

اسم المقال: تأثير التجارة الحرة من الناتج المحلي الإجمالي للفرد: من منظور دول مجلس التعاون الخليجي

اسم الكاتب: سعاد محمد الشريف

رابط ثابت: <https://political-encyclopedia.org/library/8884>

تاريخ الاسترداد: 2026/04/11 14:34 +03

الموسوعة السياسية هي مبادرة أكاديمية غير هادفة للربح، تساعد الباحثين والطلاب على الوصول واستخدام وبناء مجموعات أوسع من المحتوى العلمي العربي في مجال علم السياسة واستخدامها في الأرشيف الرقمي الموثوق به لإغناء المحتوى العربي على الإنترنت. لمزيد من المعلومات حول الموسوعة السياسية - Encyclopedia Political، يرجى التواصل على [info@political-encyclopedia.org](mailto:info@political-encyclopedia.org)

استخدامكم لأرشيف مكتبة الموسوعة السياسية - Encyclopedia Political يعني موافقتك على شروط وأحكام الاستخدام المتاحة على الموقع <https://political-encyclopedia.org/terms-of-use>



UNIVERSITY OF SHARJAH  
where civilizations meet

# University of Sharjah Journal

International Refereed Periodical

*of*

**Humanities  
& Social  
Sciences**



Vol. 12, No. 2

Raby Al-Awal 1437 A.H. / Dec. 2015 A.D.

ISSN : 1996 - 2339

# The Impact of Free Trade on GDP per Capita: The GCC Perspective

**Souad M. Sherif**

*College of Business Administration - University of Sharjah  
Sharjah - United Arab Emirates*

*Pima Community College  
Tucson, Arizona - USA*

**Received on : 29-04-2014**

**Accepted on : 04-06-2014**

## **Abstract**

Free trade increases overall world production of goods and services and is a positive sum game in which all participating countries realize economic gains, a fact which is suggested in the theory of comparative advantage. Vast literature also uses cross-country regressions to search for empirical linkages between trade and income. However, research within the Gulf Cooperation Council (GCC) context remains limited; this study is an attempt to fill this gap by determining the correlation between trade freedom and GDP per capita for the six GCC countries over a period of 13 years (1999-2012). The evaluation of data from the GCC countries in this study demonstrates a strong correlation between KSA and UAE's level of trade freedom (according to its Trade Freedom Index) and its GDP per capita. Exceptions to this trend taking into consideration the different sizes (economically and population) are Kuwait, Bahrain, Oman, and Qatar, as these countries have experienced different economic systems and trade barriers. A cross-section regression model concludes that the convergence hypothesis is supported and their unique economic and repression tends to constrain the trade liberalization index influence on the economic growth. One unit change in FTI leads on average to 0.22 point change in GDP per Capita rates on average, ceteris paribus. It can be concluded that, the GDP per capita in the country is mainly driven by greater trade liberalization.

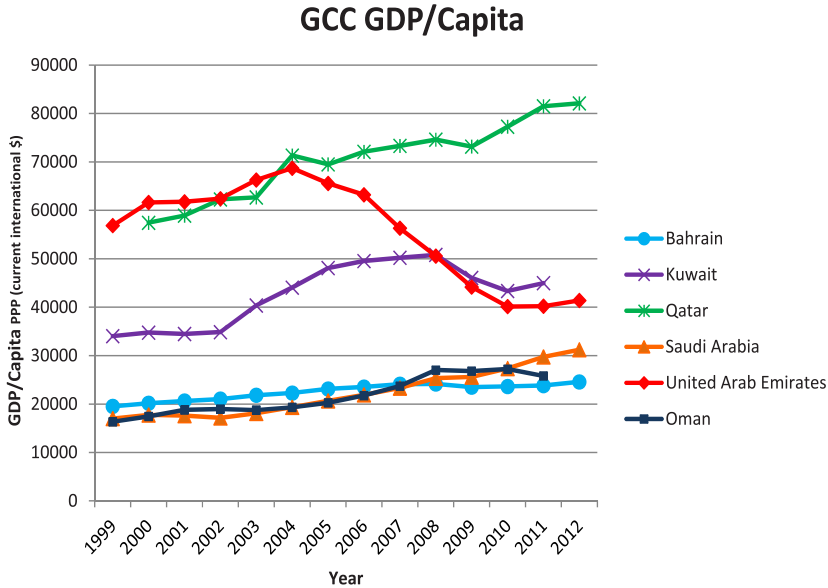
**Keywords:** Economic freedom; GCC; Trade Freedom Index; GDP per Capita  
Subject classification codes: F1, O4, E00

