Oil Exports and Economic Growth: An Empirical Evidence from Saudi Arabia

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ABSTRACT

Being an oil-based economy, the economic prosperity of Saudi Arabia to a large extent depends upon the international price of crude oil. A substantial portion of public revenue which determine the economic activities of the government comes from oil exports. Oil exports are also important for earning the foreign exchange to fulfill the import requirements of the country. Hence any disturbance in this sector is likely to affect the entire economy of Saudi Arabia. This paper applies Johansen cointegration method to establish long run relationship of economic growth with oil exports, imports and government consumption expenditure. The study finds that economic growth has a positive long run relationship with oil exports, and consumption expenditure of the government. Further, there is a negative long run association between imports and economic growth. Finally, the study recommends regulating imports and intensive efforts to diversify economic base in import substituting industries.

Keywords: Oil Export, Economic Growth, Causality, Saudi Arabia
JEL Classifications: C22, F14, H50, N15

1. INTRODUCTION

Fluctuation in petroleum prices and consequent fluctuation in export proceeds in oil-based economy like Saudi Arabia influence most of the macroeconomic variables. The four-fold increase in petroleum price in 1973 led to substantial increase in contribution of proceeds from oil exports in national income, balance of payment and government revenue of the country. These have made many favorable impacts on the economy of Saudi Arabia. Increase in export proceeds augmented the foreign exchange reserves of the country. This enabled the country to import necessary consumer, capital and intermediate goods and services required for growing developmental and other needs of the country. Further, owing to comfortable fiscal conditions, the government followed expansionary fiscal policy and increased government expenditure on various projects. The increased expenditure through its multiplier-acceleration linkages accelerated rate of economic growth in the 1970s. The favorable time, however, didn't continue for long. During larger part of the 1980s and 1990s, the oil prices turned unfavorable for oil exporting countries including Saudi Arabia. This made an adverse impact on export revenue

and economic growth of the country. The economy revived in the first decade of the 21st century with the rise in crude oil prices and export revenue. Since 2012, the international price of crude petrol once again started declining that resulted in downward movement in export and government revenue.

The effect of change in oil price and export proceeds is transmitted in the economy through import and public expenditure. Though the classical economists were of the view that the public expenditure was unproductive and therefore the government restricted their activities to defense and for maintaining of law and order. They believed in laissez faire system and considered market forces as most efficient mechanism for the working of the economy. It was argued that money in the private hands would bring better returns. Since public expenditure implies transfer of money away from private hands, this would result in inefficient utilization of national resources. In the 20th century, John Maynard Keynes had shown the importance of public expenditure in economic growth of the country. Since then, the importance of public expenditure is realized and almost all the countries have witnessed a rising trend of such expenditure.

There are people who argue that increase in public expenditure may negatively influence the level of investment and growth of an economy. They are of the views that increase in expenditure financed by higher taxes on households and firms would have dampening effect on aggregate demand. This would reduce net profits of the firms and hence investment. If the government finances its expenditure through borrowing from banks, this would put an upward pressure on rate of interest and would negatively affect the investment level in the economy. There are also people who favor public expenditure because of its positive impact on investment and other economic variables. Interest rate is only one of the factors or cost components of investment besides level of educational development, transport facilities, availability of electricity, and income with the people etc. If public expenditure improves all these conditions, the investors would be motivated to invest more. Further, more income with the people would increase the aggregate demand in the economy and thus would stimulate the level of investment in the economy. For the economy like Saudi Arabia, where tax is negligible, and capital with the government is not scarce, thanks to oil revenue, the government finances its expenditure without resort to either borrowing from the market or imposing additional taxes. The public expenditure is less likely to crowd out private investment. In fact, it is more likely to have positive impact on level of investment in the economy due to its backward and forward linkages and also by pushing up aggregate demand. Because of this, fiscal policy in the form of public consumption expenditure has been an important policy instrument in country's economic policy. The public consumption expenditure has increased from 3989 million riyal in 1970 to 183804 million riyal in 2000 and further to 73956 million riyal in 2014. This period also corresponds to rise in level of investment in the country.

