climate
Qatar	<ul style="list-style-type: none"> <li>- Foreign ownership capped at 49%, with the Qatari partner(s) holding at least 51%.</li> <li>- A Qatari company can be 100% foreign-owned if it operates in the agriculture and industry sectors, especially in areas that require technical transfer, research &amp; development or the upskilling of the local labour force.</li> <li>- Alcohol and tobacco products are subject to a 100% tariff while certain steel items are subject to a 20% duty. In addition, import licensing applies to all products and only Qataris are able to obtain import licences – confirming the continued existence of agency agreements that allow the agents to have exclusive distribution rights for certain products.</li> <li>- Inadequate IPR.</li> <li>- NTBs such as tough licensing requirements and quota restrictions.</li> <li>- A FTZ at Doha International Airport, where the usual range of tax exemptions apply.</li> </ul>
UAE	<ul style="list-style-type: none"> <li>- Foreign shareholders may only hold up to a 49% equity interest in limited liability companies, with a minimum of 51% national ownership, although profits may be divided differently. Full foreign ownership is only allowed within FTZs.</li> <li>- The average tariff rate is just 4%, while FTZs offer numerous incentives, such as exemptions from taxes and duties. The customs duty for most items is 5% calculated on CIF value. Imports of liquor are subject to a 70% customs duty while imports of tobacco products face a 100% duty on their CIF value. But a number of essential items – staple foodstuffs and pharmaceuticals – duty-free status.</li> <li>- Full corporate tax and customs duty exemption on imported raw materials and equipment. No levy on exports and imports.</li> <li>- NTBs in the form of restrictive agency or distribution requirements.</li> <li>- Regional leader in the protection of IPRs - grant patents to pharmaceutical and agricultural chemicals products, forced to put a halt to import quotas on textiles based on the WTO TRIPs.</li> <li>- 12 FTZs in operation, developed along specialised lines – covering ICT, media, finance, gold and jewellery and health care. Jebel Ali Free Zone, in Dubai, is one of the world's largest FTZs.</li> </ul>

Source: Compiled from the various country business forecast reports, Q4 2011, Business Monitor International Ltd.



## Notes

<sup>a</sup>Corresponding author.

<sup>\*</sup>Paper prepared for the *International Conference on International Trade and Investment: Globalisation at Crossroads - Implications for the Developing World*, Le Meridien Hotel, Mauritius, 20-21 December 2011.

<sup>1</sup> The GCC is a group of six high-income economies of the Persian Gulf, established on 25 May 1981. These economies share a common production structure based on a state-owned hydrocarbon sector and a nonoil sector dependent on imports (World Bank, 2010). Beginning 2008, the GCC operated a common market, which aims to have a unified tariff structure (with a 5 per cent common external tariff imposed on 1,500 imported goods coming from outside the six-member bloc following the GCC Customs Union pact in 2003) and to remove intra-bloc trade barriers.

<sup>2</sup> At present, Malaysia does not have FTA with any of the GCC countries, but has instead signed the Investment Guarantee Agreements (IGAs) with Kuwait (1987), UAE (1991), Bahrain (1999) and Saudi Arabia (2000).

<sup>3</sup> However, it is worth mentioning here that the degree of Malaysia's export market concentration for merchandise goods is low relative to her ASEAN counterpart, declining from 0.179 to 0.165 between 1995 and 2010. Likewise the import concentration index for merchandise goods declined from 0.178 to 0.170 for the same period (UNCTADstat online database).

<sup>4</sup> In fact, Malaysia is not an important trading partner to the GCC countries (see also Mehanna, 2003). For example, the major export partners of UAE are Japan, South Korea and India whilst her corresponding import partners are China, India and the US.

<sup>5</sup> The diversification index of Malaysia in 2010 was 0.470, whilst the values of the index for all individual GCC economies were above 0.5. In 2010, the diversification indices for Bahrain, Kuwait, Oman, Saudi Arabia, Qatar and UAE were 0.701, 0.802, 0.673, 0.793, 0.766 and 0.529 respectively (UNCTADstat online database).

