



The Gulf Cooperative Council's Approach to Economic Strength: A SWOT Analysis of GCC's Countries and Regional Development

Dr. Wisam Adnan Samarah

Researcher, Planning Department, Al-Quds Open University, Ramallah, Palestine

Email: wsamarah@gou.edu

And

A. F. M. Ataur Rahman

Professor, Department of Economics, North South University, Dhaka, Bangladesh

Email: Ataur.rahman@northsouth.edu

The Gulf Cooperative Council's Approach to Economic Strength: A SWOT Analysis of GCC's Countries and Regional Development

Wisam Adnan Samarah and A. F. M. Ataur Rahman

Abstract

The purpose of this paper is to utilize the Strength, Weakness, Opportunity and Threat (SWOT) evaluation technique to evaluate the current scenario of Arab Gulf countries. The importance of this topic lies in emphasizing the vital necessity of building a self-sufficient GCC and demonstrating that a strong GCC must be built on a firm economic foundation. We will also measure the impact of the oil revenues on the standard of living of the Gulf citizens. The data was collected from the World Bank and the Arab Monetary Fund, covering the period of 1995 to 2015. A time series analysis and a regression analysis will be performed. The time series analysis indicated that the variables were non-stationary and the oil revenues had varied in their impact among the Gulf States. The Gulf States should implement joint economic strategies that would make them more self-sufficient and thus building a more sustainable Gulf Cooperate Council.

Keywords: Gulf Cooperate Council, Integration, Sequences, SWOT, Unit Root Test

Introduction

The Gulf Cooperation Council (GCC) was established in 1981. The six rich oil-producing Gulf States formed the council; they are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (UAE). The council was originally formed to combat military threats coming from the Islamic Revolution of Iran, Iraq's Saddam Hussein, and Soviet Union. Nonetheless, the council had quickly transformed into an economic bloc, where the GCC free-trade area was established in 1983. This allowed the free flow of goods and labor across the boundaries of the region. In 2003, the GCC had developed a common customs union, thus having a common external tariff (Al-Momani, 2008, p. 47).

The purpose of this paper is to utilize the Strength, Weakness, Opportunity and Threat (SWOT) evaluation technique to evaluate the current scenario of Arab Gulf countries. The SWOT analysis is extensively used to analyze business environment. We will treat the whole region as a unit and try to find its attributes. The importance of this topic lies in emphasizing the vital necessity of building a self-sufficient GCC and demonstrating that a strong GCC must be built on a firm economic foundation. If GCC countries want to reveal themselves as a strong player in geopolitical landscape then they have to have a resilient economic foundation. Such foundation should include all GCC countries together leading towards self-sufficiency.

We will also look at the path of the GDP per capita and evaluate the impact of revenues generated from oil exports on the GDP per capita for each of the Gulf States. Are all the GDP per capita moving along the same path? The argument is that if the economies of the Gulf States are somewhat integrated, then they should share a somewhat similar trend over the long run. We will also try to measure the impact of the oil revenues on the standard of living of the Gulf citizens.

Let us take a closer look at the economies that form the GCC. The table below shows the population of the different Gulf States.

Table (1): Population for the Gulf States (2014 and 2015)

| Country Name | Population for year 2014 (in Thousands) | Population for Year 2015* (in Thousands) |
|----------------------|---|--|
| Bahrain | 1,315 | 1,380 |
| Kuwait | 4,692 | 4,239 |
| Oman | 3,993 | 4,159 |
| Qatar | 2,216 | 2,423 |
| Saudi Arabia | 30,770 | 31,521 |
| United Arab Emirates | 8,625 | 8,718 |

*Predicted values

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ae/ar/.../التقرير-1

We notice that in terms of population, Saudi Arabia has the most number of people, followed by UAE.

Table (2): GDP and GDP per Capita for 2015

| Country Name | Gross Domestic Product (in millions of US Dollars) | GDP per Capita (Current International \$) |
|----------------------|--|---|
| Bahrain | 32,241 | 46,946.34 |
| Kuwait | 114,080 | 71,311.99 |
| Oman | 70,255 | 38,234.05 |
| Qatar | 165,894 | 143,788.24 |
| Saudi Arabia | 646,002 | 53,430.05 |
| United Arab Emirates | 375,230 | 70,237.95 |

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ae/ar/.../التقرير-1, and World Bank, website: www.worldbank.org

Saudi Arabia has the highest GDP, followed by UAE, and then Qatar. Meanwhile, Qatar has the highest GDP per capita, followed by Kuwait, and UAE. To have a better understanding of the

economies of the Gulf States, we will take a closer look at the break down of each country's GDP. The table below indicates the breakdown of the GDP.