## Introduction:

International trade is important as it contributes toward the economic growth of a nation (Ben-David, Nordstrom, & Winters, 1999,). International trade has experienced changing patterns particularly since World War II and subsequently global trade has expanded faster than global Gross Domestic Product (GDP) (McDonald, Robinson & Thierfelder, 2008). In addition since the 1990s the number of bilateral free trade agreements has risen (Hur & Park, 2012).

In the Gulf Cooperation Council (GCC: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) context, the developing member GCC countries with similar incomes trade extensively more with each other and this can be partly explained by supporting the argument that the income similarity effect is only applicable to developed countries with very small difference in incomes (Sherif, 2013). According to the Economist, from 2002–2006, GCC countries exported a total \$ 1.5 trillion, of which \$ 1 trillion have been spent on imports. Over the same period, an average of 30% of total UAE imports came from the Europe while 70% from other countries. The UAE economy is the second largest in the GCC after Saudi Arabia. The combined GDP of GCC countries is \$ 646 billion; Saudi Arabia's GDP represents 42% of the GCC followed by the UAE with 27%. However, in terms of GDP per capita, Saudi Arabia ranks last with \$ 13,600 while the UAE second with \$ 26,610. Qatar has the highest GDP per capita in the GCC with \$ 32,000, and this is illustrated in Figure(1).

**Figure 1: GCC GDP per Capita (1999-2012)**



Source: Adapted from the World Bank Data Bank

“Economic freedom” means the degree to which a market economy is in place, where the central components are voluntary exchange, free competition, and protection of persons and property (Gwartney & Lawson, 2002). The concept of economic freedom is relatively new attributing to limited research on mutual effects of free trade between countries especially in the GCC context and openness is challenging to define. The current analyses models primarily evaluate the correlation between a country’s degree of openness and its growth (Hur & Park, 2012). Research study conducted by Mahmood et al., (2010) selected members of South Asian Association for Regional Cooperation (SAARC) and evaluated their economic freedom index (EFI) from 2008 (The Heritage Foundation) and financials from 2007 (according to the International Monetary Fund); imports, exports, GDP and foreign direct investments were evaluated with results indicating that freedom to private sectors (including trade freedom) leads to economic prosperity. Other factors such as property rights, business freedom and freedom from corruption also contributed to economic prosperity.

A study by Cebula & Elkstrom (2009) concluded that economic growth was greater

in countries with higher levels of trade and business freedom, secure systems of property rights protection, and monetary freedom in nations belonging to the Organization for Economic Co-Operation and Development (OECD). Lastly, Wu (2011) evaluated the linkage between economic growth and economic freedom in China by using the EFI. His study indicated that China was ranked 7th in the world in terms of real GDP growth and had an EFI of 52 in 1995 but by 2008 this had dropped to 15 in terms of real GDP growth and a stable EFI of 53.1. Wu (2011) explained, China had experienced increasing growth which was accompanied by an undeveloped legal and financial system, lack of economic freedom and high levels of corruption. With these findings, China differs from the results of other cross-country data which demonstrate that improvements in economic freedom are associated positively with real GDP (Wu, 2011). The literature indicates that trade freedom is associated with GDP and increases in freedom result in corresponding increases in GDP per capita, with the exception of China due to political and financial system limitations.

The GCC Custom Union has the potential to enhance new opportunities of trade as it goes beyond the removal of tariffs to the elimination of non-tariff trade barriers and the establishment of common standards and regulatory regimes which should strengthen levels of trade. Furthermore, the emphasis on the production of tradable goods would facilitate high trade between these rapidly growing developing countries in the long-run (Sherif, 2013). The bilateral trade relationships between three GCC nations, Saudi Arabia (KSA), Bahrain, and Qatar—over the last 30 years (1981-2010) has indicated that distance related negatively to the level of KSA export level, while the gross domestic product, population growth, and gross domestic product per capita have a positive relationship with the level of KSA export level. These results provide evidence that KSA's exports trade significantly depends upon on the economic sizes of the other countries (Bahrain and Qatar) (Sherif, 2013). Previous studies in the GCC indicate there is a positive correlation; as trade increases the GDP per capita increases.