Another important channel through which effect of oil exports is transmitted in the economy is import of consumers' and producers' goods and services. Recent endogenous growth model has emphasized the role of imports through which new knowledge and technology is channeled to an economy. Capital goods like machines and equipment embodying new technology comes into the economy, improves the productivity of labor and helps in accelerating economic growth (Lee, 1995; Mazumdar, 2001). If foreign exchange reserves are enough, import of high quality goods may expand production possibilities and promote economic growth (Baharumshah and Rashid, 1999). By stabilizing the price level, the import of essential consumer goods also helps in fostering economic growth through steadying the economy and boosting confidence among the investors. In the case of Saudi Arabia, sufficient foreign exchange reserves thanks to high crude oil prices in the 1970s and first decade of 21st century helped the country to import consumer as well as intermediate and capital goods. This would have facilitated the country to attain high rate of economic growth during the period as evident from relatively high rate of growth during the 1970s and 2003-2012 periods. There is other line of thinking too, with regard to effect of import on economic growth of the country. Infant industry model argue that import may adversely affect the industrial growth of the country. Lucas (1988) has also concluded that import may negatively impact economic growth of the country.

Since last few years, there is a downward pressure on the oil price and hence on the revenue generated from oil sector in Saudi Arabia. This would tighten the hands of the government in pursuing expansionary fiscal policy through increased public expenditure. This may also impact investment level and hence on employment and growth of the economy. Keeping this in mind, the present study intends to examine the impact of oil exports on economic growth in Saudi Arabia. The rest of the paper is structured as follows. Section 2 describes importance of public expenditure in Saudi Arabia. Review of relevant literature has been discussed in section 3. Next section discusses the model, data and empirical methodology. This is followed by analysis of empirical results. Finally, the paper presents conclusion.

## 2. IMPORTANCE OF OIL SECTOR IN SAUDI ECONOMY

Saudi Arabia is one of the largest and fastest growing economies of Middle East and North African (MENA) region. Despite continuous efforts to diversify the economy, Saudi remains primarily an oil based economy. Oil contributes about 90% of government total revenues, about 88% of export earnings and about 35% of gross domestic product (GDP). Along with the oil price, the share of this sector in government revenue and in GDP changes in same direction along the change in oil price. For example, during the 1990s the price of oil declined from 20.8 dollar per barrel in 1990 to 17.45 dollar per barrel in 1999, the contribution of this sector in GDP also declined from 20.8% in 1990 to 17.5% in 1999 and its contribution in GDP declined from 75.3% to 70.8% during the corresponding period. Since 2000, the price of oil increased and the share of this sector in government revenue increased from 83.1% in 2000 to 91.8% in 2012 and the share in GDP increased from 40.5% to 49.9% in 2012. However, its contribution in total exports remained stable around 87–89% during the period. Since then, however, as the price of oil declined, the share of oil sector in all these three variables also declined. This is also depicted in following Figure 1.

The revenue generated from the oil sector also helped the Saudi government in following expansionary fiscal policy in the form of substantial increase in public expenditure. The public expenditure increased from 6273 million Saudi Riyal (SAR) in 1970 to 284650 million SAR in 1981. In the 1980s, however, due to decline in oil price the expenditure of the government decreased to 154870 million SAR in 1989. In the 1990s, public expenditure fluctuated between 170000 million SAR and 235000 million SAR. In the new century, public expenditure increased from 235000 million SAR in 2000 to 1109903 million SAR in 2014 and then declined to 830513 million SAR by 2016.