<sup>6</sup> The GL indices at the 5-digit SITC level are aggregated across the agricultural (SITC 0-4) and manufacturing (SITC 5-8) sectors, taking into account their different weights. The weighted average GL index is given as:  $AGL_i = [ \sum(X_i + M_i) - \sum|X_i - M_i| ] / \sum(X_i + M_i)$  where  $i$  = particular industry at the 5-digit level.

<sup>7</sup> The case whereby a country's exports and imports share a single industry classification dominates.

<sup>8</sup> Various studies have documented the case of vertical networks that prevail in intra-ASEAN trade.

<sup>9</sup> Exports of wood products from Malaysia to the Middle East are expected to gain momentum with the onset of new housing projects in the latter. More recently, demand from the Middle East for Malaysian-made garments has seen a substantial rise as a result of the rising affluence and household income of these emerging economies (MOF, 2011).

<sup>10</sup> This specification is considered appropriate given that the GCC partners differ considerably from Malaysia in terms of factor endowments (capital-labour ratios).

<sup>11</sup> The trade model identification (to explain the trade pattern of bilateral trade flows) is particularly important when a gravity model is applied to a single-country, instead to pairs of countries (Chan-Hyun, 2005).

<sup>12</sup> It should be borne in mind that differences in factor endowments are also crucial in determining vertical IIT, but, to a lesser degree (Chan-Hyun, 2005).

<sup>13</sup> Using the data on GFCF, capital stock ( $K$ ) is estimated as follows (Miller and Upadhyay, 2000):

$K_0 = GFCF_0 / [\lambda g_d + (1 - \lambda)g_w + \delta]$  where the initial or base year is 1970;  $g_d$  is the average growth rate of the GDP series for the country in question for the period 1990-2010;  $g_w$  is the estimated world growth rate at 2.95 per cent for the period 1990-2010;  $\lambda = 0.25$ , is a measure of mean reversion in growth rates and  $\delta = 0.05$ , is the assumed rate of depreciation. The estimated capital stock is  $K_t = GFCF_t + (1 - \delta)K_{t-1}$

<sup>14</sup> This level of aggregation would balance the issue of disaggregated versus aggregated analysis, in addition to reflecting the agriculture and industry based products. This level of aggregation also reduces the problem of a standard sample selection bias, as many more trade relationships on a product-specific level at HS2 are nonexistent. Instead at this level of aggregation, there are no observations with zero trade flows.

<sup>15</sup> The results are not reported in the paper but are available upon request from the authors.

<sup>16</sup> It is worth noting here that Malaysia is already facing strong competition from other major Asian economies that export similar products to the Gulf, namely Singapore, Indonesia, China and India, particularly so when the Malaysian products are considered as "middle-end" products. This problem is however not specific to Malaysia as the ASEAN region has also to contend with the stiff competition from China and India to gain market access in GCC. The ASEAN 6 (pioneer ASEAN countries plus Vietnam), currently account for 35 per cent of Asian trade with the GCC, falling from 77 per cent in 1981. Instead, China and India's share has risen to almost 58 per cent of Asian trade with the GCC from a mere 10 per cent in 1981 (EIU, 2011).

<sup>17</sup> Approval procedure and testing certification in the GCC is also cited to be a major obstacle for Malaysian traders based on a qualitative survey conducted Abu Hussin (2010).

<sup>18</sup> Malaysia (apart from Singapore, South Korea and India) will remain important as providers of technology know-how for the GCC States (EIU, 2011). Unfortunately, the influence of R&D on Malaysia-GCC exports was not examined in the empirical estimation of this paper given the lack of data on R&D in the GCC economies.

<sup>19</sup> Saudi Arabia and the UAE are also the major FDI destinations for Malaysia. There is however no consistent time-series data available on Malaysia's FDI outflow to the GCC.

<sup>20</sup> In fact, China is expected to be the GCC's most important economic partner by 2020 (EIU, 2011).

Armal, A.E. and Mohd Farid, S. (2007), 'Economic Integration: Challenge and Opportunity for the Malaysian Economy', *Journal of International Trade Research*, Vol. 2, No.3, 43-55.

Balagati, B.H., Egger, P. and Pfaffermayr, M. (2003), 'A Generalized Gravity for Bilateral Trade Flow Models', *Economics Letters*, Vol. 81, No. 3, 371-377.