The question arises; does free trade result in higher GDP per capita? This will be answered by identifying any correlation between free trade and GDP growth per capita utilizing measures of Free Trade Index and GDP per capita over time in GCC context.

## Materials and Method:

In this study, three measures of trade freedom were utilized. Firstly, trade as a percentage of GDP which provides a measure of trade freedom through the

sum of imports and exports of goods and services measured as a share of GDP. The GDP per capita data were available in several units namely: current US\$, constant 2000 US\$, constant 2005 International \$ (adjusted for PPP), current International \$ (adjusted for PPP) and constant local currency unit. Attention was given to units of measure which showed real growth free from the effects of exchange rate fluctuations and inflation therefore, Purchasing Power Parity (PPP) is the strongest measure to provide a reflection of GDP in terms of purchasing power free from exchange rate effects (World Bank, 2012). Current pricing reflects the value of a currency in the year being reported whereas constant pricing shows the applicable value for a particular base year. Constant pricing therefore eliminates the effect of inflation and shows true growth over time. Therefore, "Constant 2005 International \$" was chosen to measure GDP per Capita in this research. Secondly, the Trade Freedom Index (TFI) published by the Heritage Foundation (2011) as a component of EFI which considers direct trade barriers such as trade tariffs and non-tariff barriers. Thirdly, in an attempt to establish a statistically significant relationship between economic growth and a particular variable of interest, most researchers consider only a small number of explanatory variables. This study utilizes a linear regression model to determine the correlation between the TFI and GDP per Capita. Average GDP/ Capita model in country  $i$  is a function of Free Trade

$$y_i = \alpha + \beta T_i + \varepsilon_i, \quad i = 1, \dots, n.$$

Where:

- $y_i$  is the value of GDP per Capita for country  $i$  current International \$ (adjusted for PPP)
- $T_i$  is Trade Freedom Index (TFI)
- $\beta$  is the coefficient the size of the effect of the FTI on the GDP per Capita
- $\alpha$  is the value of GDP per Capita when the FTI is equal zero
- $\varepsilon_i$  reflects other influences on GDP/Capita for country  $i$

The basic framework for estimating the impact of free trade on the GDP per Capita is the long-established and empirically highly successful linear regression model. The Weighted Average Tariff Rate across all Products which indicates of the level of government hindrance to free trade (the higher the tariff, the lower the trade freedom).

## Results:

Trade freedom graphs are shown below for the six GCC nations (Figures 2-7), GDP per capita is represented on the left axis and corresponds to solid lines along the curves, while the right axis represents measures of trade freedom (per cent) and corresponds to the dashed lines. Generally most country's indicators of increasing trade freedom (i.e. tariff rates down, TFI and Trade % of GDP increase) are largely correlated with increasing GDP per capita. There is an increasing trend in GDP per capita over the last 13 years with Saudi Arabia and Oman showing the most growth through a 4.5 increase in GDP per capita.

### Saudi Arabia:

Represented in Figure 2, Saudi Arabia's TFI increased by 2.68% per annum over the period whereas GDP per capita increased by only 4.48% per annum compared with most other GCC countries where the increase in GDP per capita increased at a higher rate than TFI. The reasons for this are unclear and would require further analysis beyond the scope of this study.