The trends of consumption and capital expenditure are shown in Figure 2. The diagram shows that with oil boom in 1972, the consumption and capital expenditure both increased but capital expenditure increased more rapidly than the consumption expenditure until 1981. During the period Saudi government focused on financing different development projects like education, health, housing, transportation and telecommunication

Figure 1: Share of oil sector in gross domestic product, export and government revenue
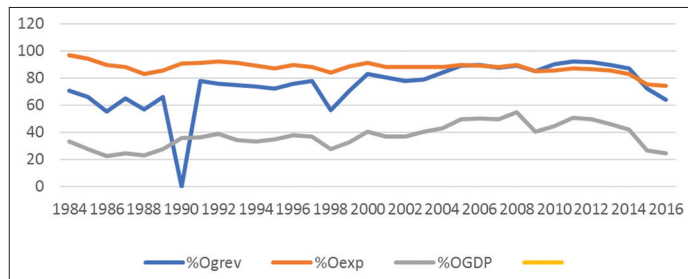
Source: Saudi Arabian Monetary Agency

Figure 2: Trends of consumption and capital expenditure in KSA
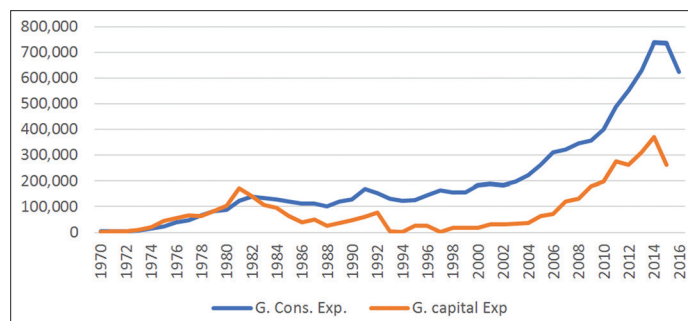
Source: Saudi Arabian Monetary Agency

services required for development of the country. Since then, the capital expenditure shrank sharply following the decline in oil revenues due to decline in oil price and became lower than the current expenditure. The consumption expenditure during the 1980s declined marginally. The consumption expenditure once again picked up since 1994 later followed by capital expenditure since 1998, but the gap between the two widened. The consumption expenditure reached 736139 million SAR in 2015. Defense, education, general public service, economic service and health were the major components of consumption expenditure. Education and health are the major areas which has attracted more attention of the government. Their share has increased from 21% to about 30% and from about 6% to about 15% respectively during 1994 to 2015.

3. REVIEW OF LITERATURE

Export has long been considered as an important tool for economic growth. It helps in accelerating economic growth by encouraging technical know-how (Grossman and Helpman, 1991), improves productivity of production factors (Balassa, 1978; Krueger, 1980), providing economies of scale (Chenery and Strout, 1966; Helpman and Krugman, 1985). Many empirical studies have also been done to examine the relationship between exports and economic growth. Jung and Marshall (1985) found that export led to economic growth in the case of four out of 37 countries taken in the sample. El-Sakka and Al-Mutairi (2000) in their study on 16 Arab countries found mixed evidence of causal relationship between export and economic growth. For Saudi Arabia, he found export causing economic growth. Hosseini and Tang (2013) though found that oil and non-oil export have long run cointegration relationship with

economic growth of Iran and exports Granger cause economic growth, oil export has negative impact on economic growth of Iran. Metwally and Tamaschke (1980) investigated the role of oil exports in economic development of MENA. Their findings suggest that gross fixed capital formation is extremely sensitive to the growth in oil exports in all the countries under investigation except Libya and Kuwait. Positive influence of oil exports on economic progress has also been found by Adedokun (2012) in his study about Nigeria. Esfahani et al. (2009) while studying Iranian economy found that the output in the economy is shaped by oil exports in the long run through its impact on capital accumulation.

The link between public expenditure and economic growth in a country has been a subject of debate among economists for long. The classical economists viewed public expenditure as unproductive and wasteful and advocated to keep at minimum necessary level. Keynes questioned this view and argued that the public expenditure may have positive impact on investment and growth of the economy. However, neo-classical economists again reinstated that it would retard the private investment and hence may affect the economic growth too. Public expenditure financed by public debt and rising taxes would adversely affect private investment in an economy. Public debt draws liquidity out of the market and given money supply pushes the rate of interest up and makes investment less profitable and less attractive. Moreover, more public expenditure financed by higher taxes reduces capacity and incentive to save and invest, thus, retards private investment and growth.

