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Capturing Arab gulf market: An analysis of Malaysian exports competitiveness in the market

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In recent years, the Arab Gulf Countries in particular Gulf Cooperation Council (GCC) has been an attractive market destination for the Asian businesses. China, India, Japan and other Asian countries have huge interest in developing close relationships with the six nations. As an emerging economy in the West Eastern Asia, the GCC offer huge interest in doing businesses and become a gate for the Middle Eastern markets. Malaysia, besides the religious affinity that it shares with the Arab Gulf Countries, is also highly interested in expanding its trade relations with the Arab Gulf Economies. Therefore, in this article, an investigation on the countries' trade compositions and followed by a study on Exports competitiveness were conducted. Finding from the analysis of exports competitiveness of Malaysian products will then be compared to the major Asian exporters in the GCC market. By doing this, it will identify Malaysia's niche product that could potentially expanded in this market. This will shed a light on the Malaysia's willingness to enhance market penetration to this economic bloc.

Key words: Malaysia, Gulf Cooperation Council (GCC) countries, international trade, economic relations.

INTRODUCTION

Economic relationship between Malaysia and Arab Gulf economies has been growing in recent years. Arab Gulf countries appear to be a new destination for Malaysia's trade and investment. Malaysia recently has implemented a new approach to its international trade strategies by shifting from dependency on traditional exports markets (US, Japan and EU) to Asian and Middle East orientation (BNM, 2010, NEAC, 2010). Middle East markets especially Arab Gulf Countries are seen as potential emerging market for the Malaysian economy to be tap.

Since the Arab Gulf countries are members of Organization of Islamic Cooperation (OIC), it is believed that this new strategy in enhancing economic activities will strengthen the ties between the Muslim worlds. For Malaysia, Arab Gulf has been a "gate" for capturing the Middle East market. In fact, Malaysia has been "persuading" a closer relationship with the Arab Gulf through a proposed Free Trade Agreement (FTA) (Bernama, 2007). The undergoing process of economic liberalisation in the GCC countries may serve as a milestone for Malaysia to capture this market. Malaysia is a country with a moderate population yet it offers huge business opportunities. Series of well-planned development and continues economic reform have resulted a consistent economic growth. In 2010, Malaysian economy recorded 7.2% growth and in average, between 2005 and 2010, the economic growth was approximately 4.5%. Huge potential in Islamic Banking and Finance sectors that both Malaysia and United Arab Emirates (UAE) claim to be world Islamic Financial-Hub may be an important factor that can strengthen economic cooperation between Malaysia and the Arab Gulf Region.

As far as GCC is concerned, it is a regional economic bloc that consists of 6 nations with a combined population

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Abbreviations: **GCC**, Gulf Cooperation Council; **OIC**, organization of Islamic cooperation; **FTA**, free trade agreement; **UAE**, united Arab emirates; **WTO**, world trade organisation; **GATT**, general agreement on tariffs and trade; **EU**, European union; **RCA**, revealed comparative advantage; **CEP**, comparative export performance; **TO**, trade overlap; **ES**, export similarity; **ASEAN**, association of Southeast Asian nations; **SITC**, standard international trade classification; **CMS**, constant market share; **WITS**, world integrated trade solution.

of 37.45 million in 2008. Their population growth as recorded by the World Bank is 3% per annum and UAE has recorded a higher percentage of population growth with an average of 6% since 2000. Between 2006 and 2008, GCC population gained more than 1.7 million which was considered a large increase in the region which is mainly consists of expatriate work forces (Kawach, 2009). In terms of resources, GCC countries are rather unique. They are enriched with petroleum and gas and hold 53% of proven oil reserves worldwide, produce 24% of world oil, and account for 40% of oil exports. Economic liberalisation in the Arab Gulf countries has gradually taken place; this can be seen from their participation to World Trade Organisation (WTO). Saudi Arabia was the last country to become a WTO member in 2005, whereas other GCC countries became members soon after the establishment of the WTO in 1995 (replacing General Agreement on Tariffs and Trade) (GATT). Bahrain and Kuwait were the earliest countries joining the organisation in 1995, while Qatar and the UAE joined in 1996 and Oman in 2000. The GCC is seen as one of the fastest growing regional economic bloc in the world. It has been successful in implementing free trade agreements between its members and creating a customs union which has been notoriously difficult to realise in other economic bloc. Apart the custom union, the GCC countries were expecting to have a single currency which was scheduled to be implemented in 2010. However, due to internal issues among them, this idea of monetary union has been suspended. The successful of the GCC countries economic integration has attracted other countries to ally themselves with Gulf economies in particular over trade and economic activities. European Union (EU), which has had close economic relations with the GCC since 1988, for example has proposed EU-GCC FTA but the implementation of the proposal was delayed due to technical issues between the two economic blocs. To date, Singapore is the only country that managed to conclude FTA with the GCC countries. Malaysia, a Singapore's neighbour, being no exception and has been proposing the FTA with the GCC since 2007. It is noted that, the development of trade relations between Malaysia and the Middle East markets especially Gulf Cooperation Council countries in the current situation is relatively small compared to their 'traditional' trading partners. To date, trade relations between Malaysia and West Asian markets, especially the (GCC countries, are currently relatively limited, which was around 3 to 4% of Malaysia's total trade in 2008, in comparison to their 'traditional' trading partners mentioned above. Nevertheless, Malaysia's exports growth to the West Asian market in 2008 was 38% which considerably high (BNM, 2009). Despite Malaysia's aim to strengthening its trade relations with the Arab-Muslim countries, it is also can be seen that, other countries particularly from Asia are hugely interested to expand their relations with the Arab GCC, Singapore for example, managed to close a FTA

with the economic bloc. Therefore, in this articles, it is argued that, Malaysia could lose their advantage in exporting major products to the GCC countries since, other major Asian economies are also interested and expanding their economic relations with the Arab Gulf Countries. In this article, an analysis of export competitiveness which formulated by Balassa are used in order to analyse this phenomena. Further details on the methodology used are discussed in the next section.

Revealed comparative advantage index: Selective survey of literature

There have been many studies that investigated exports competitiveness of a country with respect to the global trade or with particular trading partners by employing the Revealed Comparative Advantage (RCA) index. The RCA index has been intensively employed and revised by many researchers in assessing countries or products competitiveness in the world market. Issues related to the RCA index, such as its appropriateness of interpretations, techniques and methodological issues have been a major concern to the economists (Yeats, 1985; Vollrath, 1991). Nevertheless, in this study, it is aimed to only focus on RCA indices applied to this research. Therefore, Balassa's index was used. Balassa (1965) has done significant work to reveal a country's comparative advantage and introduced his famous index, which was known as Balassa's index in 1965. It is also widely known as RCA Index. Although, there are issues concerning this index, it stands as the most widely used index in revealing country's comparative advantage (Serin and Civan, 2008). Previous study on the RCA index can be divided into two categories: one is a study on a country's competitiveness in comparing with global trade and secondly for analysing a country's specialisation with respect to particular country or region (bilateral comparison). With regard to the research on a country's competitiveness in the global level, here are several previous studies on that matter. Basically, Balassa (1977) himself conducted a study on an analysis of the pattern of comparative advantage of industrial countries for the period 1953 to 1971.