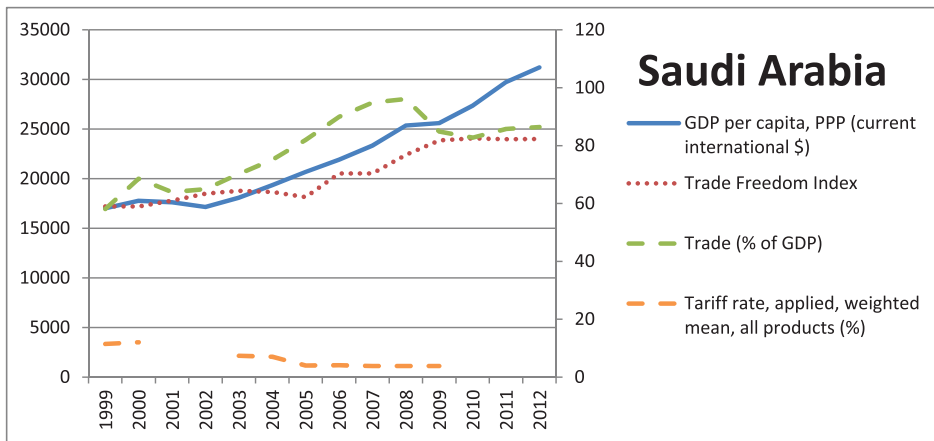
### United Arab Emirates (UAE), Qatar and Oman:

UAE's TFI increased by 0.56% per annum over the period whereas GDP per capita decreased by 2.19% per annum. Qatar's TFI increased by 0.86% per annum over the period whereas GDP per capita decreased by only 3.91% per annum. Both countries experienced similarity TFI and GDP per Capita behavior. Oman's TFI increased by 1.24% per annum over the period whereas GDP per capita decreased by only 4.60% per annum. UAE, Qatar and Oman between 1999 and 2006 had slowly rising TFI and somewhat increasing GDP however there was a significant trough in TFI measures in 2006. In the years that followed UAE's, Qatar's and Oman's TFI had increased gradually, however GDP continued to increase progressively demonstrating there is inverse relation between TFI and GDP in both countries as represented in Figures 3, 4 and 5. This relationship could be attributed to the significant impact of the recent economic crises even though these three GCC countries especially UAE have increased trade liberalization in the past decade. In addition, large change in trade freedom that corresponds to a large change in GDP/capita especially in Qatar.

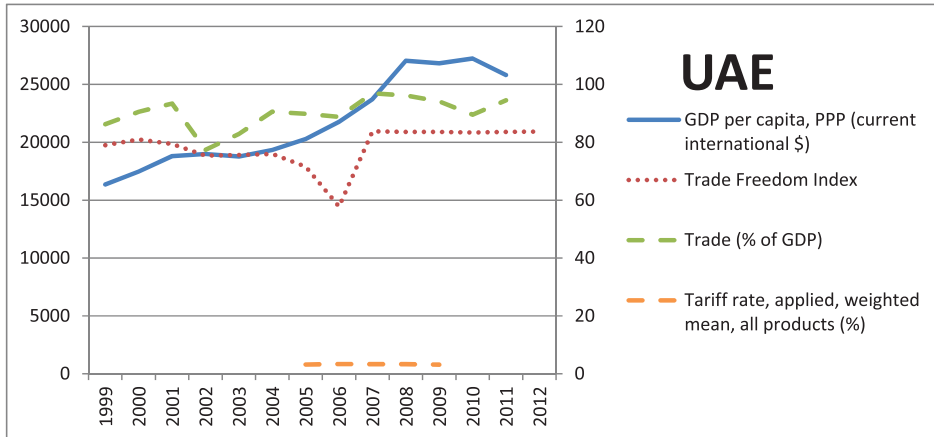
**Kuwait and Bahrain:**

Figures 6 and 7 illustrate Kuwait’s TFI increased by 0.37% per annum over the period whereas GDP per capita decreased by only 1.48% per annum. Bahrain’s TFI increased by 0.546% per annum over the period whereas GDP per capita decreased by only 1.80% per annum. Another example of lack of correlation between GDP and TFI are Kuwait and Bahrain. Although there was a slight increase in TFI between 1995 and 2012 this was accompanied by a number of peaks and troughs. In contrast GDP had steadily increased in Bahrain and progressively more increase with in Kuwait, there was a significant trough in 2010. However, in the past decade there has been significant change in Kuwait’s political climate. Also, there was widespread violence and political instability in Bahrain (Economist Intelligence Unit, 2012) that may have contributed to changes in GDP and TFI.