Bank Negara Malaysia (BNM) (2011), *Bank Negara Malaysia Annual Report 2010*. Bank Negara Malaysia, Kuala Lumpur.

Baxter, M. and Kouparnikas, M.A. (2006), 'What Determines Bilateral Trade Flows?' NBER Working Paper No. 12189, National Bureau of Economic Research, Cambridge Massachusetts.

Bergstrand, J.H. (1985), 'The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence', *Review of Economics and Statistics*, Vol. 67, No. 4, 474-81.

Bergstrand, J.H. (1990), 'The Gravity Equations in Trade: An Empirical Investigation and the Determinants of Bilateral International Trade', *Economics Letters*, Vol. 34, No. 3, 1216-1229.

Chiu-Hyun S. (2005), 'Does the Gravity Model Explain South Korea's Trade Flows?' *Applied Economic Review*, Vol. 9, No. 3, 417-430.

Changert, W., Yungui, W. and Jianping, Z. (2004), 'Determinants of Bilateral Trade Flows in OECD Countries: Evidence from Gravity Model Using Panel Data', *World Economic*, Vol. 32, No. 7, 594-615.

Casella, A. (2007), 'Bilateral Trade Volumes, the Gravity Equation and Factor Proportions', *Journal of International Trade and Economic Development*, Vol. 18, No. 1, 17-39.

Dalgaard, P. (2001), 'Relative Factor Abundance and Trade', *Journal of Political Economy*, Vol. 109, No. 3, 589-610.

Hanousek, T., S.J. Lu Cook and E. Yau (2008), 'China Trade: Putting Gravity's Hand to Work', *Journal of Asian Economics*, Vol. 19, No. 3-4, 415-430.

Paper, P. (2004), 'A Note on the Gravity Model: Some Empirical Evidence', *Journal of International Economics*, Vol. 68, No. 1, 1-11.

---

## REFERENCES

- Abu-Hussin, M.F. (2010), *Exploring International Trade between Malaysia and GCC Countries: Empirical Analysis on Trends, Developments and Challenges*, unpub. Doctoral thesis, Durham University, United Kingdom.
- Asmak, A.R. and Mohd Fauzi, A.H. (2009), 'GCC Economic Integration Challenge and Opportunity for the Malaysian Economy,' *Journal of International Social Research*, Vol.2, No.9, 43-55.
- Baltagi, B.H., Egger, P. and Pfaffermayr, M. (2003), 'A Generalized Design for Bilateral Trade Flow Models,' *Economics Letters*, Vol.80, No.3, 391-397.
- Bank Negara Malaysia (BNM) (2010), *Bank Negara Malaysia Annual Report 2009*. Bank Negara Malaysia, Kuala Lumpur.
- Baxter, M. and Kouparitsas, M.A. (2006), 'What Determines Bilateral Trade Flows?' NBER Working Paper No.12188, National Bureau of Economic Research, Cambridge Massachusetts.
- Bergstrand, J.H. (1985), 'The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence,' *Review of Economics and Statistics*, Vol.67, No.3, 474-81.
- Bergstrand, J.H. (1990), 'The Heckscher-Ohlin-Samuelson Model, the Linder Hypothesis and the Determinants of Bilateral Intra-Industry Trade,' *Economic Journal*, Vol.100, No.403, 1216-1229.
- Chan-Hyun S. (2005), 'Does the Gravity Model Explain South Korea's Trade Flows?' *Japanese Economic Review*, Vol.56, No.4, 417-430.
- Chengang, W., Yimgqi, W. and Xiaming, L. (2010), 'Determinants of Bilateral Trade Flows in OECD Countries: Evidence from Gravity Panel Data Models,' *World Economy*, Vol.33, No.7, 894-915.
- Cieslik, A. (2009), 'Bilateral Trade Volumes, the Gravity Equation and Factor Proportions,' *Journal of International Trade and Economic Development*, Vol.18, No.1, 37-59.
- Debaere, P. (2003), 'Relative Factor Abundance and Trade,' *Journal of Political Economy*, Vol.11, No.3, 589-610.
- Edmonds, C., S.J. La Croix and L. Yao (2008), 'China Trade: Busting Gravity's Bounds,' *Journal of Asian Economies*, Vol.19, Nos.5-6, 455-466.
- Egger, P. (2000), 'A Note on the Proper Econometric Specification of the Gravity Equation,' *Economics Letters*, Vol.66, No.1, 25-31.