It is found that the export diversification tends to increase with the degree of technological development. Kalbasi (1995) analysed Iran comparative advantage with respect to the world trade and found that Iran's exports tend to lie in natural-resource-based goods often agricultural products, and labour-intensive products. Meanwhile, Yeats (1997) studies the possible distortions in trade patterns on account of discriminatory trade barriers that are characteristic of the RTA. He uses the revealed comparative advantage index to identify any apparent of inefficiency in trade patterns for the Mercosur group of countries. Richardson and Zhang (1999) used the Balassa index of RCA for U.S. They analyse the

patterns of variation across time, sectors and regions. They found that the patterns differ across different parts of the world, over time and also for different levels of aggregation of the export data. By using Balassa's RCA index, Yue (2001) demonstrated the fact that China has changed its export pattern to correspond with its comparative advantage and that there are distinct differences in export patterns between the coastal regions and the interiors in China. Batra and Khan (2005) identified China and India comparative advantage pattern by using the Balassa (1965) index for export data. Harmonized system of classification of trade data were used in calculating the RCA index. They conclude that, the pattern of comparative advantage varies at different levels of commodity disaggregation. Nevertheless, it is found that, India's comparative advantage mainly come from cotton industry while china in textiles, sets, worn clothing. As mentioned, they are several studies in analysing a country's specialisation in comparison with a particular country or economic region. Among them include Utkulu and Seymen (2004). They investigated Turkish's export competitiveness with respect to the EU-25 by using Balassa's index of RCA and their extended version.

They found that Turkey has revealed comparative advantages for seven of the 63 product groups: clothing and clothing accessories; vegetables and fruit, sugar, sugar preparations, honey; tobacco; oil seeds and oleaginous fruits; rubber manufactures; textile yarn, fabrics and related products. Yilmaz (2003) examined the Turkish trade competitiveness and the structure of specialisation in trade in comparison with the five EU candidate countries (Bulgaria, the Czech Republic, Hungary, Romania, Poland) and the EU/15. By employing four different measures of competitiveness, namely RCA, comparative export performance (CEP), trade overlap (TO), and export similarity (ES) indices, the empirical findings suggest that Turkey has a strong comparative advantage in raw material-intensive. By using similar index, Akgungor et al. (2002) investigated competitiveness of the Turkish fruit and vegetable processing industry in European market. The author investigated the competitiveness of Turkey's tomato, grape and citrus fruit processing industry product exports in the EU market. The finding reveals that Greece, Spain, and Portugal are Turkey's competitors. They also found that Turkey's competitive power is higher than Spain and Portugal in processed grape exports, and is higher than Greece and Portugal in citrus fruit exports. Based on Balassa's RCA measure, Khatibi (2008) analysed Kazakhstan's exports competitiveness in the EU27. He concluded that although shows a revealed comparative advantage in a number of sectors, its competitiveness have a falling trend in almost all sectors. Meanwhile, Saboniene (2009) examined Lithuanian export competitiveness in 2000 to 2007 by using modified indices of revealed comparative advantage. The analysis of Lithuanian export competitiveness is also compared with

other small Baltic states (Latvia and Estonia). Results of RCA study reveal competitive advantage in several commodities.

Surveying literature on revealed comparative advantage index: Case study on Malaysia

It is agreed that RCA index has some benefits in analysing product advantages for a country as it is strongly believed that the RCA index considers the fundamental advantage of a particular export commodity and is independent of size and the overall trade surplus/deficit situation (Batra and Khan, 2005). On the other hand, this index is widely accepted for analysing a country's advantage in exporting its goods to its counterpart. A number of studies have been conducted by using this index in assessing such opportunities. The following discussion is attributed to previous studies on RCA which have focused on studying Malaysia's comparative advantage. By using both version of the Balassa index on comparative advantage and an export competitiveness index, Mahmood (1999) determined the competitiveness of Malaysian exports with respect to the global market as well as Association of Southeast Asian Nations (ASEAN) economies. He suggested that the manufacturing sector has significantly changed Malaysian export structures to compete with the world's rising demand in manufacturing sector. He noted that overall electronic and electrical manufacturers remained the most important contributors to the manufacturing sector. Abidin and Wai Heng (2008) examined the global competitiveness of the Malaysian economy by focusing on five non-resource-based manufactured goods and one selected resource-based manufacturer for the 2001 to 2005 periods. By using Standard International Trade Classification (SITC) in 3 digit level, the study employed the Balassa index of comparative advantage to estimate those particular product groups including wood and wood products, and manufacturers of machinery (except electrical), electrical and electronics goods, metals, textile, clothing, and footwear, and transport equipment. Findings from this study suggest that Malaysia still holds comparative advantage for electrical and electronic goods and machinery (its largest export item).

It is also suggested that market access for clothing and wearing apparel, selected manufacturers of machinery and metals, wood and wood products must be emphasised in any negotiation on multilateral or bilateral trade liberalisation. This is due to these products' competitiveness in the world market. In terms of Malaysia's bilateral RCA with other economies Yeoh and Ooi (2007) analysed the competitiveness of Malaysian exports commodities with respect to China's global exports, which, purposely, identified niche products of Malaysian exports to China. By using HS 2-digit data classification, the analysis is divided into two categories, namely primary

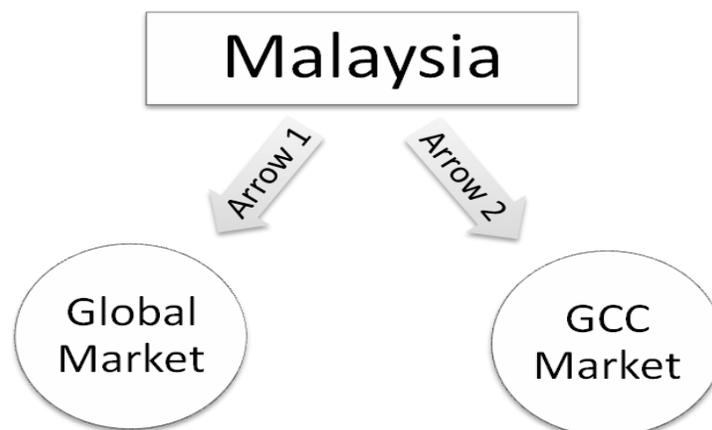


Figure 1. Calculating revealed comparative advantage.

and secondary sectors. In terms of the primary sector, results from the analysis suggest that Malaysia holds a comparative advantage in raw materials with respect to the Chinese market. Products identified in this category include tin and tin products, wood and wood products, charcoal, rubber and rubber products. In the secondary sector, there can be opportunities in the Chinese market for Malaysian production of animal fats, vegetable fats and oils and cleavage products. A recent work by Amin and Hamid (2009) analysed five major Muslim countries' comparative advantage by employing RCA measures. These five countries include Malaysia, the UAE, Jordan, Turkey and Pakistan. They used HS 2002 classification with two-digit data level and findings from the index for each individual country were then compared with the main imports of each corresponding country. The results suggest that, there is a potential expansion of between 10 and 25% of trade between these individual Muslim countries. Literature also exist which measures Malaysia's competitiveness at the sectoral/industrial level. Muhammad and Yaacob (2008), employing Constant Market Share (CMS) and RCA frameworks, compared the competitiveness of selected Malaysian electric and electronics products vis-à-vis the USA, Singapore, Japan and Hong Kong markets. Results suggested that Malaysian electric and electronics exports only performed well in the US market.