Thus, on theoretical line there are different views regarding the impact of public expenditure on economic growth in an economy. These contrasting views incited many researchers to empirically examine the impact of public expenditure on investment and growth of an economy. Devarajan et al. (1993) in the case of 69 developing countries observed that there is positive relationship between government current outlay and growth. The relationship between capital expenditure and growth, however, has been found to be negative. Further, the defense and economic infrastructure had negative and significant relation with economic growth, while government outlay on health and education also had negative but insignificant relation with growth. Devarajan et al. (1993) while examining the data of 43 countries of 20 years have found that the higher share of current spending is associated with higher growth while opposite is true for capital expenditure. Alkhateeb et al. (2017) observed positive impact of public expenditure on income and employment of Saudi Arabia. Wu et al. (2010) on the basis of study of 182 countries over a period of 55 years from 1950 to 2004 concluded that public expenditure affects growth positively for all countries except for low income countries. He was of the opinion that in low income economies the ineffectiveness of public spending owed to inefficient government and inferior institutions. Landau (1983) concluded that increase in share of public spending in real GDP has adverse impact on growth rate of per capita GDP. Negative effect of public expenditure on economic growth has also been found by other economists (Romer, 1990; Folster and Henrekson, 1999). Barro (1989) observed that increase in share of government consumption expenditure reduces per capita GDP while public investment has insignificant positive effect on growth.

Alshahrani and Alsadiq (2014) while investigating the effect of different types of public spending on growth found that government investment and expenditure on health affects the long run growth of Saudi Arabia and trade openness and expenditure on housing influences production in the short run. Using cross section data of 58 countries, Baum and Lin (1993) analyzed the effect of expenditure on defense, education and welfare activities and concluded that growth rate of defense and education expenditure positively effect economic growth, but expenditure on welfare activities has insignificant negative impact on growth.

Number of studies has also been done to examine the relationship between import and economic growth. Some of the studies have found import contributing positively to economic growth of a country. For example, Baharumshah and Rashid (1999) have observed that import of foreign technology has made a positive influence on economic growth of Malaysia. Humpage (2000) observed that imports accelerate economic growth of a country through specialization and transfer of technology. Awokuse (2007) while examining the case of Poland, Bulgaria and Czech Republic took export as well as import in his model of growth and concluded that ignoring import may mislead our result. Imports of intermediaries enhance productivity of domestic industries (Grossman and Helpman, 1991). Imports lead to economic growth by promoting innovation and competition which finally lead to improved productivity in the economy (Rodrick, 1999). Gulati (1980) has argued that import of capital positively affects growth of an economy. However, the impact depends upon the degree to which the growth is inhibited by want of capital. Imports' contribution to productivity is more important than its contribution in terms of providing intermediate goods for industries (Lawrence and Weinstein, 1999). Imports expose the country to the advances in technology and in the process increases productivity as well (Kim and Donghyun, 2007).

However, Lucas (1988) has arrived at different result about the impact of import on economic growth. He is of the opinion that growth occurs on account of learning by doing that takes place in export and import sectors. The export sector grows as the country has comparative advantage in this sector. But the import sector does not carry these benefits and suffers due to harsh competition with its competitors. Thus, import may negatively affect economic growth.

4. MODEL ESTIMATION, DATA AND METHODOLOGY

Being oil-based economy, the economic activities are to a large extent depends upon the proceeds from the oil exports. The proceeds from the oil exports depend upon the oil price. Being inelastic demand on account of nature of the products, change in price has direct effect on revenue from oil exports. Since oil sector constitutes more than 90% of total exports and government revenue, change in oil price and revenue from oil exports may also affect economic activities at macro level.

Imports play an important role in economic growth. Import of capital equipment, intermediate goods, new technology and other inputs not only augments capital formation in the country, but it also improves the productivity level required for economic growth of the country. Further, for a country like Saudi Arabia where agriculture and industrial sector are not so developed and diversified to fulfill the needs of the country, import of food and other consumer goods are also important to stabilize price level and accelerate economic growth. There may be other possibility too. Import of goods may also adversely affect the growth of production within the country. This may have negative impact on economic growth of the country.