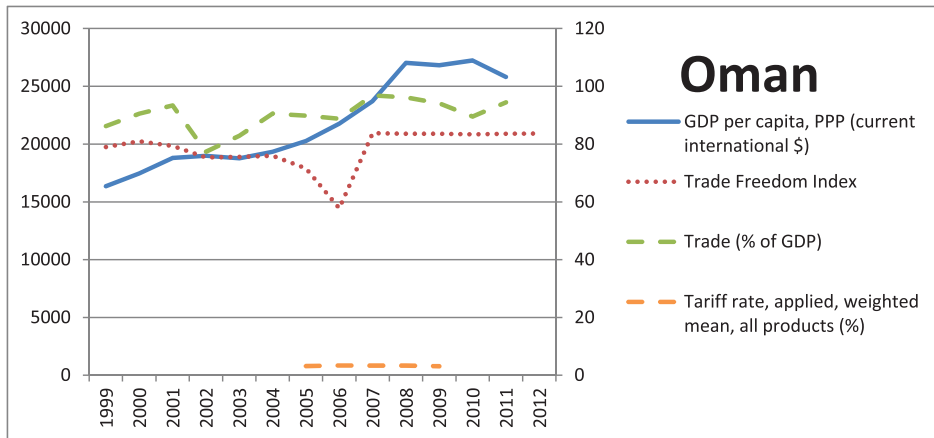
**Figure 2: Trade Freedom vs. GDP per Capita for Saudi Arabia**



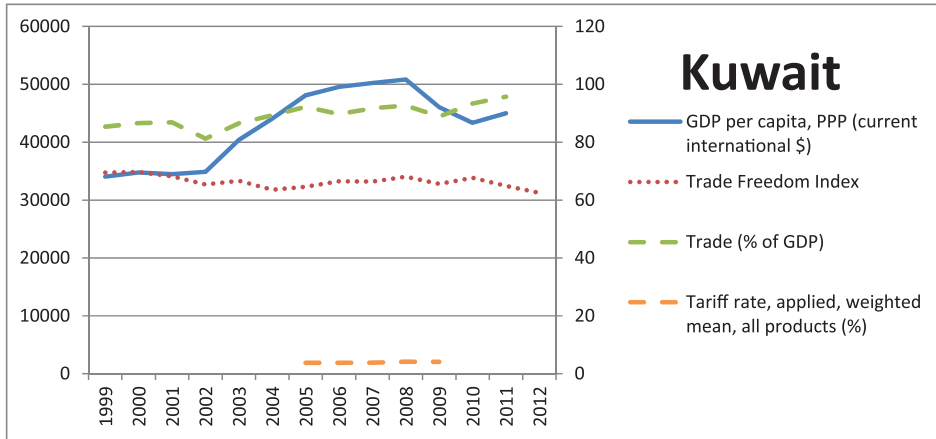
**Figure 3: Trade Freedom vs. GDP per Capita for UAE**



**Figure 4: Trade Freedom vs. GDP per Capita for Oman**



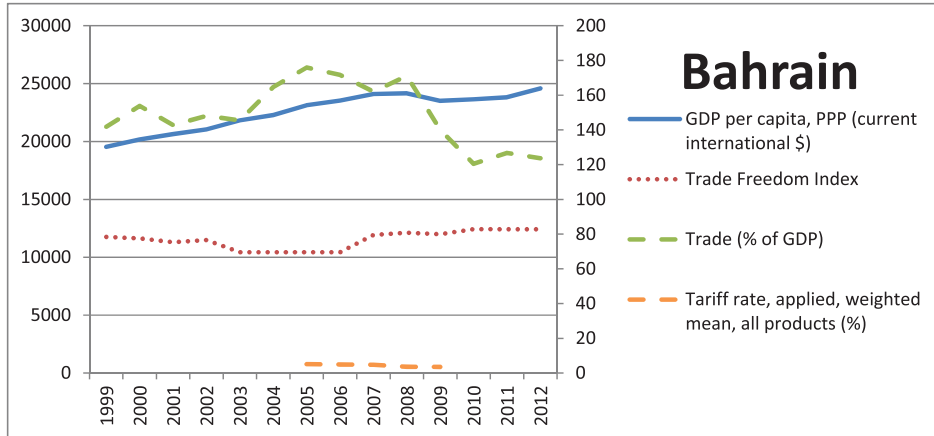
**Figure 5: Trade Freedom vs. GDP per Capita for Kuwait**



**Figure 6: Trade Freedom vs. GDP per Capita for Qatar**



**Figure 7: Trade Freedom vs. GDP per Capita for Bahrain**



Parameter estimates from each country based on the regression results showed that the FTI of the country under consideration has a mixed effect on their GDP per Capita. The regression results with GDP per capita as a dependent variable and FTI as the independent variable from 1999 through 2012 are consistent with the theoretical expectation.