METHODOLOGY

Measuring revealed comparative advantage (RCA)

Balassa (1965) presented a comprehensive and advanced measure of the RCA index, which is widely accepted for measuring RCA in the literature. Balassa (1965) proposed two measures; one based on export-import ratios, the other on relative exports shares. The index can be written as:

$$RCA_j = (X_{ij} / X_{it}) / (X_{nj} / X_{nt}) = (X_{ij} / X_{nj}) / (X_{it} / X_{nt}) \quad (1)$$

Where X represents exports, i is a country, j is a commodity (or industry), t is time, and n is a set of countries. Literally, RCA_j measures a country's exports of a commodity j (or industry j) and corresponding exports of a set of countries, for example, the GCC. The above index of RCA_j has a relatively simple interpretation. The critical level of the indicator is 1, means the product neither has advantage nor disadvantage. A comparative advantage is revealed, if RCA₂>1 (greater than 1). If it is less than 1, it reveals a comparative disadvantage or the country is said to have a comparative disadvantage in the particular commodity/industry. Given the above specification in Equation 1, this study endeavours to analyse the competitiveness of Malaysia's export in two different contexts (Figure 1). First, this study investigates Malaysia's products' competitiveness at the global level (arrow 1). Secondly, this research examines Malaysia's product competitiveness in the GCC market by using GCC total exports to identify Malaysia's comparative advantage in the market (arrow 2).

Source of data

In analysing the indices discussed above, this research used SITC data at the 3-digit level. Data from UNCOMTRADE were obtained and analysed purposely for this study. This is to ensure data consistency. The analysis is taken between 1998 and 2007 due to data availability.

Commodity composition of trade between Malaysia and GCC countries

Prior to analysing Malaysia's revealed comparative advantage with respect to the GCC countries, a brief discussion on Malaysia's exports composition to the GCC countries is necessary. Table 1 shows the major exports to the GCC countries in selected years. It reveals that, in 2007, jewellery products were the largest item that was exported to the GCC countries. It accounted for 22.8% of total exports to the GCC in 2007. It has replaced electrical and electronic products as the most important export commodity to the GCC. Whereas electrical and electronic products accounted for 25.8% of the total exports to the GCC in 1998, that decreased to a mere 22% in 2007. Nevertheless, in terms of value, both electrical and electronic and jewellery exports have been increasing dramatically and almost reached US\$ 1 billion in 2007. Although, palm oil was the second largest export product to the GCC in 1998, its percentage

Table 1. Malaysia exports to the GCC: Major products (US\$ million).

Product	Year							
	1998		2001		2004		2007	
	Value	Share (%)						
Food beverages and oils	74.42	6.8	63.19	4.5	131.33	5.7	256.03	5.9
Palm oil and its fraction	196.43	17.9	106.49	7.7	250.41	10.9	337.02	7.8
Crude material and fuel	36.98	3.4	57.54	4.1	42.82	1.9	127.73	2.9
Chemicals	27.58	2.5	39.45	2.8	79.32	3.4	153.21	3.5
Manufactured goods	100.54	9.1	210.15	15.1	241.99	10.5	661.28	15.2
Machinery	69.28	6.3	61.16	4.4	154.00	6.7	420.18	9.7
Electrical and electronic	332.63	30.2	423.16	30.4	616.51	26.8	953.11	22.0
Misc. Consumer products	29.89	2.7	36.55	2.6	66.71	2.9	158.71	3.7
Furniture	67.75	6.2	91.09	6.5	149.72	6.5	173.66	4.0
Jewellery	153.64	14.0	282.08	20.3	510.81	22.2	987.36	22.8

Source: UN COMTRADE obtained from world integrated trade solution (WITS). Explanation of products: "Food, beverages and oils": SITC 0 ("Food and live animals") + SITC 1 ("Beverages and tobacco") + SITC 4 ("Animal and vegetable oils, fats and waxes") – SITC 4222 (Palm oil and its fraction). "Palm oil and its fraction": SITC 4222 (Palm oil and its fraction), "Crude material and fuel": SITC 2 ("Crude materials, inedible, except fuels") + SITC 3 (Mineral fuels, lubricants, and related materials), "Chemicals": SITC 5 (Chemicals and related products, n. e. s.), "Manufactured goods": SITC 6 (Manufactured goods classified chiefly by material), "Machinery": SITC 7 (Machinery and transport equipment) – SITC 75 (Office machines and automatic data-processing machines) – SITC 76, (Telecommunications and sound-recording) – SITC 77 (Electrical machinery, apparatus and appliances), "Electric and electronic": SITC 75 (Office machines and automatic data-processing machines) + SITC 76 (Telecommunications and sound-recording) + SITC 77 (Electrical machinery, apparatus and appliances), "Misc consumer products": SITC 8 (Miscellaneous manufactured articles) – SITC 821 (Furniture and parts thereof) – SITC 897 (Jewellery), "Furniture": SITC 821 (Furniture and parts thereof), "Jewellery": SITC 897 (Jewellery).

share of Malaysia's exports to the GCC decreased in 2007 to only 7.8%. It has also been discovered that the share of manufactured exports to the GCC countries has almost doubled from 9.1% in 1998 to 15.2% in 2007. From this can be seen that the strongest exports are jewellery, electronic and electrical products, manufactured goods and machinery. In terms of exports to individual GCC countries, the trends vary.

This can be seen in Table 2. The following observations can be concluded: Firstly, the composition of Malaysia's exports to the GCC member countries is plain to see. Table 2 shows that the proportion of palm oil exports to individual GCC countries have dramatically changed. Apart from Kuwait and Oman, exports' share of palm oil products as Malaysia's total exports to the other the GCC countries have significantly decreased. The share of palm oil exports to Bahrain, for example, has decreased to merely 1% in 2007 from 48% in 1998 and exports of palm oil to Saudi decreased to 2.7% in 2007 from 30.5% in 1998. It is noted that, Malaysia is a major world producer of palm oil and palm oil is one of its top five exports to the world (UNCOMTRADE, 2010). Thus, it is interesting to note here that, the demand for this product in the GCC market exhibit positive trend (Table 1), where; the volume of exports has been increasing. Nevertheless, the share of palm oil exports to the GCC has decreased to 7.8% in 2007 due to the increase of proportion of other products that being exported to the GCC countries. Secondly, exports of manufactured goods to individual GCC countries are showing interesting development. Exports to individual GCC countries have increased between 5 and 9% except for Qatar, where share of export of Malaysia's total exports for manufactured goods to the country has decreased dramatically from 46.17% in 1998 to 17% in 2007. Thirdly, interestingly, exports of jewellery products which were the largest Malaysian exports to the GCC countries have been directed towards the United Arab Emirates. They accounted for 18.6% in 1998 and 33.5% of Malaysia's total exports to the UAE.

The preceding analysis focuses on Malaysia's composition of exports to the GCC countries. It also worth here to observe on

Malaysia's imports composition with the GCC countries. Table 3 shows Malaysia's imports from the GCC countries between 1998 and 2007 based on the leading product groups. It should be noted that the data on Malaysia's imports composition was obtained from the UN COMTRADE provided by World Integrated Trade Solution (WITS). Without any doubt, the largest Malaysian imports from the Arab Gulf countries are in the form of crude and non-crude oil. Considering the increasing oil prices, these product groups have constituted the major import from the GCC since 1998. They accounted 56.8% in 1998 and kept increasing by up to 81.5% of Malaysia's total imports from this market in 2007. Despite this trend, surprisingly, for the past ten years, Malaysia's imports of crude and non-crude oil petroleum were supplied from Singapore (Appendix 1). While, the Arab Gulf countries contribute around one-third of Malaysia's oil import, which was the second largest source of oil import for Malaysia. The second largest imports are chemical-based products (SITC 5). These products contribute 22.8% of Malaysia's imports from the GCC. Nevertheless, the percentage share decreased to 7.9% in 2007. Other products that have been identified as major imports into Malaysia from the GCC are aluminium and gold which constituted 3.5% and 2.0%, respectively in 2007. In terms of imports from the individual GCC countries, the trends show similarity. Table 4 allows the following observations to be made: One, as discussed earlier, petroleum products constitutes Malaysia's largest imports from the GCC.