Table (3a): Gross Production Sectors for 2015

| Country Name | Agriculture, Fishing, and Forestry | Strategic Industries | Transformative Industries | Construction | Electricity and Gas | Gross Production |
|----------------------|------------------------------------|----------------------|---------------------------|--------------|---------------------|------------------|
| Bahrain | 97 | 5,161 | 5,411 | 2,326 | 432 | 13,427 |
| Kuwait | 789 | 49,452 | 7,685 | 3,334 | 3,625 | 64,885 |
| Oman | 1,112 | 24,204 | 7,645 | 5,800 | 1,086 | 39,847 |
| Qatar | 227 | 60,437 | 16,496 | 14,896 | 1,242 | 93,298 |
| Saudi Arabia | 14,626 | 164,238 | 79,457 | 43,460 | 9,346 | 311,127 |
| United Arab Emirates | 2,801 | 90,699 | 38,266 | 39,009 | 10,628 | 181,403 |

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ae/ar/.../التقرير-1

Table (3b): Gross Productive Services Sector for 2015

| Country Name | Trade, Restaurants, and Hotels | Transportation, Communication, and Storage | Finance, Insurance, and Banks | Gross Productive Services Sectors |
|----------------------|--------------------------------|--|-------------------------------|-----------------------------------|
| Bahrain | 2,228 | 2,352 | 5,368 | 9,948 |
| Kuwait | 7,290 | 8,327 | 4,782 | 20,399 |
| Oman | 5,972 | 4,256 | 2,390 | 12,618 |
| Qatar | 15,832 | 7,332 | 7,297 | 30,461 |
| Saudi Arabia | 74,141 | 40,690 | 34,366 | 149,197 |
| United Arab Emirates | 58,724 | 37,229 | 4,134 | 100,086 |

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ae/ar/.../التقرير-1

Table (3c): Gross Social Services Sector for 2015

| Country Name | Housing and Utilities | Government Services | Finance, Other Services | Gross Social Services Sectors |
|----------------------|-----------------------|---------------------|-------------------------|-------------------------------|
| Bahrain | 2,985 | 7,432 | 1,667 | 12,085 |
| Kuwait | 9,701 | 28,346 | 1,537 | 39,584 |
| Oman | 3,347 | 8,593 | 8,054 | 19,994 |
| Qatar | 17,223 | 21,755 | 3,157 | 42,135 |
| Saudi Arabia | 48,410 | 121,351 | 8,983 | 178,744 |
| United Arab Emirates | 44,528 | 27,185 | 13,587 | 85,500 |

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ae/ar/.../التقرير-1

The exports within the Gulf Cooperate Council and the Arab Free Trade Area had registered a decrease of 3.4 percent and 10.9 percent in the year 2015. On the other hand, the improvement of the importance of the exports within the GCC relative to the total exports, its share had declined. Meanwhile, the share of the exports of Arab countries within the Arab Free Trade Area had increased in the year 2015.

The most important commodities that are exchanged in the GCC are metals and its products, the chemical industries products, cars and transportation, live stocks and its products, plastic industries and rubber, The table below summaries the structure of the inner trade within the GCC and the Arab Free Trade Agreement.

Table (4): The Structure of the Commodities Inner Trade within the GCC and the Arab Free Trade Area. The Mean for the Period 2012 - 2015

| Type of Commodity | Arab Free Trade Area (%) | Gulf Cooperation Council (%) |
|--|--------------------------|------------------------------|
| Live Stock and its products | 3.5 | 5.7 |
| Vegetable Products | 3.0 | 1.5 |
| Fat, Animal and Vegetable Oils, and their Products | 1.0 | 0.8 |
| Food, Beverages, and Tobacco Industries | 4.7 | 2.5 |
| Metals and its Products | 20.3 | 19.3 |
| Chemical Industry and its Products | 5.1 | 8.2 |
| Plastic and Rubber Industries and their Products | 5.9 | 5.6 |
| Raw Leather and its Products | 0.1 | 0.1 |
| Wood, Cork, and their Products | 0.3 | 0.2 |
| Paper and its Products | 4.9 | 1.2 |
| Textiles and its Products | 3.2 | 0.9 |
| Cement and its Products | 3.6 | 3.7 |

