

Analysis of Intensity of Intra-Regional Trade in GCC Countries, 1998-2008

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Abstract—This paper addresses the intra-regional trade of the countries of the Gulf Cooperation Council (GCC), namely, the United Arab Emirates, Bahrain, Saudi Arabia, Oman, Qatar and Kuwait. We have found that the intra-regional trade is still at a modest level, where the trade intensity index showed negative signals except the UAE, and Saudi Arabia. The study concludes that the unified economic policy of the GCC countries has not achieved its target in terms of increasing the level of intra trade which implies a high reliance on oil export revenues.

Index Terms—Economic growth, GCC, GDP, intensity trade.

I. INTRODUCTION

The role of trade, regionally and internationally, as an engine of economic growth has increased considerably, particularly in countries that follow a policy of encouraging exports, where it leads to an increase in the gross domestic product level and improved terms of trade, which, in turn, reflects achieving acceptable economic growth. Therefore, many scholars have emphasized the positive role of improving the level of foreign trade and then economic openness

However, the foreign trade commodity is one of the most important factors for economic growth in GCC countries, especially for Saudi Arabia as a main producer and exporter of crude oil, as all GCC countries characterized in a high reliance on the world by importing most of their capital and consumer goods.

II. REVIEW OF LITERATURE

Many studies have emerged addressing the role of foreign trade, the most important studies are those of Fischer, which analysed the relationship between the policy of import substitution and its positive impact on growth after World War II, and encouraged export growth. In this respect, Fischer confirms the role of economic policy in promoting export levels and enhancing the rate of growth [1]. He reports that a greater degree of economic openness will promote growth and income level as well, as the open countries have increased their economic growth rate by 2% compared with closed countries.

This positive effect occurs through the increased level of trade. Fisher asserts that countries wishing to grow must be integrated into the global economy to take advantage of the foreign market and flows of foreign investment. Moreover,

Fisher stresses on countries that wish to grow must be integrated into the global economy to take advantage of the foreign market, and foreign investment flows. However, Promotion of exports is a part of trade policy, and can be considered as a tool of funding imports, where one of studies shows that the experience of 25 developing countries have witnessed the fastest economic growth rates over the period 1965-1994 and which were characterized as high level (10%) [2]. The main notion of this study is that it confirms the significant role of exports to stimulate economic activities and enhance the level of growth. Alcalá and Ciccone found that trade and local markets were the major determinants of economic growth over the period 1960-1996 [3]. Their study tests trade openness, which they consider as an appropriate measure of trade. In this study, the average growth rate of income per capita is the dependent variable of the study's model, while trade openness, local market size, institutional quality, initial income per capita are the independent variables.

Spanu affirmed that the liberalization of foreign trade leads to a positive impact on the economy and may lead to economic growth [4], where the critical issue in this growth is the economic and trade policies followed by the state to determine the trend of economic growth. The main point in this study concerns foreign trade and the importance of the lifting of trade restrictions as a significant process to obtain WTO membership. These steps are consistent with the conditions of the International Monetary Fund (IMF) and World Bank (WB) for achieving economic reformation and enhancing the level of foreign trade. Vlad Spanu suggested that to increase the level of exports in developing countries is mainly associated with the transnational corporations nationalities (TNCs), which holds that the share of foreign firms in total exports achieved rates as high as (90%) in Ireland, (80%) in Hungary, Poland, (56%) China, Costa Rica (50%), Switzerland (47%), Sweden (39%), and Mexico (31%).

Sohn analysed Korea's trade pattern based on the gravity model [5]. His study suggests possible ways to expand foreign trade by identifying the important factors that determine Korea's bilateral trade flows. This study added new independent variables, such as the trade conformity index and APEC membership, in order to examine the trade patterns of Korea in terms of following the Heckscher-Ohlin model or the differentiated product model [6]. However, this study focused on the positive effect of foreign trade on economic growth of developing countries through its role in transferring the technology to countries that imported capital goods. This study confirmed the importance of developing countries to expand trade relations with developed countries. In addition, this study confirmed the expansion of

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trade relations between developing and developed countries. Furthermore, it reported that the open trade policy is a good motivation that promotes economic growth resulting from foreign trade, which could lead to sustainable economic growth. This study depends on the formulation of a standard form in which researchers found that trade openness significantly promotes economic growth. This supports that the expansion of economic relations between developing and developed countries has been delayed by the need to acquire the technology needed to achieve economic growth. The study was based on Endogenous growth theories, which suggest that countries benefit from foreign trade through the import of capital goods, and advanced technology. Carrillo and Li analysed the importance of trade agreements in enhancing intra-industrial trade of Latin American countries over the period 1980-1997 [7]. The study reports that increasing the level of intra-trade in these countries is attributed to the role of intra-industrial trade, which witnessed a significant increase during the said period. Furthermore, it tested the effectiveness of trade agreements in raising the trade level by applying a gravity model of bilateral trade flows. It found that these trade agreements have had an impact on the dynamism of intra-regional trade and on the high increase of intra-industrial. In addition, it confirms that distance has a statistically significant effect, and that size of economy is considered a main determinant of trade.