Exports of oil are also expected to promote economic growth. It provides foreign exchange that facilitates the import of necessary products and benefit economic growth of the country. Besides, proceeds from oil exports are also dominant sources of public revenue which are used to finance various developmental and non-developmental expenditure of the government. Increase in government spending push up the level of demand in the economy which calls for more investment in the economy. Thus, we may expect positive relationship between public expenditure and economic growth of an economy.

With this framework, following model may be constructed to estimate the relationship between oil exports, imports, government consumption expenditure and economic growth in the case of Saudi Arabia.

$$GDP_t = f(OEXP_t, IMP_t, GCE_t)$$

Where,
GDP refers to gross domestic product of Saudi Arabia,
OEXP symbolizes oil export from Saudi Arabia,
IMP represents imports in Saudi Arabia,
GCE denotes government consumption expenditure of Saudi Arabia, and
t refers to time period.

The data used in the study have been taken from Saudi Arabian Monetary Agency, International Monetary Fund and UNCTADSTATS. All the variables are in natural log form and have been converted into real values using GDP deflator. The paper has used the annual data from 1984 to 2015. Since the data is time series data and since most of the macroeconomic variables show a kind of trend over time which makes application of ordinary least square method inappropriate, we need to examine unit root status of the variables and make sure that all the variables are integrated of same order. For the purpose, augmented Dicky-Fuller test and Philips-Perron tests will be used. Having found that the variables are integrated of same order, Johansen cointegration method will be applied to estimate long run equilibrium relationship between the variables. If cointegration relationship is found among the variables, we apply vector error correction model (VECM) to find the causal relationship between employment and other variables. The negative and significant lagged error correction term would show the long run causal relationship while the joint significance of first differenced coefficient captures the short run causal effect of the variables.

5. EMPIRICAL ANALYSIS

It is evident from the results given in Tables 1a and 1b that all the variables considered for the study have unit roots at level. However, the hypothesis of presence of unit root is rejected when these variables are tested at first difference. This implies that all these variables are integrated of first order.

Thus, this study proceeds with Johansen's cointegration to study the long run cointegration of economic growth of Saudi Arabia with oil exports, imports and government consumption expenditure. Selection of appropriate number of lag period is important to get more frugal results. One period lag has been selected to estimate cointegration on the basis of Schwarz information criteria given in Table 2.

The result of cointegration test at one period lag is shown in Tables 3a and 3b. The result shows that trace statistics and maximum eigen statistics for null hypothesis of no cointegration relationship between the variables are greater than their respective critical values at 5% significance level, thus rejecting the hypothesis of no cointegration and accept that there is at least one cointegration relationship between the variables. Further, the null hypothesis of at most one cointegration relationship is rejected on the basis of trace statistics but the hypothesis is accepted on the basis of maximum eigen value which is less than their critical value. Thus, we may confirm that there is a long run cointegration relationship between economic growth, oil exports, imports and public consumption expenditure. The cointegration equation obtained by normalizing the coefficients shows that oil exports and government consumption expenditure have positive and significant relation with the economic growth of Saudi Arabia. The result thus confirms our propositions made above and is in line with the findings of most of the studies reviewed. The imports, however,

have been found to have negative impact on the economic growth of Saudi Arabia in the long run (Table 4). This result has however been different from most of the studies reviewed and is in line with observations of Lucas (1988) which shows that import retards growth of domestic industries to flourish.

Determining that the variables are cointegrated we may proceed to causality analysis through VECM. The results are given in Table 5. Various diagnostic tests like serial correlation test, heteroskedasticity test and normality test verify that the model is stable. In the table we observe that the lagged error correction term is negative and significant. This advocates that in the long run oil exports, imports and government expenditure Granger cause economic growth in Saudi Arabia. Long run causality suggests that more exports lead to increase in economic growth of the country. Further the proceeds also enable the government to spend more which through multiplier effect accelerates economic growth. Increase in export revenue brings more foreign exchange and improves the balance of payments position of the country. Conversely, the economy will suffer an adverse impact if these explanatory variables move in opposite direction. The implication of such findings is that Saudi Arabia will suffer slowdown in its economic growth because of decline in proceeds from oil exports owing to present low level of international prices. The result of block exogeneity Wald test (Table 6) indicates that only imports Granger cause economic growth in the short run while oil exports and government expenditure does not. The reason may be that the government might have used the surpluses accumulated over the years to overcome any decline in export proceeds from oil exports arising out of fall in oil prices in international market.