| | | |
|-------------------------------|-----|-----|
| Precious Stones | 2.3 | 3.5 |
| Machines and Electric Devices | 5.2 | 3.5 |
| Cars and Transportation | 3.3 | 6.4 |
| Optic Devices | 0.2 | 0.3 |
| Other Products | 1.2 | 0.7 |

Source: 2016 التقرير الاقتصادي العربي الموحد, Arab Monetary Fund. Website: www.amf.org.ac/ar/.../التقرير-ا

The direction of trade between the Arab countries is characterized by its concentration on the trade with its neighbors. For example, Saudi Arabia and Iraq occupied approximately 52 percent of the Jordanian exports to the Arab countries in the year 2015. Meanwhile, approximately 52 percent of UAE exports went to Oman and Saudi Arabia in that same year. Bahrain had exported to UAE and Saudi Arabia to approximately 67 percent of its exports to the Arab countries. Approximately 85 percent of the Sudan exports to the Arab countries went to Saudi Arabia and UAE. UAE, Oman, and Yemen were markets for approximately 87 percent of Somali exports. UAE had also received approximately 55 percent and 65 percent of the exports of both Oman and Qatar. Egypt had received approximately 62 percent of the total exports of Kuwait to the Arab countries. Yemen's exports went to Kuwait, Saudi Arabia, and UAE. Finally, Saudi Arabia, Egypt, and Morocco exports went to five or more of the Arab countries. These three countries are considered to be the most diverse economies (Arab Monetary Fund, 2016).

Regarding the imports, Saudi Arabia and UAE had imported approximately 59 percent and 16 percent of Jordan imports from the Arab World. Approximately 67 percent of UAE's imports from the Arab countries came from Oman, Qatar, and Saudi Arabia. Approximately 76 percent of Bahrain imports came from Saudi Arabia. The Saudi imports from Bahrain, Egypt, and UAE formed approximately 72 percent. Approximately 68 percent of Qatar's imports came from Saudi Arabia and UAE. Approximately 84 percent of Oman's imports came from UAE and Saudi Arabia. Approximately 73 percent of Kuwait's imports came from Saudi Arabia and UAE (Arab Monetary Fund, 2016).

This section will be followed by a Literature Review, Mathematical Economic Theory, Econometric Model, Results, Discussion, and Conclusion.

Literature Review

Clearly the role of the GCC as an economic power has been hampered. The GCC had witnessed the transformation of the European Community from a cooperative regional organization to the European Union. Nonetheless, the GCC had failed to follow the footsteps of the EU. The Saudis had pressed for progress on a united currency for the GCC and a political union; however, the other Gulf States were not ready to cease the moment. In contrary, "Each of the Gulf states has preferred to retain its special security ties to Western powers; rivalries among the members' respective royal families remain acute; and each state has tried to develop a distinct economic development strategy and, more recently, a unique brand as a global actor" (Liapson, 2017, p. 1).

Some authors had indicated that the GCC is deepening the integration due to symbolic and political reasons, as well as gaining economic powers (Al-Momani, 2008). However, focusing on economics and creating links between the economies of the Gulf States will be better-off for the council and will benefit all its members. This can be achieved according to some by transforming the economies of the member states into a knowledge based economy (KBE). Even if one country outperforms the others in the knowledge-based indicators, it will spill over to the rest of the countries of the GCC. In other words, becoming a KBE will benefit the GCC members by gaining competitiveness of the KBE and thus building a stronger economic bloc (Hossain, 2015).

The development of the infrastructure of the GCC -become e-readiness- will allow its countries to engage in the activities of the e-commerce at various levels. This will allow the Gulf States to enter the new digital world economy. As a result, this will strengthen the GCC bloc (عبدالعالي & سلمان, 2013).