In 2007, these products came from most of the GCC countries except for Bahrain and Qatar which are not major oil producers in the Gulf. It is also worth noting here that almost 100% of Malaysia's imports from Kuwait consist of crude and non-crude oil products. Secondly, Malaysia's main imports from Bahrain are aluminium products of which Malaysia has been importing more than 50% out of its total imports from the country. On the other hand, Malaysia's imports from Qatar largely constitute chemical products. Thirdly, since almost the entire GCC member countries are major world oil producers, Malaysia's imports from this economic group have not diversified much, except for those from the United Arab Emirates

Table 2. Composition of Malaysia's exports to individual GCC countries (% share).

Product	UAE (%)	BHR (%)	KWT (%)	OMN (%)	QAT (%)	SAU (%)
1998						
Food beverages and oils	6.3	6.5	7.4	10.4	1.9	7.8
Palm oil and its fraction	11.5	48.4	4.2	40.7	0.1	30.5
Crude material and fuel	3.1	7.4	4.0	0.3	3.6	3.8
Chemicals	2.5	0.7	1.1	0.9	0.4	3.4
Manufactured goods	5.3	16.5	14.4	9.1	46.1	11.6
Machinery	6.0	1.6	11.3	12.6	11.7	4.9
Electrical and electronic	39.6	7.0	21.5	13.6	27.1	16.5
Misc. consumer products	2.3	1.9	3.2	4.4	0.7	3.7
Furniture	4.5	6.8	16.5	7.0	7.9	7.2
Jewellery	18.6	0.0	15.9	0.5	0.0	8.3
2007						
Food beverages and oils	3.3	13.6	28.0	10.0	2.3	11.6
Palm oil and its fraction	8.4	1.1	4.3	42.0	0.0	2.7
Crude material and fuel	3.1	6.2	4.6	0.8	1.6	2.4
Chemicals	3.0	2.4	2.0	2.3	0.7	7.7
Manufactured goods	11.2	24.5	19.5	17.6	17.3	28.7
Machinery	6.6	18.8	14.3	13.6	15.4	17.6
Electric and electronic	23.2	15.7	11.5	6.7	34.8	17.8
Misc. consumer products	2.3	4.0	3.7	1.6	17.5	3.8
Furniture	3.4	8.0	7.8	4.0	4.6	4.9
Jewellery	33.5	0.0	0.5	0.0	0.0	0.0

UAE, United Arab Emirates; BHR, Bahrain; KWT, Kuwait; OMN, Oman; QAT, Qatar; SAU, Saudi Arabia.
Source: UN COMTRADE, obtained from world integrated trade solution (WITS).

Table 3. Composition of Malaysia's imports from the GCC: Major products (Value in US\$ million).

Goods	Year							
	1998		2001		2004		2007	
	Value	Share (%)	Value	Share (%)	Value	Share (%)	Value	Share(%)
Food, beverage and oils	1.3	0.3	5.4	0.4	9.6	0.5	13.1	0.3
Crude material (except petroleum)	13.0	3.0	28.5	2.1	70.6	3.5	143.4	3.2
Fuel/petroleum	245.3	56.8	1028.9	77.4	1625.4	79.6	3648.5	81.5
Chemicals	98.4	22.8	129.0	9.7	143.0	7.0	354.9	7.9
Manufactured good	5.7	1.3	9.6	0.7	23.8	1.2	21.3	0.5
Aluminium	33.4	7.7	64.7	4.9	81.9	4.0	157.3	3.5
Machinery/transport equipment	4.1	0.9	20.3	1.5	9.4	0.5	35.1	0.8
Miscellaneous consumer goods	3.6	0.8	6.8	0.5	5.6	0.3	12.3	0.3
Gold, non-monetary	27.2	6.3	36.0	2.7	71.9	3.5	91.8	2.0

Source: UN COMTRADE, obtained from world integrated trade solution (WITS), explanation of products: "food, beverages and oils": SITC 0 ("Food and live animals") + SITC 1 ("Beverages and Tobacco") + SITC 4 ("Animal and vegetable oils, fats and waxes), "Crude materials": SITC 2 ("Crude materials, inedible, except fuels") + SITC 3 (Mineral fuels, lubricants, and related materials) – SITC 333 (Petroleum oils and oils) – SITC 334 (Petroleum oils and oils other than crude), "Fuel/petroleum": SITC 333 (Petroleum oils and oils) – SITC 334 (Petroleum oils and oils other than crude) , "Chemicals": SITC 5 (Chemicals and related product), "Manufactured good": SITC 6, (Manufactured goods classified chiefly by material) – SITC 684 (Aluminium), "Aluminium": SITC 684 (Aluminium), "Machinery": SITC 7 (Machinery and transport equipment), "Misc. consumer goods": SITC 8 (Miscellaneous manufactured articles), "Gold, non-monetary": SITC 97 Gold, non-monetary (excluding gold ores and concentrates).

and Bahrain. In terms of products, Malaysia's import structure from these two countries has been varied. However, it is agreed that the UAE is the re-exporter hub in the region and in a process of reforming and diversifying its own economic structure. In this way

it can contribute to the diversification of its export products to Malaysia. Overall, it can be said that Malaysia's imports from the GCC countries is very concentrated on petroleum products, since these countries are the major source of Malaysia's oil imports. It

Table 4. Composition Malaysia's imports from individual GCC countries (% share of individual countries imports): Major products.

Row label	UAE (%)	BHR (%)	KWT (%)	OMN (%)	QAT (%)	SAU (%)
1998						
Food, beverage and oils	0.5	0.0	0.0	32.3	0.0	0.2
Crude material (except petroleum)	1.3	28.4	1.8	11.7	0.0	2.1
Fuel/petroleum	65.4	0.0	0.0	0.0	0.0	65.1
Chemicals	2.0	0.0	93.7	14.1	89.4	27.3
Manufactured good	1.8	2.1	0.1	28.6	0.0	1.1
Aluminium	8.9	67.6	0.0	0.0	9.3	2.6
Machinery/transport equipment	17.3	0.2	4.4	5.2	0.1	0.3
Miscellaneous consumer goods	1.0	0.1	0.0	3.5	1.1	1.1
Gold, non-monetary	1.8	1.5	0.0	4.5	0.0	0.3
2007						
Food, beverage and oils	0.8	0.4	0.0	0.2	0.0	0.1
Crude material (except petroleum)	4.0	29.1	0.8	0.0	2.2	2.6
Fuel/petroleum	74.8	8.7	87.8	95.6	0.0	86.0
Chemicals	3.1	4.9	10.6	3.8	86.0	10.5
Manufactured good	0.9	0.1	0.0	0.4	5.7	0.3
Aluminium	6.8	56.4	0.0	0.0	0.0	0.0
Machinery/transport equipment	6.9	0.2	0.0	0.0	1.6	0.1
Miscellaneous consumer goods	1.9	0.2	0.7	0.0	2.4	0.3
Gold, non-monetary	0.8	0.0	0.0	0.0	2.0	0.0

UAE, United Arab Emirates; BHR, Bahrain; KWT, Kuwait; OMN, Oman; QAT, Qatar; SAU, Saudi Arabia.
Source: UN COMTRADE, obtained from world integrated trade solution (WITS).

also clear that the composition of Malaysia's exports to this market has been diversifying and is led by Malaysia's major export products to the world (electrical and electronic products and palm oil). In this section, an analysis of Malaysia's imports and exports to the world as well as to the GCC countries has been extensively discussed. However, the evidence is hardly satisfactory, as it says little about whether the pattern emerging is peculiar to trade with the GCC countries or a more general one reflecting of Malaysia's external economic relations. Therefore, a further examination of the concept of RCA as developed by Balassa (1965) is certainly helpful and will be discussed in the next section.