6. CONCLUSION

Over the past few years the price of oil is witnessing a downward movement which has led to a decline in the export revenue from

Table 1a: Unit root test result (ADF test)

Variables	Level			First difference		
	C	C and T	None	C	C and T	None
GDP	−2.204910	−2.699960	0.491381	−7.154780*	−7.540792*	−7.181090*
OEXP	−1.450251	−1.462319	0.653398	−5.064702*	−5.336535*	−4.991367*
IMP	−1.565269	−1.980728	0.524896	−7.585480*	−7.452266*	−7.490084*
GCE	−0.742469	−1.959921	1.445707	−6.154693*	−6.059727*	−5.723380*
Critical values (%)						
1	−3.653730	−4.273277	−2.639210			
5	−2.957110	−3.557759	−1.951687			
10	−2.617434	−3.212361	−1.610579			

*Denotes significant at 1%. GDP: Gross domestic product, ADF: Augmented Dicky-Fuller

Table 1b: Unit root test result (PP test)

Variables	Level			First difference		
	C	C and T	None	C	C and T	None
GDP	−2.203884	−2.661108	0.597367	−6.944277	−7.317392*	−6.982065*
OEXP	−1.453822	−1.770033	0.649511	3−5.062472	−5.528440*	−5.001875
IMP	−1.450329	−1.942508	0.524896	−7.340993*	−7.228353*	−7.257065*
GCE	−0.742469	−1.982901	1.727708	−6.160346*	−6.088576*	−5.723176*
Critical values	−3.653730	−4.273277	−2.639210			
	−2.957110	−3.557759	−1.951687			
	−2.617434	−3.212361	−1.610579			

*Denotes significant at 1%. PP: Philips-Perron

Table 2: Lag selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	20.37070	NA	3.80e-06	−1.129014	−0.940421	−1.069949
1	109.0279	146.7430	2.57e-08	−6.139856	−5.196893*	−5.844532
2	131.6027	31.13767*	1.75e-08*	−6.593291*	−4.895958	−6.061707*
3	140.5791	9.904952	3.44e-08	−6.108902	−3.657199	−5.341059

*Indicates lag order selected by the criterion

Table 3a: Johansen's cointegration

Lags interval (in first differences): 1 to 2				
Unrestricted cointegration rank test (Trace)				
Hypothesized No. of CE(s)	Eigen value	Trace statistics	0.05 critical value	Prob.**
None *	0.791324	92.75626	63.87610	0.0000
At most 1 *	0.553136	45.74702	42.91525	0.0254
At most 2	0.408795	21.58200	25.87211	0.1561
At most 3	0.176184	5.814239	12.51798	0.4843

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

Table 3b: Johansen's cointegration

Unrestricted cointegration rank test (maximum eigen value)				
Hypothesized No. of CE(s)	Eigen value	Max-Eigen statistic	0.05 critical value	Prob.**
None *	0.791324	47.00924	32.11832	0.0004
At most 1	0.553136	24.16502	25.82321	0.0815
At most 2	0.408795	15.76776	19.38704	0.1554
At most 3	0.176184	5.814239	12.51798	0.4843

Maximum Eigen value indicates 1 cointegrating eqn(s) at the 0.05 level. *Denotes rejection of the hypothesis at the 0.05 level. **MacKinnon-Haug-Michelis (1999) P values

Table 4: Estimate of long run co-integrating vector

Normalized coefficients					
GDP	OEXP	IMP	GCE	C	Trend
1.00	−0.320311*	0.654095*	−1.259013*	−3.420778	0.054643*
t-values	−2.51266	4.73789	−6.01262		6.91643