The current geo-political crisis involving Bahrain, Qatar, Saudi Arabia, and UAE and the predictable economic slowdown –due to the continuous decrease in the oil prices made it a necessary to use the SWOT analysis that takes into consideration both the internal state of the GCC and the external environment. This analysis was conducted for the European Union (EU) in order to meet the challenges it is facing due to the unpredictable situation of the crisis, geo-political conflict and overindebttness (Neykov, 2014)

Mathematical Economic Theory

The GDP per capita will be used to measure and compare the standard of living for the different Gulf States and the performance of their economies. The GDP per capita is simply found by dividing the GDP by the population of the country. An indication of the success of the GCC, the member country's citizens should enjoy a higher standard of living when joining the GCC. In addition, the GCC countries GDP per capita for every member country should converge to the same value. Thus the standard of living for all the citizens of the GCC should be similar. Hence, they should all enjoy similar standards of living. Only then the GCC will be an unbreakable economic bloc. This will then spill over to the political and other areas of GCC. As a result, full integration will occur.

Let us take a more theoretical look at the structure of the GDP per capita. In this paper we will work in the Euclidian space. The Euclidean space is an example of a metric space.

A set S , whose elements we will call points, is said to be a metric space if with any two points a and b of S there is associated a real number $d(a,b)$, called the distance from a to b , such that

1. $d(a,b) > 0$ if $a \neq b$; $d(a,a) = 0$.
2. Symmetry, $d(a,b) = d(b,a)$.
3. Triangular inequality, $d(a,b) \leq d(a,r) + d(r,b)$ for any r belongs to S .

(Rudin, 1976, p.30). A function is, “Consider two sets A and B , whose elements may be any objects whatsoever, and suppose that with each element x of A there is associated, in some manner, an element of B , which we denote by $f(x)$. Then f is said to be a *function* from A to B (or a *mapping* of A into B). The set A is called the *domain* of f (we also say f is defined on A), and

the elements $f(x)$ are called the *values* of f . The set of all the values of f is called the *range* of f .” (Rudin, 1976, p.24). The definition of a function will now allow us to define a sequence. “By a *sequence*, we mean a function f defined on the set J of all positive integers. If $f(n)=x_n$ ” (Rudin, 1976, p.26), for n belong to J , we denote a sequence by x_n . The elements of a sequence are called the terms of the sequence (Rudin, 1976, p.26).

“A sequence $\{p_n\}$ in a metric space X is said to converge if there is a point $p \in X$ with the following property: For every $\varepsilon > 0$ there is an integer N such that $n \geq N$ implies that $d(p_n, p) < \varepsilon$ ” (Rudin, 1976, p. 47). If the range of a sequence is bounded then the sequence is bounded (Rudin, 1976, p. 48).

Let us now define some terms, let S be a metric space and let all the elements and sets mentioned below are elements and subsets of S .

1. A neighborhood of a is a set $N_r(a)$ consisting of all b such that $d(a,b) < r$, for some $r > 0$. Where r is called the radius of $N_r(a)$.
2. A point b is a limit point of the set G if every neighborhood of b contains a point $a \neq b$ such that a belongs to G .
3. A set G is said to be closed if every limit point of G is a point of G .
4. A point a is an interior point of P if there is a neighborhood N of a such that N is a subset of P .
5. P is an open set if every point of P is an interior point of P .

(Rudin, 1976, p.32). Let X be a metric space, and let $\{g_n\}$ represent the sequence of the GDP per capita. Clearly the range of the sequence is bounded. This is due to the simple fact that there are scarce and limited factors of production. Thus the GDP per capita can only increase or decrease by so much. This means that $\{g_n\}$ is bounded.

“A sequence $\{p_n\}$ in a metric space X is said to be a Cauchy sequence if for every $\varepsilon > 0$ there is an integer N such that $d(p_n, p_m) < \varepsilon$ if $n \geq N$ and $m \geq N$ ” (Rudin, 1976, p. 52). Theorem 3.11 states that “In any metric space X , every convergent sequence is a Cauchy sequence” (Rudin, 1976, p. 53).

Let the GDP per capita for every Gulf state be represented as a sequence, then we would hope that all the sequences would converge to similar amounts. The economic level of economic integration of the Gulf States should be measured by the closeness of the convergent limit point for each sequence. The closer are economic ties between the nations, the more similar trend will be followed by each sequence and we would hope that the closer the convergent limit points are.