RESULTS

As discussed in the methodology, the following discussion is the result from the RCA index analysis.

Competitiveness of Malaysian products: Evidence from RCA index

Before analysing Malaysian export competitiveness towards the GCC countries at the SITC 3-digit level, we shall examine Malaysia's comparative advantage at the global and Malaysia-GCC bilateral level. By using industrial classification as previously discussed, Tables 5 and 6 depicts the results. These tables show that for last ten years, Malaysia's exports comparative advantages with respect to the GCC countries have been identical

with its comparative advantage at the global level. Four major products and industries have been identified as having value above unity throughout the ten-year period. These products include palm oil, electronic and electrical, furniture and jewellery. It certainly shows that palm oil products remain the strongest sector in Malaysian exports in both the global and the GCC market in the last 10 years. Moreover, although, Malaysia's major exports to the world comprise electronic and electrical products, its RCA for these products in the GCC countries is just above unity. This implies that there are other major sources for importing these products into the GCC countries: Singapore, Japan and the USA, especially, are very competitive in these products.

In identifying a greater details of products and goods in which Malaysia has comparative advantage in the GCC market, an analysis at more disaggregated level of data, a SITC 3-digit level, was carried out and is presented in Tables 7 to 9. Table 7 shows Malaysian products at a SITC 3-digit level with an RCA greater than unity throughout the 10-year period from 1998 and 2007.

There are in total 23 products out of 233 products in which Malaysia has consistently enjoyed a competitive advantage in the GCC market as compared to the rest of the world exports to the GCC. Besides palm oil (SITC 422), jewellery (SITC 897) and furniture products (SITC 821) are high on RCA index as previously discussed. Table 7 also reveals that Malaysia is highly competitive in

Table 5. Malaysia RCA at the global level c.

Product/industry	Year									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Food beverages and oils	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7
Palm oil and its fraction	46.9	40.0	34.3	37.0	35.2	37.9	33.4	31.3	31.6	31.9
Crude material and fuel	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Chemicals	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
Manufactured goods	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Machinery	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electrical and electronics	2.9	3.0	2.9	3.1	3.1	3.1	2.9	2.9	2.9	2.8
Misc. consumer products	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
Furniture	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Jewellery	1.4	1.5	1.9	1.6	1.2	1.5	2.0	2.3	1.8	2.2

Source: UN COMTRADE database, obtained from world integrated trade solution (WITS). Calculated by using RCA_j index (Equation 1).
*share of Malaysia export of commodity j relative to its total trade to the World/ share of world exports for commodity j relative to its total trade.

Table 6. Malaysian export competitiveness in the GCC countries.

Product/industry	Year									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Food beverages and oils	0.7	0.5	0.4	0.4	0.5	0.6	0.6	0.6	0.8	0.7
Palm oil and its fraction	64.8	47.7	45.1	50.7	59.3	58.5	48.9	50.3	41.7	39.1
Crude material and fuel	1.5	1.2	0.9	1.3	0.8	0.4	0.6	0.5	0.6	0.4
Chemicals	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.6
Manufactured goods	0.5	0.6	0.6	0.8	0.6	0.6	0.5	0.7	0.7	0.8
Machinery	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Electrical and electronic	2.8	2.7	2.5	2.4	2.3	2.2	1.8	1.5	1.8	1.8
Misc consumer products	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.5
Furniture	5.8	5.7	6.1	5.9	7.1	8.4	6.5	5.8	5.7	4.3
Jewellery	8.5	9.5	10.6	10.5	7.4	7.3	7.4	9.4	8.5	8.7

Source: UN COMTRADE database, obtained from world integrated trade solution (WITS). Calculated by using RCA_{ijG} index .
*Share of Malaysia export of commodity j to GCC relative to its total trade to GCC / share of World exports of commodity j to the GCC relative to its total trade to the GCC.

the following products in the Gulf: cocoa (SITC 072), margarine/shortening (SITC 091), natural rubber/latex/etc (SITC 231), animal/vegetable oils processed (SITC 431), lead (SITC 685), tin (SITC 687), television receivers (SITC 761), radio broadcast receiver (SITC 762) and sound/television recorders etc (SITC 763). Almost of all the product groups in the table recorded either a declining trend in their RCA index or increased minimally, except for cocoa (SITC 072) and veneer/plywood/etc (SITC 634). Among the products that experienced a declining competitiveness in the GCC market, tin (SITC 687) product group recorded the sharpest decline from a peak of 43.6 in 1998 to 4.6 in 2007. Other product groups that experienced a significant decline in their RCA index in this market are natural rubber/latex/etc (SITC 231) and cereal meal/flour n.e.s (SITC 047). Their RCA indexes were 24.4 and 11.0 in 1998 but fell to 5.1 and 2.9 in 2007, respectively. The pattern suggests that Malaysia's

competitiveness in these products has gradually diminished in the GCC market.

It is also important to note here that, the declining trend in Malaysia's competitiveness in electrical and electronic products in the GCC market is reflected by Malaysia's decreasing comparative advantage in producing these products at the global level (Abidin and Heng, 2008; Muhammad and Yaacob, 2008). Throughout the 10 year period, the most competitive Malaysian products in the GCC countries have been much concentrated on natural products such as tin, cocoa, wood, jewellery, copper and lead, half of which are non-renewable products. It is also interesting to analyse Malaysian products that gained and lost their competitiveness in the GCC countries between 1998 and 2007. This will further help in identifying niche exports products from Malaysia to the Gulf. Tables 8 and 9 illustrate the trends. Interestingly, the wood chips/waste (SITC 246) group had a high index in 2007 though it had

Table 7. Malaysian products that have consistent competitiveness in the GCC countries (1998 to 2007).