*Indicates significant at 1%. GDP: Gross domestic product

Table 5: VECM

Variables	Coefficients	Standard error	t-values
ECT(-1)	−0.519567*	0.07989	−6.50393
D(GDPt(-1))	−0.256229	0.14684	−1.74500
D(lGCEt(-1))	0.053873	0.19829	0.27169
D(OEXPt (-1))	−0.107382	0.07835	−1.37058
D(IMPt (-1))	−0.286135	0.15683	−1.82446

R²=0.695064. Lagrange multiplier (Lag 1)=(0.4086), (Lag 2)=(0.5655),
(Lag 3)=(0.8878), Breusch-Pagan-Godfrey test=(0.7053), Jarque-Bera
test=(0.4441).*Indicates significant at 1%; Figures in small parentheses show P values.
VECM: Vector error correction model

Table 6: VEC granger causality/block exogeneity wald tests: Economic growth as dependent variable

Independent variable	OEXPt	IMPt	GCEt	Joint
Chi square (P-values)	0.1705(1)	0.0681(1)***	0.7859(1)	0.0675(3)***

*Symbolizes significant at 10%. Figures in small parentheses shows degree of freedom

petrol. Since this sector generates about 90% of export and budget revenue in Saudi Arabia, the economic growth is expected to get affected as public expenditure, imports all are determined by the revenue from petroleum sector. This study tries to examine the impact of decline in oil price by estimating the association between oil exports, imports, government consumption expenditure and economic growth in Saudi Arabia. Using Johansen cointegration and VEC model, the results show that economic growth has long run relationship with oil exports, imports and government consumption expenditure. Further, oil exports positively and significantly affect economic growth in the short run as well as in the long run. The government consumption expenditure also has positive and significant association with economic growth in the long run. The effect of imports, however, has been found to be negative and significant in the short run as well as in the long run. This is the only unexpected result which emerged from this and validates the opinion of Lucas (1988). Imports are hypothesized as source of capital and intermediate goods for growth of industries, and that it improves productivity through improved technology. But, import has been found to be adversely affecting economic growth in Saudi Arabia. Imports are just meeting the demands of the consumers but not leading to any productivity or growth in the economy. A plausible justification may be that imports outcompete the domestic sectors and hence do not let the domestic industries grow in the non-oil sector. This indicates that in spite of government efforts the country has not been very successful in diversifying its economy. The oil sector continues to dominate in Saudi's exports as well as in GDP. Their share moves along the direction of change in international prices of oil. The study suggests that the country should monitor and rationalize imports so that domestic economy grows on a sustainable growth path.

REFERENCES

Alkhateeb, T.T., Sultan, Z.A., Mahmood, H. (2017), Oil revenue, public spending, gross domestic product and employment in Saudi Arabia. International Journal of Energy Economics and Policy, 7(6), 27-31.

Alshahrani, S.A., Alsadiq, A.J. (2014), Economic growth and government spending in Saudi Arabia: An empirical investigation. International Monetary Fund. IMF Working Paper No. WP/14/3. Available from: https://www.imf.org/external/pubs/ft/wp/2014/wp1403.pdf.

Awokuse, T.O. (2007), Causality between exports, imports and economic growth: Evidence from transition economies. Economics Letters, 94, 389-395.

Baharumshah, A.Z., Rashid, S. (1999), Exports, imports and economic growth in Malaysia: Emprical evidence based on multivariate time series. Asian Economic Journal, 13(4), 389-406.

Balassa, B. (1978), Export and economic growth: Further evidence. Journal of Development Economics, 5, 181-189.

Barro, R. (1990), Government spending in a simple model of endogenous growth. Journal of Political Economy, 98, 103-125.

Baum, N.D, Lin, S. (1993), The differential effects on economic growth of government expenditures on education, welfare, and defense. Journal of Economic Development, 18, 75-185.

Chenery, H., Strout, A. (1966), Foreign assistance and economic development. American Economic Review, 56, 679-733.