Econometric Model

Stationary is an important concept to be examined, it guarantees that there are no fundamental fluctuations in the structure of the process. Thus, this property allows the possibility of predicting future values, i.e. the absence of this property for a variable would make it either impossible or difficult to predict future values.

The Unit Root Test will be used to test the stationarity of a variable. Assume y is an ARMA(p,q) processes that are polynomials of a lag operators L , then the model for y is written as follows:

$$y_t = \beta_1 y_{t-1} + \dots + \beta_p y_{t-p} + \varepsilon_t + \theta_1 \varepsilon_{t-1} + \dots + \theta_q \varepsilon_{t-q}$$

The above equation can be rewritten as

$$(1 - \beta_1 L - \dots - \beta_p L^p) y_t = (1 + \theta_1 L + \dots + \theta_q L^q) \varepsilon_t$$

Hence $\beta(L)Y_t = \theta(L)\varepsilon_t$, where $\beta(L)$ is the p th order polynomial in L which recaptures the dynamics of AR in the process and $\theta(L)$ is the q th order polynomial that captures the MA dynamics. The fact that we are dealing with polynomials allows us to calculate their roots λ . The roots are interpreted as the value of L such that $\beta(\lambda) = 0$ or $\theta(\lambda) = 0$ (Greene, 1995, p.556).

To determine the stationary or non-stationarity of the series we are interested in the roots of AR polynomial $\beta(L)$. We calculate the modulus of the root $\lambda = a \pm bi$. The modulus is equal to the $(a^2 + b^2)^{1/2}$. Nonetheless, if λ is real, then $b = 0$ and the modulus is equal to the absolute value of a . The Unit Root Rule for stationarity states that if the modulus of any root of $\beta(L) \leq 1$ then the series is non-stationary. Thus for the series to be stationary all the roots of $\beta(L)$ must lie outside the unit root circle in the complex plane (Greene, 1995, p. 556).

We will use the unit root test to determine whether we can formulate a pattern for the variable over time. In other words, if the variable is stationary then we can draw a pattern for the variable over time. This will allow us to attempt to formulate a sequence for each of these variables.

Since the GCC is formed by the cooperation of “the six rich Gulf oil-producing states” (Al-Momani, 2008, p. 47), it is not surprising for us to try and determine the effect of oil exports on the GDP per capita for each of the Gulf states. In order for us to better understand the effect of the oil export revenues, let us simplify our model and assume that the individual Gulf states have oil as their sole export, and the oil revenues are distributed equally among the population of the country. To take things to a microeconomic level, they are “gas station managers” (Dawoody, 2017) seeking to maximize profit from oil sales.

We know that

$$Y = C + I + G + (X - M)$$

Where Y is GDP; C is consumption; I is investment; G is government spending; X is exports; and M is imports. Thus the relationship between the GDP and oil exports is linear. This is why we will use the simple Linear Regression model. We will then have the following regression model

$$y = \alpha + \beta x + \varepsilon$$

Where y is the GDP per capita for Bahrain in US dollars; α is the y -intercept; β is the slope of the line; x is amount of oil exports for Bahrain in US dollars; and ε is the error term. We will re-run our regression for each of the other five Gulf states.

Results

The data was collected from the World Bank and the Arab Monetary Fund for the period from 1995 to 2015. The Eviews program was used to carry out our statistical analysis.

We will run a unit root test to determine whether the variables are stationary or non-stationary. We will start by testing the GDP per capita for Bahrain variable (BAHRAIN). Hence, we have the following hypothesis:

H_0 : BAHRAIN has a unit root

H_A : BAHRAIN has no unit root

Using $\alpha = 0.05$ and the p-value of the t-test for the Augmented Dickey-Fuller test is 0.7665 – thus $\alpha < p$ -value, we fail to reject the null hypothesis and thus Bahrain has a unit root. Repeating the unit root test for the rest of the variables, we will have the following results:

Table (5) : Augmented Dickey Fuller (ADF) test results

| Variable Name | Unit Root |
|---------------------------------|-----------------------------|
| GDP per capita for Bahrain | Unit Root at variable level |
| GDP per capita for Kuwait | Unit Root at variable level |
| GDP per capita for Oman | Unit Root at variable level |
| GDP per capita for Qatar | Unit Root at variable level |
| GDP per capita for Saudi Arabia | Unit Root at variable level |
| GDP per capita for UAE | Unit Root at variable level |

The above results indicate that the variables are non-stationary and thus the variables do not have a pattern over time. Therefore we cannot draw a pattern for the variables. As a result we cannot find a sequence that can represent each of the variables.