Code	Product name	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
047	Cereal meal/ flour n.e.s	11.0	10.6	12.6	9.2	9.3	7.0	2.3	4.9	6.2	2.9
048	Cereal etc flour/ starch	2.4	2.7	3.0	2.6	3.0	2.4	2.4	2.8	2.7	2.2
072	Cocoa	8.0	7.6	10.0	8.0	14.4	12.7	10.2	9.6	9.0	12.1
091	Margarine/ shortening	42.8	29.2	26.2	23.1	22.7	26.3	24.1	31.3	47.1	35.9
231	Natural rubber/ latex/ etc	24.4	33.0	24.3	17.7	12.5	16.5	21.1	12.3	13.1	5.1
248	Wood simply worked	9.7	7.4	7.6	6.2	6.0	5.6	5.5	7.0	8.1	5.0
422	Fixed veg oils not soft	63.3	46.1	42.4	47.2	56.5	52.9	46.9	45.0	37.7	38.2
431	Animal/veg oils processed	24.7	21.1	15.8	16.8	26.1	26.5	24.3	29.6	27.4	19.1
554	Soaps/cleansers/ polishes	2.8	3.8	4.6	2.6	4.2	3.7	4.9	2.8	4.3	3.5
572	Styrene primary polymers	3.8	4.1	3.5	3.1	3.1	4.5	3.8	3.2	2.8	2.8
621	Materials of rubber	2.3	2.9	2.2	1.7	2.0	3.1	2.6	3.4	2.8	2.9
634	Veneer/plywood/ etc	6.1	6.2	8.8	10.5	9.9	10.6	10.3	12.6	10.8	11.1
682	Copper	1.3	1.8	1.6	1.7	1.2	1.5	1.2	1.5	1.4	2.5
685	Lead	6.6	5.7	3.0	2.0	2.3	7.5	25.1	17.5	15.0	9.4
687	Tin	43.6	6.7	8.3	11.4	8.6	7.5	19.4	37.6	3.5	4.6
741	Industrial heat/cool equipment	1.5	1.4	1.7	1.4	1.2	1.4	1.7	2.3	2.0	1.6
752	Computer equipment	4.1	3.5	3.2	3.3	2.3	2.4	2.3	2.8	2.2	1.8
761	Television receivers	15.5	13.3	10.8	10.0	11.8	11.4	10.0	9.6	10.3	13.6
762	Radio broadcast receiver	15.3	21.1	15.1	9.3	9.1	16.2	13.3	13.8	14.9	9.8
763	Sound/TV recorders etc	9.4	8.3	7.4	8.2	6.7	3.8	2.9	3.5	2.7	2.0
821	Furniture/ stuff furnishing	5.8	5.7	6.1	5.9	7.1	8.4	6.5	5.8	5.7	4.3
848	Headgear/ non-text clothing	3.4	4.3	4.2	2.2	2.2	1.9	2.0	2.0	2.6	2.5
897	Jewellery	8.5	9.5	10.6	10.5	7.4	7.3	7.4	9.4	8.5	8.7

Source: Author calculation based on UN COMTRADE database, obtained from world integrated trade solution (WITS). Calculated by using RCA_{ijG} index. *Share of Malaysian exports of commodity j to GCC relative to its total trade with GCC / share of world exports of commodity j to the GCC relative to its total trade with the GCC. Numbers in bold indicate $RCA > 1$.

Table 8. Products gaining comparative advantage in the GCC market.

Code	Product name	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
246	Wood chips/waste	0.5	0.3	0.0	0.0	0.6	2.5	6.3	18.7	23.6	26.1
678	Iron/steel wire	0.2	4.1	3.0	2.0	2.0	2.1	4.4	6.7	7.7	7.7
511	Hydrocarbons/derivatives	0.1	0.1	2.5	2.4	5.2	0.0	1.9	0.0	1.8	4.6
776	Valves/transistors/etc	0.1	0.2	0.2	3.1	2.8	5.5	2.5	5.1	5.2	3.6
344	Petrol./hydrocarbon gas	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	3.4
017	Meat/offal presvd n.e.s	0.0	0.0	0.6	3.9	3.8	3.9	2.1	2.3	3.1	3.2
022	Milk pr exc butter/cheese	0.0	0.0	0.0	0.0	0.1	1.2	1.8	1.7	1.5	2.7
635	Wood manufactures n.e.s.	0.9	0.8	0.9	0.8	1.1	1.3	1.1	1.7	2.0	2.5
693	Wire prod excluding ins electric	0.8	1.6	2.0	1.6	0.9	1.0	3.4	3.4	2.8	2.3
612	Leather manufactures	0.4	0.0	0.0	0.0	4.6	12.1	0.5	1.4	1.4	2.0
881	Photographic equipment	0.1	0.1	0.2	0.1	0.0	0.8	1.1	0.3	1.6	1.9
773	Electrical distributing equip	0.2	0.5	1.4	0.6	1.0	0.4	1.0	1.2	1.8	1.6
071	Coffee/coffee substitute	0.0	0.0	0.1	0.3	0.3	0.8	1.1	0.7	1.0	1.5
684	Aluminium	0.9	1.5	1.0	0.9	1.1	1.2	0.9	0.8	1.3	1.2
657	Special yarns/fabrics	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.9	1.6	1.2
778	Electrical equipment nes	0.4	0.3	0.3	0.3	0.4	0.8	0.9	1.1	2.0	1.1
895	Office/stationery supply	0.8	0.6	0.7	0.9	0.8	1.0	0.7	1.1	1.1	1.1
232	Rubber synth/waste/etc	0.0	0.0	0.0	0.0	0.5	0.7	0.9	1.1	1.0	1.0

Source: Author calculation based on UN COMTRADE database, obtained from world integrated trade solution (WITS). Calculated by using RCA_{ijG} index. *Share of Malaysian exports of commodity j to GCC relative to its total trade with GCC / share of World exports of commodity j to the GCC relative to its total trade with the GCC. Numbers in bold indicate $RCA > 1$.

Table 9. Products losing comparative advantage in the GCC market.

Code	Product name	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
046	Flour/meal wheat/meslin	1.5	1.6	1.1	1.4	1.5	1.1	1.1	1.3	1.0	0.6
062	Sugar confectionery	2.4	2.0	1.9	1.8	1.5	1.5	1.0	0.9	0.8	0.4
073	Chocolate/cocoa preps	0.9	0.7	1.6	2.1	1.3	1.2	1.5	1.3	1.0	0.9
512	Alcohols/phenols/derives	2.9	3.1	2.9	3.1	2.7	1.7	1.6	1.4	1.3	0.8
513	Carboxylic acid compound	0.4	0.4	0.4	0.4	1.0	1.7	2.3	1.1	1.1	0.4
574	Polyacetals/polyesters..	0.7	1.7	1.7	1.4	2.3	3.0	1.1	0.9	0.7	0.6
692	Metal store/transpt cont	0.6	0.4	1.4	0.2	1.0	1.0	2.3	2.1	0.6	0.5
743	Fans/filters/gas pumps	0.3	0.3	0.3	0.4	1.0	1.3	1.2	1.6	1.0	0.8
759	Office equips parts/accs.	1.1	1.2	0.8	3.0	3.7	3.4	1.5	0.4	0.4	0.9
775	Domestic equipment	2.0	1.1	0.9	1.0	0.8	0.9	0.8	1.0	1.0	0.9
813	Lighting fixtures etc	1.3	1.6	1.6	1.2	0.9	0.7	0.6	0.7	0.7	0.7

Source: UN COMTRADE database, obtained from world integrated trade solution (WITS). Calculated by using RCA_{ijG} *Share of Malaysian export of commodity j to GCC relative to its total trade with GCC / share of World exports of commodity j to the GCC relative to its total trade with the GCC.

been uncompetitive in the GCC market for the 1998 to 2002 period. These products group mainly comes from wood chips (SITC 24615) and wood waste/sawdust (SITC 2462). Apart from this group of products, others that gained considerable competitiveness in the GCC market include iron/steel/wire (SITC 678), hydrocarbons/derivatives (SITC 511), valves/transistors/etc (SITC 776), meat and offal preserved (SITC 017), wood manufactures (SITC 635), wire products (excluding insulated electrical wiring) and fencing grills (SITC 693), equipment for distributing electricity (SITC 773) and aluminium (SITC 684).