III. METHODOLOGY

This study is based on an analysis of the data to extrapolate the reality of GCC economies for the period 1998-2008. Also, in this approach, we will depend on graphs that are associated with the analysis of the study. Regarding the commercial relationship between GCC countries, we will adopt a mathematical formulation [8] to measure and assess the intensity of Intra-trade of GCC countries, in order to identify the reality of regional trade between these countries, this formulation is

$$Ci = \frac{\{X_{GCC} - M_{GCC}\}}{\{X_{total} + M_{total}\}} - \frac{\{X_{GCC} + M_{GCC}\}}{\{X_{total} + M_{total}\}} * \frac{\{X_{total} - M_{total}\}}{\{X_{total} + M_{total}\}}$$

Where: Ci: Intensity of regional trade of the country (i) with other GCC countries in the net total export.

X_{GCC} : Intra-export from country (i) to other GCC countries.

M_{GCC} : Intra-import from country (i) to other GCC countries.

X_{total} : Total export of the country (i) to the world countries.

M_{total} : Total import of the country (i) from the world countries.

By the formulation above, if (Ci) is positive that means the country (i) has dense exports with GCC and other countries, and vice versa. When (Ci) is negative that means the country (i) has dense imports with GCC and other countries. The country that has the highest density of trade over the period 1998-2008 will be considered as the leading market in GCC countries.

IV. REALITY OF INTRA- REGIONAL TRADE IN GCC COUNTRIES

average of intra-trade in GCC countries ranges between

6% - 14.6% [9] for the total foreign trade over. These modest proportions are attributed to the similarity of production patterns in these countries, which makes its trade a limited activity in general.

During the period 1998-2008, the average of intra-trade is about USD 29,473.6 million [10]. This represents 8.6% of the average total of non-oil foreign commodity, which amounted to USD 344,239.21 million, where the value of imports is about USD 154,175.58 million, and the value of exports is USD 190,063.63 million. - . However, we noted that both Saudi Arabia and the United Arab Emirates have the biggest share of the average of total intra-exports, which amounted to USD 9454.97 million, and USD 5556.78 million, respectively. The proportion of intra-exports is estimated to be 52% and 30%, respectively, during the period 1998-2008(*).

The most important exported commodities are industrial products, and natural resources. The industrial exports of Saudi Arabia are estimated to be 63%, followed by natural resources (29%) and the remaining percentage, 8% represents agricultural products [11]

According to the above, we see that increasing the level of intra-exports is related to the level of investment of non-oil sectors. However, we see that foreign direct investment is a good way within this framework in order to achieve rapid economic growth. Also, the low level of intra-exports in GCC countries refers to the weakness of diversification. This could be enhanced through using the high level of oil revenue to increase the non-oil industries and decrease the leakage of a large part of the income of these countries. Therefore, the important issue is investing the oil revenue in non-oil projects. This will significantly contribute to increasing the level of value added and diversifying the production structure in order to meet the local needs, with the possibility of exporting the surplus commodities to other GCC countries, which helps to increase the level of total intra-exports. Moreover, we note also that UAE has reached the first rank in terms of its total intra-imports, which amounted to USD 3146.35 Million and represents 28% of the total intra-GCC imports, in which chemical products is the most important commodity imported by the UAE from Saudi Arabia, which represents 20% of the total intra-imports of GCC countries on average for the period 1998-2008. Also, both Oman and Qatar represent 15%, 14%, respectively, followed by Kuwait and Bahrain in proportions 13.5% and 9.5%, respectively [12].

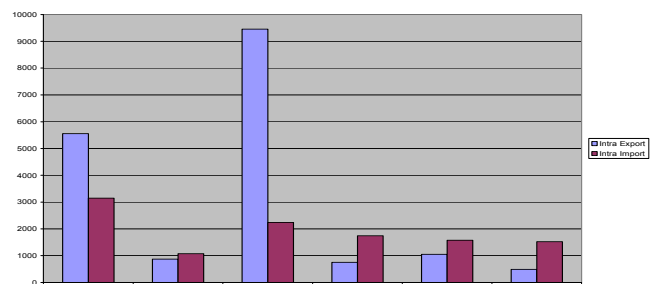


Fig. 1. Intra-Export and Import , 1998-2008 (Million USD).