We will now run the Least Squares regression model, then we will test whether the parameters are significant. For the f-test, we will have the following null and alternative hypothesis:

H_0 : $\beta_0 = \beta_1 = 0$

H_A : At least one of the betas does not equal to 0

Using $\alpha = 0.05$ and the p-value is 0.000249 –thus the $\alpha > p$ -value, we reject the null hypothesis. That is the betas of the whole model or at least one of the betas of the model does not equal to zero and thus they are significant or at least one is significant.

We carry out the t-test, and thus we have the following null and alternative hypothesis:

H_0 : $\beta_0 = 0$

H_A : $\beta_0 \neq 0$

Using $\alpha = 0.05$ and the p-value of the t-test is 0.0000 – thus $\alpha > p$ -value, we reject the null hypothesis and thus the beta is significant. For β_1 we have,

$$H_0 : \beta_1 = 0$$

$$H_A : \beta_1 \neq 0$$

Using $\alpha = 0.05$ and the p-value of the t-test is 0.0002 – thus $\alpha > p$ -value, we reject the null hypothesis and thus the beta is significant. We thus have the following results:

Table (6) : Least Squares Regression test results

| Country Name | Intercept | Beta Coefficient | R-Squared |
|----------------------|-----------------|------------------|-----------|
| Bahrain | 32,716.78 | 1.45 | 0.52 |
| Kuwait | 57,950.08 | 0.34 | 0.66 |
| Oman | 31,648.76 | 0.4 | 0.54 |
| Qatar | Not significant | 5.18 | 0.61 |
| Saudi Arabia | 23,624.6 | 0.09 | 0.79 |
| United Arab Emirates | 86,435.63 | -0.26 | 0.54 |

As a general principle, if the positive or negative attribute –about a region, country, or organization- is realized, i.e. people are already benefiting from its advantage or suffering from its disadvantage then that is considered a strength or a weakness. However, if an attribute is not fully explored yet and lots of benefits or losses might be a result if we nurture that attribute or do not take measure to stop that then this is considered either an opportunity or threat. Opportunities and threats can come from any source such as environment, local economy, foreign economy, geo-political, etc... Some of the strength, weaknesses, opportunities, and threats on the GCC are as follows:

Strength:

- Large land area
- Relatively uniform climate (mostly warm) with some diversity
- Relative affluence of the region (can undertake large projects)
- Affluent consumer class (can afford high priced goods)
- Enough oil to meet own consumption (Cheap energy cost)
- Huge source of chemical and petrochemicals
- Access to sea port

Weakness

- Dependence of oil revenue
- Semi arid or arid land
- No tradition of producing manufactured goods at a large scale
- Low food security
- Subsidy based economy, absence of proper market (in the sense of Economic)

Opportunity

- Huge consumer demand
- Population sharing same language, culture and same values
- Comfortable with immigrant workers
- Excellent land, air and sea communication

Threats

- Sustained low oil price
- Emergence of shale gas and methane hydrates
- Austerity/withdrawal of subsidy may not be a popular idea for the general people
- May suffer from Dutch disease

Based on such reality we would like to argue that the easiest (and most probably the only) way for the Gulf countries to survive and prosper in this evolving backdrop will be to cooperate and work for self-sufficiency as a region. That means they need to produce most of the things that they use by themselves and to give internal trade more priority over external trade. Of course they have to use not only economic arguments but also mass media to motivate people who will have to make some (consumption and welfare) sacrifice to meet this goal. After exhausting their possibility of becoming self-sufficient, they should focus on external trade with other countries.

Discussion

As shown in Table 5, the unit root test had indicated that the variables were non-stationary. The first difference was generated for each of the variables in Table 5. Unfortunately, some of the generated variables were also non-stationary at the first difference. This is why we were not able to continue our analysis and as a result no pattern was found.