It is also interesting to note that although the GCC countries are major producers of petroleum product, Malaysia's hydrocarbon gas products (SITC 344) gained competitiveness in the GCC market in 2007. Table 8 shows that the products that are gaining competitiveness in the gulf countries are mainly from the manufacturing product group which is enjoying high demand in the GCC market. Since the GCC countries are in the process of development and the per capita incomes in the region are high, this group of exports have a plenty of room to increase their foothold in the market. Those products that are losing competitiveness in the GCC market can be seen in Table 9. The table reveals that there are only 11 Malaysian products that lost competitiveness in 2007. Furthermore, these products had either had a comparative advantage in 1998 or a consistent one for 2 or 3 years before 2007. Food-based products (SITC 046, 062 and 073) chemical-based products (SITC 512, 513 and 574) and machinery products (743, 759 and 775) are among the major products that had comparative disadvantage in the GCC market in 2007. In addition, flour/meal wheat (SITC 046), sugar confectionery (SITC 062), chocolate/cocoa preparations (SITC 073), alcohols/phenols/derives (SITC 512), polyacetals/polyesters (SITC 574) and office equipment parts (SITC 759) faced declining competitiveness despite their consistent competitive strengths in the early period of analysis. What can

be learnt here is that most of the products that lost their competitiveness in the GCC market are capital intensive and Malaysia does not even have an advantageous position in producing these products in the domestic market despite its effort to enhance the halal product. An investigation of Malaysia's RCA and competitiveness in the GCC market shows that Malaysia has a considerable number of strong product groups in the GCC market. Despite losing competitiveness in non-traditional Malaysian products, Malaysia is also improving its competitiveness in consumption products that have high demand in the GCC. This reveals the importance of intra-industry trade between Malaysia and GCC countries, and manufacturers in this same industry will find opportunities to trade with each other.

Competition with other Asian countries

In order to extend the analysis, the comparative advantages of selected Asian economies, which have high presence in the GCC export market, are also analysed. Countries like China, Indonesia, Japan and Singapore are competitors for Malaysian exports in the region. Importantly, country like Singapore that already has a free trade agreement with the GCC countries is becoming Malaysia's main export competitor in the Arab Gulf market. Therefore, it is important to assess Malaysian export competitiveness vis-a-vis Asian leading importers in GCC markets based on findings presented earlier. As identified in an RCA analysis of Malaysia with respect to the GCC market, exports of palm oil, electronic and electrical products, jewellery and furniture have been Malaysia's main export strength in the GCC market. Hence, this section analyses the structural effect on Malaysia's competitiveness in the GCC market for those products in comparison with China, Indonesia, Japan and Singapore. Tables 10, 11, 12, 13 and 14 summarise the RCA

Table 10. Asian countries export competitiveness for palm oil products in GCC market.

Country	SITC 4222 – Palm oil and its fraction									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malaysia	64.8	47.7	45.1	50.7	59.3	58.5	48.9	50.3	41.7	39.1
Indonesia	2.44	3.06	1.07	1.26	0.36	1.01	1.61	3.86	26.27	22.12
Singapore	5.39	7.79	6.48	6.48	3.91	4.79	4.76	3.14	3.78	3.05

Source: Author's calculation by using RCA_{ijG} index. Based on UN COMTRADE database, obtained from world integrated trade solution (WITS).

Table 11. Asian countries exports competitiveness for industrial heating/cooling equipment in GCC market.

Country	SITC 741 - Industrial heating/cooling equipment									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malaysia	1.54	1.42	1.65	1.45	1.17	1.42	1.67	2.26	2.01	1.63
China	0.11	0.24	0.30	0.33	0.47	0.75	1.15	1.38	1.14	0.85
Indonesia	0.03	0.01	0.04	0.06	0.02	0.07	0.02	0.01	0.06	0.12
Japan	0.93	1.41	0.68	0.52	0.39	0.51	0.43	0.52	0.46	0.54
Singapore	0.84	0.89	0.79	0.50	0.63	0.77	0.68	0.39	0.49	0.29
India	0.1	0.3	0.23	0.23	0.26	0.37	0.49	0.37	0.35	0.33

Source: Author's calculation by using RCA_{ijG} index. Based on UN COMTRADE database, obtained from world integrated trade solution (WITS).

Table 12. Asian export competitiveness for electronic and electrical products in GCC market.

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
SITC 752 – Computer equipment										
Malaysia	4.1	3.5	3.2	3.3	2.3	2.4	2.3	2.8	2.2	1.8
China	0.73	0.98	0.95	1.04	1.03	1.39	1.46	2.43	3.01	3.45
Indonesia	0.03	0.15	1.16	1.52	1.83	0.52	1.22	0.79	0.65	0.45
Japan	0.23	0.32	0.22	0.17	0.12	0.15	0.15	0.15	0.13	0.17
Singapore	4.47	2.13	2.36	4.43	4.68	5.27	3.06	1.83	2.30	1.53
India	0.03	0.03	0.02	0.03	0.03	0.08	0.04	0.07	0.05	0.03
SITC 761 – Television receivers										
Malaysia	15.5	13.3	10.8	10.0	11.8	11.4	10.0	9.6	10.3	13.6
China	1.30	1.34	1.27	1.99	2.48	2.96	2.71	3.39	3.52	2.85
Indonesia	0.51	0.47	1.69	2.18	2.41	2.80	3.92	5.06	3.79	1.94
Japan	1.48	1.38	0.93	0.76	0.62	0.66	0.99	1.20	1.51	1.24
Singapore	6.14	4.04	3.53	3.68	3.36	2.91	1.87	1.76	0.94	1.39
India	0.23	0.31	0.15	0.22	0.22	0.39	0.41	0.42	0.29	0.26
SITC 762 – Radio broadcast receiver										
Malaysia	15.3	21.1	15.1	9.3	9.1	16.2	13.3	13.8	14.9	9.8
China	7.89	6.18	4.14	4.11	3.69	3.44	2.62	2.85	2.04	2.23
Indonesia	3.86	2.72	6.54	11.40	15.50	11.22	17.01	22.26	22.55	19.59
Japan	1.26	1.15	0.85	0.47	0.62	0.50	0.34	0.40	0.35	0.27
Singapore	13.31	9.08	10.16	15.37	11.47	8.02	8.50	6.43	6.60	5.47
India	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.00	0.00
SITC 763 Sound/ TV recorders etc										
Malaysia	9.4	8.3	7.4	8.2	6.7	3.8	2.9	3.5	2.7	2.0

Table 12. Contd.

China	1.87	2.15	1.34	1.93	2.52	2.89	1.98	2.41	2.40	2.43
Indonesia	0.09	0.24	2.18	2.56	2.57	4.65	3.61	2.66	2.17	0.56
Japan	3.64	4.17	4.06	3.81	3.62	4.45	5.50	6.30	6.92	5.49
Singapore	12.55	10.16	11.17	10.75	10.75	9.11	7.68	5.54	4.27	3.60
India	0.04	0.06	0.02	0.01	0.01	0.04	0.01	0.04	0.03	0.01

Source: Author's calculation by using RCA_{ijG} index. Based on UN COMTRADE database, obtained from world integrated trade solution (WITS).