(*) All ratios of this study have calculated by the researcher based on official data of study.

SourceGCC, Secretariat general (2001-2008), Statistical bulletin. League of Arab states, et.al (2001-2003,2009), (*In Arabic*) Joint Arab economic report, Abu Dhabi.
United Nations, ESCWA (2009) External trade bulletin of the ESCWA region, eighteenth issue, New York, pp44-46.

Fig. 1 clearly confirms that both Saudi Arabia and the United Arab Emirates represent the main market of intra-trade of the GCC countries for the period 1998-2008, whereas Oman is the first trade partner of each. Furthermore, this fact is clearer when we compare GCC's intra-trade with their foreign trade commodity during the said period, where the average intra-trade represents 8.6% of the total foreign trade during the period 1998-2008, which shows a weakness of intra-trade commodities in these countries. The data of study illustrated the share of GCC countries in its contribution to the total intra-trade as a percentage of total foreign trade, the high ratio in Oman, 14.6%, is because the Omani economy has a high trade level with the rest of the GCC countries, particularly Saudi Arabia and the United Arab Emirates, which means there are strong commercial relationships between Oman and these countries. By the same reason, Bahrain ranks in the second level, which amounted to 13%, while Saudi Arabia and Qatar are dominating on 11.6% and 11%, respectively. We note that both the United Arab Emirates and Kuwait represent the lowest level in total contribution of intra-trade (6%) and (4%), respectively, as a percentage of average of total foreign trade. Figure (2) confirms that the United Arab Emirates and Saudi Arabia represent the largest economic power in the Gulf Cooperation Council, in both, foreign trade and intra-trade. The main issue that must be emphasized is that intra-trade in this study only includes domestic produced goods –as was mentioned already –and does not include transit. The researcher has excluded the transit trade and crude oil to show the real situation of intra-trade.

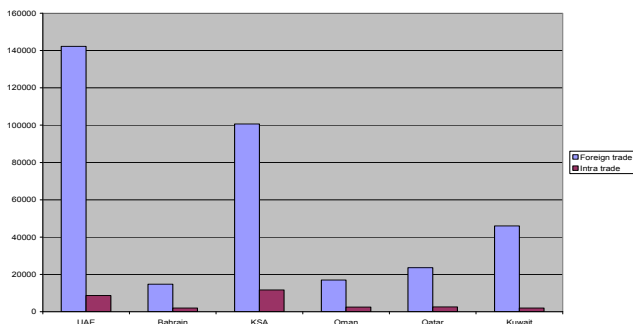


Fig. 2. Foreign and Intra-trade commodity of GCC, on average 1998-2008 (Million USD).

Source:GCC, Secretariat general (2001-2008), Statistical bulletin. League of Arab states, et.al (2001-2003,2009), (*In Arabic*) Joint Arab economic report, Abu Dhabi.
United Nations, ESCWA (2009) External trade bulletin of the ESCWA region, eighteenth issue, New York, pp44-46.

In addition, Fig. 2 verifies that Bahrain and Oman have the lowest foreign trade level, and that Kuwait has heavy reliance on foreign trade compared with its small intra-trade. Also, the situation is similar in Qatar, its intra-trade level is better than Kuwait. However, the UAE economy has a high dependence on foreign trade, which represents 41% of the total average of foreign trade in the GCC countries for the period 1998-2008 (29.5%). Furthermore, we see that the average of intra-trade

of the UAE amounted to 29.5% over the period of study. Therefore, the UAE is considered a vital economy in terms of its relation with the GCC and non-GCC countries. In other words, the UAE economy is a more open economy towards the world market in comparison with the other GCC countries. In respect of Qatar and Kuwait, the foreign trade commodity represents 7% and 13%, respectively. While the intra-trade amounted to 9%, 7% of the total trade volume between GCC countries. Therefore, we can say that Qatar has more reliance on intra-trade compared to Kuwait. In other words, Kuwait depends on other countries outside of the GCC to meet its commodity needs. Also, the UAE and Saudi Arabia are the major economies in the GCC in general, which are controlling the largest share in respect of foreign and intra-trade, as mentioned before 1998-2008. According to previous analysis, and to determine the intensity of intra-trade in the GCC countries during the period 1998 – 2008, and by using the methodology of this study, we obtained the following result:

UAE:

$$Ci = [2410.43 / 142255.28] - ([8703.13 / 142255.28] * [9368.94 / 142255.28])$$

Ci = 0.0129

The above result indicates that the UAE has a density in its intra-export commodity, which implies that the UAE economy has achieved a surplus in the commodity production during the period 1998-2008. Furthermore, it increased the growth level of intra-trade over the same period; in other words, the UAE economy achieved a competitive advantage in its intra-export more than its intra-imports.