Looking at Table 6, we noticed that the R-squared had ranged from 0.52 to 0.79. This is actually expected since we have simplified our model and it only included the revenues from oil exports. In the case of Saudi Arabia –having the largest R-squared, 79 percent of the fluctuations in its GDP per capita are explained by the fluctuations in the revenues from the oil exports. Meanwhile, Bahrain had the lowest R-squared. We could have added more variables to our models in order to increase the R-squared, but we were only interested in seeing the effect of oil revenues on the GDP per capita.

All the beta coefficients had a positive sign except for the UAE's beta coefficient. This negative sign is due to the volatility of both the GDP per capita and the revenues from the oil exports variables. These two variables were moving in opposite directions most of the time. However, this result is not accurate. Qatar had the highest beta value with 5.8, followed by Bahrain with 1.45. This had meant that \$1 increase in the revenues from oil exports would result in an increase of \$5.8 in the GDP per capita.

Conclusion

The optimal results that we had hoped to see for the GDP per capita for each of the Gulf States were a monotonically increasing sequence. “A sequence $\{s_n\}$ of real numbers is said to be monotonically increasing if $s_n \leq s_{n+1}$ ($n = 1, 2, 3, \dots$).” (Rudin, 1976, p. 55). We know that when “ $\{s_n\}$ is monotonic. Then $\{s_n\}$ converges if and only if it is bounded.” (Rudin, 1976, p. 55).

Intuitively, we were hoping that the GDP per capita for each of the Gulf States would have been constantly increasing from one year to the next. This would have allowed the GDP per capita for each of the Gulf States to converge to the highest number given the possible combinations of factors of production can produce.

Based on the discussed and given reality of the GCC, we would like to argue that the easiest (and most probably the only) way for the Gulf countries to survive and prosper in this evolving backdrop will be to cooperate and work for self-sufficiency as a region. That means they need to produce most of the things that they use by themselves and to give internal trade more priority over external trade. Of course they have to use not only economic arguments but also mass media to motivate people who will have to make some (consumption and welfare) sacrifices to meet this goal. After exhausting their possibility of becoming self-sufficient, they should focus on external trade with other countries.

Having the strong economic foundations for the GCC would minimize political rivalries and allow the expansion of GCC. The Gulf States need to have the firm believe that they are better off working together and forming an economic bloc. They should increase their economic coordination and form a united economic growth strategy that would benefit all. In addition, they should emphasize their common values and undermine their differences. Only then the GCC can be sustainable over the long run. The only cases were the dismantling the GCC would be beneficial is if it will evolve into a larger body, including more member countries, i.e. expanding its borders to include more of the neighboring countries.

Works Cited

- Al-Momani, B. F. (2008). Reacting to Global Forces: Economic and Political Intergration of the Gulf Cooperation Council. *Journal of the Gulf and Arabian Peninsula Studies* , 34 (128), 47-66.
- Arab Monetary Fund. (2016). *التجارة الخارجية للدول العربية؛ الفصل الثامن 2016 للتقرير الاقتصادي العربي الموحد*.
- Dawoody, A. (2017, 08 01). Qatar Gulf Crisis. (W. A. Samarah, Interviewer)
- Greene, W. H. (1995). *Econometric Analysis* (Second Edition ed.). Englewood Cliffs, New Jersey, United States of America: Printice Hall.
- Hossain, A. (2015). Evolution of Mutual Knowledge-Based Economy in Regional Integration: An Experience from the Cooperation Council of Arab States of the Gulf. *Journal of the Knowledge Economy* , 6 (4), 790-817.
- Liapson, E. (2017, June 13). Will the Gulf Cooperation Council Survive the Saudi-Qatar Crisis? *World Politics Review* , pp. 1-3.
- Neykov, Y. (2014). Issues Facing the European Union - A SWOT Analysis. *Economic Archive/ Narodnostopanski Arhiv* (4), 46 - 57.
- Rudin, W. (1976). *Principles of Mathematical Analysis*. (T. Edition, Ed.) United States of America: McGraw-Hill, Inc.
- مجلة. أهمية التجارة الإلكترونية وموقفاتها في اقتصادات دول مجلس التعاون الخليجي. ع. ه. سلمان & ، أ. عبدالعالي (2013). *الاقتصادي الخليجي* , 24, 123-169.