The results found a strong correlation of 90% in KSA and 82% in UAE between GDP per Capita and FTI. On the other hand, the remaining GCC countries, Qatar, Oman, Bahrain and Kuwait had the variation of GDP per Capita as explained by the FTI with results of 30%, 15.21%, 7.36%, and 2.65% respectively; this reflects a weak correlation between GDP per Capita and FTI. Since KSA accounts for 47% of total region's exports and 37% of the region's imports; this makes it the most important trader in the GCC followed by the UAE with a share of 22% and 36% respectively (Sherif 2013). Furthermore, KSA and UAE have more trade openness compared to other GCC nations, and an open economy offers a more attractive environment for trade opportunity which explains the regression results of this study (Akhtar, Khan Husain 2013).

Table (1) reported the regression results that indicate for every one unit increase in UAE FTI leads to a small but significant reduction in its GDP per Capita, while the coefficient estimates for the remaining five countries considered in this study (KSA, Oman, Kuwait, Qatar, and Bahrain) tend to have a positive relationship, as FTI increases the GDP per Capita increase. However the coefficient estimates for KSA, UAE and Oman are statistically significant ( $P < .005$ ) with 95% Confidence.

The remaining three countries considered coefficient estimates in this study (Kuwait, Qatar, and Bahrain) were not statistically significant.

**Table 1: Summary of the Regression Results**

	Saudi Arabi	UAE	Oman	Kuwait	Qatar	Bahrain
<b>R-sq</b>	0.908138407	0.817139683	0.152164325	0.026586683	0.301018338	0.073606624
<b>Significance F</b>	0.00000014	0.00000919	0.167943589	0.57755345	0.042186852	0.348114611
<b>Constant, Intercept</b>	8.474327662	15.95052399	9.181302754	9.698248879	9.526179269	9.72319603
<b>Free Trade</b>	0.021676447	-0.064262821	0.010346898	0.011993008	0.020863229	0.003888541
<b>t Statistic, Intercept</b>	60.36860002	23.15718833	16.54770117	5.844153196	13.45698678	31.72038973
<b>t Statistic, Free Trade</b>	10.89180003	-7.322831487	1.467544238	0.572498109	2.273286687	0.976453019
<b>P&gt; t or P value, Intercept</b>	0.000000000	0.000000000	0.000000001	0.000079095	0.000000013	0.000000000
<b>P&gt; t or P value, Free Trade</b>	**0.000001412	**0.000009186	0.167943589	0.57755345	*0.04218685	0.348114611

The estimated regression parameters in KSA showed that if the FTI equals 0 the GDP per Capita will equal 8.47 and for every one unit increase in FTI will lead to the increase to the GDP per capita by 0.022. Effects for both parameters are statistically significant ( $P < 0.001$ ) 99% Confidence Intervals for Slope coefficient. This result can be attributed to KSA's overall economic freedom which remains constrained by institutional shortcomings.

In the UAE, if the FTI equals 0, the GDP per capita will equal 15.95 and for every one unit increase in FTI will lead to the decrease of the GDP per capita by 0.064. Effects of both the intercept and slope are statistically significant ( $P < 0.001$ ). 91% Confidence Intervals for Slope Coefficient The UAE is a regional leader in economic freedom; which includes advancements in the management of public

spending and market openness, and overall this could have direct relation with their GDP per Capita.

For Qatar, the results showed that if the FTI equals 0, the GDP per capita will equal 9.53 and for every one unit increase in FTI will lead to an increase of the GDP per Capita by 0.021. Effects of both the intercept and slope are statistically significant ( $P < .005$ ) 95% Confidence Intervals for Slope Coefficient. This result may be attributed to the decline in the control of government spending and trade freedom. Qatar financial freedom has advanced significantly, and gains in business freedom, labor freedom, and monetary freedom have improved overall regulatory efficiency.