Bahrain:

$$Ci = [-200.98 / 14729.69] - ([1946.78 / 14729.69] * [4152.57 / 14729.69])$$

Ci = - 0.0508

The negative result above shows that Bahrain has a density in its intra-import, which confirms its increased reliance on the other GCC countries for obtaining its commodity needs.

Saudi Arabia:

$$Ci = [7212.55 / 100640.64] - ([11697.03 / 100,640.64] * [-2278.92 / 100,640.64])$$

Ci= 0.0742

Ci = 0.0742. The positive result above confirms that Saudi Arabia has a large concentration in intra-export and is superior to the United Arab Emirates, which can largely be attributed to its substantial GDP, which helped it to increase the level of intra-export during the period 1998-2008.

Oman:

$$Ci = [-989.1 / 17042.72] - ([2490.28 / 17042.72] * [-554.72 / 17042.72])$$

Ci = - 0.0533

The negative result above indicates that Oman has a intensity in the intra-import with other GCC countries. Also we note its trade is more than Bahrain's intra-import.

Qatar:

$$Ci = [-521.68 / 23624.31] - ([2625.16 / 23624.31] * [5655.61 / 23624.31])$$

Ci = - 0.0485

As we noted in cases of Oman and Bahrain, the negative result above indicates that Qatar has a density in its intra-import.

Kuwait:

$$C_i = [-1033.14 / 45946.57] - ([2011.22 / 45946.57] * [19544.57 / 45946.57])$$

$$C_i = -0.0409$$

The above result shows that Kuwait has a low intensity in intra-import in comparison to Qatar, Bahrain and Oman, which means that Kuwait is not active in the field of intra-trade and confirms that the Kuwaiti economy has a weak commercial relationship with other GCC countries. To facilitate the analysis, we can set the obtained results in the following figure, as follows:

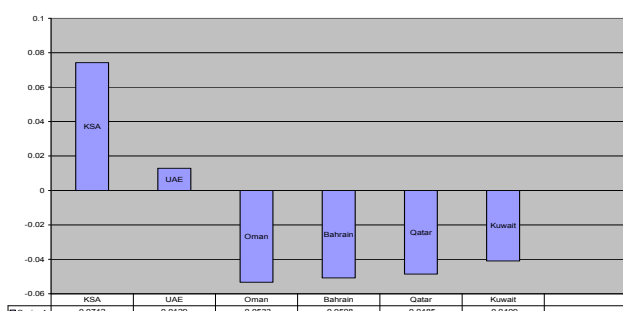


Fig. 3. Intra-trade in GCC - Average of period 1998-2008.

Source: Formed by researcher based on the result of trade intensity.

Fig. 3 and its indicators shows the level of intra-trade intensity of the GCC countries during the period 1998-2008. It shows that Saudi Arabia is a major economy in terms of intra-trade intensity. The rest of the GCC countries, except the UAE, have obtained negative signals, which confirmed their intra-import density. In this regard Oman comes in the first level, then Bahrain, Qatar and Kuwait, which indicates that this negative group is reliant on Saudi Arabia as a main partner, as well as world markets to meet its various commodity needs.

V. CONCLUSIONS

Saudi Arabia has made a positive impact on the intra-trade, which means that the commodity products of this country have a competitive position compared to the rest of the GCC countries that import these products. However, according to the positive signals of intensity index, we see that Saudi Arabia and the UAE have a positive role in their non-oil sectors during the period 1998-2008.

In respect of the negative group (Bahrain, Qatar, Kuwait and Oman) we can say that these countries have not achieved a competitive advantage in their non-oil sectors. Therefore, these countries are still suffering from weakness of the level of non-oil industries and mainly depend on the oil sector, except Bahrain. In other words, the efforts of economic diversification in these countries are not reaching their objectives in this respect.

Finally, we conclude that the continued weakness of intra-trade in the GCC countries and the high level of oil share in GDP over the period 1998-2008 are the main reasons that led to the increase in the level of integration with the global economy, more than between GCC countries, meaning, that the efforts of the GCC countries to diversify the production structure have not achieved their aims except for Saudi Arabia and UAE, the economies of which still depend

on the oil sector, which helped to increase the level of economic openness. However, it did not increase the level of intra-trade even though it was an important target of the unified economic policy of the GCC bloc.

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