Table 13. Asian exports competitiveness for furniture products in GCC market.

Country	821 Furniture/stuff furnishing									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malaysia	5.8	5.7	6.1	5.9	7.1	8.4	6.5	5.8	5.7	4.3
China	0.83	0.61	0.74	1.08	1.68	2.12	2.33	2.96	3.36	2.92
Indonesia	0.54	1.88	2.12	2.40	2.58	3.09	3.43	3.38	2.22	2.03
Japan	0.05	0.05	0.04	0.03	0.04	0.04	0.04	0.02	0.01	0.02
Singapore	0.39	0.41	0.48	0.44	0.41	0.20	0.10	0.09	0.27	0.34
India	0.08	0.07	0.06	0.08	0.08	0.15	0.13	0.14	0.12	0.10

Source: Author's calculation by using RCA_{ijG} index. Based on UN COMTRADE database, obtained from world integrated trade solution (WITS).

Table 14. Asian export competitiveness for jewellery products in GCC market.

Country	SITC 897 – Jewellery									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Malaysia	8.5	9.5	10.6	10.5	7.4	7.3	7.4	9.4	8.5	8.7
China	0.04	0.05	0.04	0.05	0.04	0.03	0.02	0.04	0.06	0.06
Indonesia	0.48	0.55	0.39	0.39	0.23	0.44	0.30	0.30	0.29	0.60
Japan	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.03	0.01	0.01
Singapore	2.20	2.20	1.91	2.16	3.40	4.84	3.56	2.12	2.03	2.82
India	4.19	2.32	2.03	3.16	2.79	3.42	5.46	5.01	5.12	4.29

Source: Author's calculation by using RCA_{ijG} index. Based on UN COMTRADE database, obtained from world integrated trade solution (WITS).

comparison. From these tables, certain observations may be made: First, it is clear that among Asian countries, Malaysia holds a great advantage in exporting palm oil products to the GCC market. Only Singapore and Indonesia have exported these products there. Knowing that Singapore does not produce palm oil, it can be inferred that it imports this product and re-exports it to the Gulf market. It is important to note that Indonesia's competitiveness in this product in the Gulf area has been steeply increasing until in 2007, the RCA was 22.12.

This implies that, Malaysia's nearest competitor for this product in the Gulf is Indonesia. Secondly, in terms of its exports of industrial heating/cooling equipment to the GCC countries, apart from China, Malaysia has had strong advantage in this product over other Asian countries in the GCC market. Malaysia's RCA index for

this product group has been fairly stable throughout the ten-year period covered in this study. Only China has an RCA over unity from 2004 to 2006 and Japan in 1999. Thirdly, in terms of competitiveness for electronic and electrical products to the GCC countries among the Asian exporters, Malaysia's electronic and electrical export performance in terms of the RCA ratio was dominant only for SITC 761, television receivers, over the whole ten-year period. Meanwhile, for SITC 752, computer equipment, and SITC 762, radio receivers, Malaysia's export performance ratio was dominant in the GCC market only in 1999, 2000, 2005 and 1998, 1999, 2000, 2003, respectively. SITC 752 competitiveness in the GCC market was dominated by Singapore between 2001 and 2004, then China rose to the top in this product in 2006 and 2007. In the meantime, Indonesia was highly competitive in SITC

762 from 2004 to 2007. Surprisingly, despite having been the strongest competitor in the global market for SITC 763, Malaysia's competitiveness in the GCC market for this product group has been overtaken by Singapore and Japan.

Fourthly, besides the increasing export of Malaysian furniture products as indicated in Table 13 this group has also been competitive in the GCC countries since 1998. Among the major Asian exporters to the GCC countries, Malaysia holds strong advantage in this product. Table 13 shows that apart from China and Indonesia, other Asian countries' export performance ratio for this product has been very low. Thus, this creates a huge opportunity for Malaysian exporters to the Gulf. Fifthly, the competitiveness of Malaysian jewellery exports is considerably strong. Table 14 shows that Malaysia dominates the market to the GCC countries. Its main rival in this product is India followed by Singapore. What can be learnt from this is that, despite Malaysia exports more of these products to the GCC countries than any other competitor and being highly competitive globally in the Gulf market in these products, it has been facing strong competition from other major Asian economies that export similar products to there. Nevertheless, in products such as jewellery, furniture, palm oil, industrial heating/cooling equipment and television receivers, Malaysia is still the dominant competitor in the region vis-à-vis Asian exporters.

Conclusion

From the analysis, it is revealed that trade compositions between Malaysia and the GCC market is terribly less diversified and much more concentrated on certain products especially oil and petroleum-related products. Malaysia's exports compositions to the GCC mainly come from palm oil, jewellery, manufactured goods, and electronic and electrical products. Based on this finding, an analysis of Malaysia's competitiveness with respect to the GCC has been intensively carried out and discussed. This was done by employing two indices of revealed comparative advantage, and calculated for the period 1998 to 2007. The analysis shows that there is considerable evidence for Malaysian products which have been identified to be expanded in the GCC countries. It is important to note here that an analysis of revealed comparative advantage shows that Malaysia's major export products have been competitive in the GCC countries. More importantly, there are also other products that have high competitiveness in the GCC market which are improving their level of comparative advantages and possible expansion in the GCC market.

Nevertheless, the competitiveness of Malaysia's major export products against its rivals in the Asian region show mix results. Among the Asian economies, Malaysian competitors which are expanding their exports to GCC market are China, Singapore, Japan and Indonesia. It

may be concluded that the RCA indices provide a useful tool to analyse a country's comparative advantage in both global and bilateral markets. This has been useful to formally establish Malaysia's competitiveness in the GCC market. This undoubtedly has further implications for Malaysia's desire to expand its trade relations with the Arab Gulf Market. It is suggested that, further concentration and promotion on the products/goods that highly competitive in the market need to be considered by the Malaysian authority. This might boost the current trade relations with the countries. Besides the opportunity to trade in goods/products, it is believed that, services sector which comprises Islamic Banking and Finance services, in which Malaysia and GCC are promoting, to a greater extent offers huge opportunity for Malaysia in expanding trade relations with the GCC. It can play greater role in bridging Malaysia's trade relations with the GCC by facilitating businesses between these two markets. In the meantime, with the aspiration of Muslim countries economic integration, further efforts need to be done in order to achieve greater relations with the market.

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APPENDIX

Appendix 1. Malaysia top ten source for crude and non crude fuels products.

Partner name	Source (%)						
	1998	1999	2000	2001	2005	2006	2007
Singapore	72.66	61.64	51.21	47.53	43.50	36.92	40.08
GCC countries group	16.75	24.17	33.54	30.28	33.29	38.20	31.53
Saudi Arabia	10.22	13.94	15.00	15.70	17.23	19.86	14.67
Vietnam	0.00	5.82	6.78	3.64	7.29	7.33	7.55
United Arab Emirates	6.52	3.19	5.60	2.09	6.89	7.03	8.35
Oman	0.00	4.33	10.50	10.55	6.17	8.32	3.87
Iran, Islamic Rep.	2.31	1.92	2.57	3.71	3.94	5.04	3.09
China	0.02	0.03	0.02	0.38	2.72	0.45	0.09
Kuwait	0.00	0.79	0.93	0.88	2.68	2.47	4.55

Source: Author's own calculation based on UN COMTRADE database, obtained from world integrated trade solution (WITS).