For the remaining countries, Oman, Kuwait and Bahrain, the results were similar and showed that if the FTI equals 0, the GDP per capita will on average be 9.53 and for every one unit increase in FTI will lead to an increase of the GDP per Capita on average by 0.009. Effects of both the intercept and slope are statistically insignificant for each of these countries. These results may be due to other factors such as improvements in monetary freedom, labor freedom and new open-market policies not related to FTI which is beyond the scope of this study.

Finally, the results of the cross-section regression models is concluded that the convergence hypothesis is supported and their unique economic and repression tends to constrain the trade liberalization index influence on the economic growth. One unit change in FTI leads on average to 0.22 point change in GDP per Capita rates on average, *ceteris paribus*.

## Conclusion:

The aim of the study is to measure the influence of the FTI on the GDP per Capita in the six GCC nations over a period of 13 years (1999-2012) using cross-country regressions to search for empirical linkages between trade and income. Empirically this study concludes that a strong link exists between FTI and GDP per Capita for KSA and UAE. On the other hand, Kuwait, Qatar, Bahrain and Oman demonstrate that other factors play a role in GDP per Capita growth outside of FTI. While trade freedom is a necessary condition for increasing GDP per capita, it is not a sufficient condition and other factors such as improvement in business freedom, monetary freedom and property rights can influence the GDP per Capita. A cross-section regression models concludes that the convergence hypothesis is supported and their unique economic and repression tends to constrain the trade liberalization index influence on the economic growth. One unit change in FTI leads on average to 0.22 point change in GDP per Capita rates on average, *ceteris paribus*.

It is conceivable that trade liberalization may lead to faster growth of imports than exports if the countries such the majority of the GCC were highly protected in pre-liberalized period. The faster growth in imports in relation to exports could have serious implications for balance of trade and this in itself could constrain economic growth in some of the GCC economies. Economies of GCC countries with a relatively specialized export structure are more vulnerable to adverse terms of trade shocks so that the sustainable level of their current-account deficit tends to be lower than that of economies with a more diversified export structure. In addition, the adverse impact of the recent global financial crises (2008-2009) in the GCC countries has significant impact on the economic growth. An obvious policy conclusion from the above is that GCC countries need to strive for diversification with a view to raising the proportion of manufactures in their exports. Output expansions of low-technology manufactured goods with no barriers to entry in the world market have resulted in falls of export prices for developing countries including GCC countries.

Future study could be directed to investigate the impact of other variables such as openness, investment rates, density of population and government consumption to GDP. Future research studies may also wish to focus on other factors that influence GDP per Capita in the GCC region such as trade barriers, and regional and sub-regional trade, and non-tariff barriers.

## References:

- Akhtar, M. H., Khan, M. B., & Hussain, S. (2013). Determinants of Resource-Seeking Foreign Direct Investment: Co-Integration and Causality Analysis for Saudi Arabia. *British Journal of Management & Economics*, 3(4).
- Ben-David, N., Nordstrom, H., & Alan, L. Winters. 1999. "Trade, Income Disparity, and Poverty". *Special Studies*, 5.
- Berggren, N. (2003). The benefits of economic freedom. *Independent Review*, 8(2), 193-211.
- Cebula, R. J., & Ekstrom, M. (2009). Economic Growth, Economic Freedom, And Governance. *Journal of International Business & Economics*, 9(3).
- Country Report. Economist Intelligence Unit., 2012
- Gwartney, J., Hall, J., & Lawson, R. (2012). *Economic Freedom of the World: 2011 Annual Report*.
- Gwartney, J. D., Holcombe, R. G., & Lawson, R. A. (2004). Economic freedom, institutional quality, and cross-country differences in income and growth. *Cato J.*, 24, 205.
- Hur, J., & Park, C. (2012). Do free trade agreements increase economic growth of the member countries?. *World development*, 40(7), 1283-1294.
- O'Driscoll, G. P., & Holmes, K. R. Melanie Kirkpatrick, eds. 2012. *Index of Economic Freedom*. Heritage Foundation
- McDonald, S., Robinson, S., & Thierfelder, K. (2008). Asian growth and trade poles: India, China, and East and Southeast Asia. *World Development*, 36(2), 210-234.
- Mehmood, S., & Carter, D. (2012). Dynamics of Exports and Economic Growth at Regional Level: A Study on Pakistan's Exports to SAARC. *Journal of Contemporary Issues in Business Research*, 1(1), 11-19.
- Scully, G. W., & Slottje, D. J. (1991). Ranking economic liberty across countries. *Public Choice*, 69(2), 121-152.
- Sherif, S., & Fantazy, K. (2013). Factors influencing export in bilateral trade: An empirical investigation in the Middle-East context. *International Journal of Management, Economics and Social Sciences (IJMESS)*, 2(1), 12-27.
- Sherif, S., (2013). Intra-Regional Trade, Evidence from the UAE: A Gravity Model Approach. *International Trade and Economic Development*, 7(3)
- Spindler, Z. A., & Vanssay, X. D. (2002). Constitutions And Economic Freedom. *South African Journal of Economics*, 70(6), 1135-1147.
- World Bank, *World Development Indicators* (2014). Retrieved from <http://data.worldbank.org>
- Wu, C. (2011). Economic freedom, economic growth, and China. *Chinese economy*, 44(5), 104-119.
- International Financial Statistics, Washington, DC: International Monetary Fund, various years
- World Bank Economic Indicators, Washington, DC: World Bank, various years