Devarajan, S., Swaroop, V., Zou, H. (1993), The composition of public expenditure and economic growth. Journal of Monetary Economics, 37(2), 313-344.

Devarajan, S., Swaroop, V., Zou, H. (1993), What do Government Buy: The Composition of Public Spending Economic Performance. Working Paper, WPS (1082). Available from: https://www.researchgate.net/publication/23548478_What_do_governments_buy_The_composition_of_public_spending_and_economic_performance.

El-Sakka, M.I., Al-Mutairi, N.H. (2000), Exports and economic growth: The Arab experience. The Pakistan Development Review, 9(2), 153-169.

Esfahani, H.S., Mohaddes, K., Pesaran, H. (2009), Oil Exports and the Iranian Economy. IZA Discussion Paper No. 4537. Available from: https://www.d-nb.info/998333212/34.

Folster, S, Henrekson, M. (1999), Growth and the public sector: A critique of critics. European Journal of Political Economy, 15(2), 337-358.

Grossman, G.M., Helpman, E. (1991), Innovation and Growth in the Global Economy. Cambridge MA: MIT Press.

Gulati, U.C. (1980), Effect of capital imports on savings and growth: Reply. Economic Inquiry 16(3), 519-522.

Helpman, E., Krugman, P. (1985), Market Structure and Foreign Trade. Cambridge MA: MIT Press.

Hosseini, S.M.P., Tang, C.F. (2014), The effect of oil and non-oil exports on economic growth: A case study of the Iranian economy. Economic Research, 27(1), 427-441.

Humpage, O.F. (2000), Do Imports Hinder or Help Economic Growth? Economic Commentary. Cleveland: Federal Reserve Bank Of Cleveland.

International Monetary Fund. (2017), World Economic Outlook (WEO) Database. Available from: https://www.knoema.com/IMFWEO2017Oct/imf-world-economic-outlook-weo-database-october-2017?tsId=1055980.

Jung, W.S., Marshall, P.J. (1985), Exports, growth and causality in developing countries. Journal of Development Economics, 18(1), 1-12.

Kim, S.H., Donghyun, P. (2007), Could Imports be Beneficial for Economic Growth? Some Evidence from Republic of Korea. ERD Working Paper Series, No. 103 Provided in Cooperation with. Manila: Asian Development Bank (ADB).

Krueger, A.O. (1980), Trade policy as an input to development. American Economic Review, 70, 288-292.

Landau, D. (1983), Government expenditure and economic growth: A cross-country study. Southern Economic Journal, 49, 783-797.

Lawrence, R., Weinstein, D. (1999), Trade and Growth: Import-led or Export-led? Evidence from Japan and Korea, NBER Working Paper No. 7264. Cambridge: National Bureau of Economic Research.

Lee, J.W. (1995), Capital goods imports and long-run growth. Journal of Development Economics, 48(1), 91-110.

Lucas, R.E. (1988), On the mechanics of economic development. Journal of Monetary Economics, 22(1), 3-42.

Mazumdar, J. (2001), Imported machinery and growth in LDCs. Journal of Development Economics 65, 209-224.

Metwally, M.M., Tamaschke, H.U. (1980), Oil exports and economic growth in the middle East. Kyklos, 33(3), 499-522.

Rodrik, D. (1999), The New Global Economy and Developing Countries: Making Openness Work. Overseas Development Council Policy Essay Number 24. Washington, DC: Johns Hopkins University Press for the Overseas Development Council.

Romer, P.M. (1990), Endogenous technological change. Journal of Political Economy, 98, 71-102.

Saudi Arabian Monetary Agency (2016). Annual Statistics. Available from: http://www.sama.gov.sa/en-US/EconomicReports/Pages/YearlyStatistics.aspx.

UNCTADSTAT. (2015), Available from: http://www.unctadstat.unctad.org/wds/TableViewer/downloadPrompt.aspx.

Wu, S., Tang, J., Lin, E.S. (2010), The impact of government expenditure on economic growth: How sensitive to the level of development. Journal of Policy Modeling, 32(6), 804-817.