---

EIU (2011), *GCC Trade and Investment Flows: The Emerging-Market Surge*, The Economist Intelligence Unit Ltd., Geneva.

Frankel, J., Stein, E. and Shang-Jin W. (1995), 'Trading Blocs and the Americas: The Natural, the Unnatural and the Supernatural,' *Journal of Development Economics*, Vol.47, No.1, 61-95.

Ghosh, S. and Yamarik, S. (2004), 'Are Regional Trading Arrangements Trade Creating? An Application of Extreme Bounds Analysis,' *Journal of International Economics*, Vol.63, No.2, 369-395.

Grubel, H.G. and Lloyd, P.J. (1975), *Intra-Industry Trade: The Theory and Measurement of International Trade in Differentiated Products*, Wiley, New York.

Hausman, J.A. and Taylor, W.E. (1981), 'Panel Data and Unobservable Individual Effects,' *Econometrica*, Vol.49, No.6, 1377-1398.

Im, K. S., Pesaran, M. H. and Shin, Y. (2003), 'Testing for Unit Roots in Heterogeneous Panels,' *Journal of Econometrics*, Vol.115, No.1, 53-74.

Insel, A. and Tekce, M. (2010), 'Econometric Analysis of the Bilateral Trade Flows in the Gulf Cooperation Council countries,' MPRA Paper No. 22130, Munich Personal RePEc Archive.

Jongwanich, J. (2010), 'Determinants of Export Performance in East and Southeast Asia,' *World Economy*, Vol.33, No.1, 20-41.

Kao, C. (1999), 'Spurious Regression and Residual-Based Tests for Cointegration in Panel Data,' *Journal of Econometrics*, Vol.90, No.1, 1-44.

Levin, A., Lin C-F., and Chu, C-S. J. (2002), 'Unit Root Tests in Panel Data: Asymptotic and Finite-Sample Properties,' *Journal of Econometrics*, Vol.108, No.1, 1-24.

Maddala, G.S. and Wu, S. (1999), 'A Comparative Study of Unit Root Test with Panel Data and a New Simple Approach,' *Oxford Bulletin of Economics and Statistics*, Vol.61, No.1, 631-652.

Mehanna, R-A. (2003), 'Do Politics and Culture Affect Middle East Trade? Evidence from the Gravity Model,' *Review of Middle East Economics and Finance*, Vol.1, No.2, 155-170.

Miller, S.M. and Upadhay, M.P. (2000), 'The Effects of Openness, Trade Orientation and Human Capital on Total Factor Productivity,' *Journal of Development Economics*, Vol.63, No.2, 399-423.

Ministry of Finance (MOF) (2011), *Economic Report 2011/2012*, Percetakan Nasional Malaysia Berhad, Kuala Lumpur.

---

National Economic Advisory Council (NEAC) (2010), *New Economic Model for Malaysia*. Percetakan Nasional Malaysia Berhad, Putrajaya.

Nechi, S. (2010), 'Assessing Economic and Financial Cooperation and Integration Among the GCC Countries,' *Journal of Business and Policy Research*, Vol.5, No.1, 158-178.

Paas, T., Tafenau, E. and Scannell, N.J. (2008), 'Gravity Equation Analysis in the Context of International Trade: Model Specification Implications in the Case of the European Union,' *Eastern European Economics*, Vol.46, No.5, 92-113.

Poyhonen, P. (1963), 'A Tentative Model for the Volume of Trade Between Countries,' *Weltwirtschaftliches Archiv*, Vol.90, No.1, 93-99.

Rojid, S. (2006), 'COMESA Trade Potential: A Gravity Approach,' *Applied Economics Letters*, Vol.13, No.14, 947-951.

Tinbergen, J. (1962), *Shaping the World Economy: Suggestions for an International Economic Policy*, Twentieth Century Fund, New York.

World Bank (2010), *Economic Integration in the GCC*, World Bank, Washington DC.