## تأثر التجارة الحرة من الناتج المحلي الإجمالي للفرد: من منظور دول مجلس التعاون الخليجي

سعاد محمد الشريف

كلية إدارة الأعمال - جامعة الشارقة

الشارقة - الإمارات العربية المتحدة

كلية بيما للمجتمع

توسان، أريزونا - الولايات المتحدة الأمريكية

### ملخص

تزيد التجارة الحرة من فرص زيادة الإنتاج العالمي الإجمالي من السلع والخدمات وهي الداعم الأساس الذي تستفيد منه اقتصاديا جميع الدول المشاركة فيها، والذي يظهر وفقا لنظرية المزية النسبية. وقد استخدمت كثير من المؤلفات العلمية التطور التجاري بين الدول للبحث عن العلاقات التي تربط بين التجارة والدخل، وإن كان البحث في هذا المجال في دول مجلس التعاون الخليجي لا يزال محدودا. وتعتبر هذه الدراسة محاولة لسد هذه الثغرة من خلال تحديد العلاقة بين حرية التجارة والناتج المحلي الإجمالي للفرد لدول مجلس التعاون الخليجي الست على مدى الثلاثة عشر عاماً (2012-1999). ومن خلال تحليل البيانات الموجودة لدول المجلس في هذه الدراسة يتبين وجود علاقة بين المملكة العربية السعودية ودولة الإمارات العربية المتحدة في مستوى حرية التجارة (وفقا لمؤشر حرية التجارة للدول المذكورة)، وناتجها المحلي الإجمالي للفرد. ولكن الأمر مختلف في كل من الكويت، والبحرين، وعمان، وقطر إذا ما أخذ في الاعتبار اختلاف الحجم الاقتصادي والسكاني، وذلك لأن هذه الدول كان لها أنظمة اقتصادية وقيود تجارية مختلفة.

وقد انتهت الدراسة إلى أن المقطع العرضي لنماذج التراجع إلى دعم فرضية التقارب وأن القيود الاقتصادية تميل لتقييد تأثير مؤشر حرية التجارة ومن ثم تأثير ذلك في النمو الاقتصادي، مما يؤدي إلى تغيير الوحدة الواحدة لمؤشر حرية التجارة في مبادرة المسار السريع في المتوسط إلى 0.22 نقطة في المتوسط للناتج المحلي الإجمالي للفرد، مع ثبات العوامل الأخرى. يمكن الاستنتاج بأن تحرير التجارة هو المحرك الأساس للناتج المحلي الإجمالي للفرد وبالتالي للنمو الاقتصادي للدولة.

**الكلمات الدالة:** الحرية الاقتصادية؛ دول مجلس التعاون الخليجي؛ مؤشر حرية التجارة؛ نصيب الفرد من الناتج المحلي الإجمالي. رموز التصنيف: ف 1, و 4, إي 00