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## The Relationship between Oil Prices, Inflation, Exchange Rate and Economic Activities: Cases GCC between 2010 to 2014

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### Abstract

The main purpose of this paper is to examine how GCC economic activity is affected by changes in international oil prices. We find that oil prices and devaluation have strongly significant positive effect on economic activity. We also consider the effect of Inflation and real effective exchange rate on economic activity in the model. The [2: 231 – 254]. co integration test reveals one co integrating equation using both the trace statistic and the maximum eigenvalue. He or she using the long-run vector coefficients we examine the sensitivity of economic activity in Vietnam to shock in international oil prices, inflation and the real effective exchange rate. We find that oil prices and devaluation have strongly significant positive effect on economic activity. Inflation also has positive effect on economic activity. This suggests that depreciation and inflation are helpful rather harmful to economic activity. Our findings show that Vietnam's economic activity increase more by depreciation of Vietnamese currency than oil prices or inflation increase. They explained these changes in financial structure mainly as the process of better matching opportunities for saving to opportunities for real investments in the economy.

**Keywords:** Oil Prices; Inflation; Exchange Rate; Economic Activities.

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## **1. introduction**

To a realist, oil, as anything else in life, can be blessing or a curse; it all depends on what is done with it. Wealth that is handed down in families can on the one hand afford future generation's added opportunities, open many doors and help increase family wealth. And on the other hand; it can make family members lazy, unproductive. But the good population, who make development, production, and growth society from possession of oil reserves. That is known the blessing, not curse.

The relationship between oil price, exchange rate, inflation and economic activity remains a controversial one in both theory and empirical findings. In an international context, oil prices may have a differential impact on each of the countries due to some different factors such as the sectoral composition, their differential tax structure and regulations or the country's position as oil net importer or exporter. For instance, some studies suggest that the impact of oil price is only limited to the short-run [3: 65 – 83].

While the others suggest that the output is influenced significantly by fluctuations in oil price through both long-run and short-run [4: 315 – 32].

## **2. Oil and economic policy**

In the extreme, if a country such as Kuwait produced all of its oil this year and spent its revenues on consumption, then its national output next year would be significantly lower, because it would have no oil revenues and no alternative sources of income to take the place of oil.

In economies that don't rely heavily on a deplorable resource such as oil, economic output, or net national product (NNP), doesn't diminish with time but indeed can normally be expected to increase with time. So oil revenues must be saved and invested, domestically or abroad, to even out NNP and to thus avoid a decline in national output in the future.

## **3. Literature review and theoretical background**

### ***3.1 Impact of oil price on output***

Oil price fluctuations receive important consideration for their presumed role on macroeconomic variables. Higher oil prices may reduce economic growth, generate stock exchange panics and produce inflation, which eventually lead to monetary and financial instability. It will also lead to higher interest rates and even a plunge into recession [5].

Sharp increase in the international oil prices is generally regarded as factors discouraging economic growth [6: 98 – 111]. Theoretically, there are different reasons why an oil price shock should affect macroeconomic variables. First, the oil price shock can lead to lower aggregate demand since the price rise redistributes income between the net oil import and export countries.

The higher costs of production in many cases translated into higher prices for goods and services. Second, the supply side effects are related to the fact that crude oil is considered as a basic input to production process. A rise in the oil price reduces aggregate supply since higher energy prices mean that firms purchase less energy; consequently, the productivity of any given amount of capital and labor declines and potential output falls. A large number of empirical studies have explored the relationship between oil price fluctuations effect on output [7: 593 – 617].

More recently, [8: 455 – 476]. examine the effect of oil price change and its volatility on economic activities in the United States, Canada, and Japan.

### **3.2 Impact of exchange rate on output**

Traditional views such as the elasticity's, absorption, and the Keynesian approaches asset that devaluation has positive effect on output. The elasticity's approach states that devaluation will improve trade balance as long as the Marshall Lerner condition is satisfied. According to the absorption approach, through its expenditure switching and expenditure reducing effects, a devaluation will generate an increase in real output[9: 65 – 74].

The Keynesian approach, in which output is assumed to be demand determined and the economy operates below its potential-full employment condition-states that devaluation will have a positive impact on output and employment.

The monetary approach, however, argues that exchange rate changes influence real magnitudes mainly through the real balance effect in the short-run but leave all variables unchanged in the long-run [10: 145 – 163].

While the traditional view indicates that currency depreciation is expansionary, other theoretical development stress some negative effects, including the differ in the marginal propensity to save from profit and wages, nominal rigidities in the economy, balance-sheet effects, capital account problem, weakening confidence, and associated economic policies [11: 183 – 227].

As for the effort of studying the impact of real exchange rate on output, some studies used data with a large sample of countries. The empirical results are quite mixed. Reference [12]Survey forty-eight developed countries from 1982-1987 and reject the hypothesis of contractionary devaluation, [13: 665]analyzes sixteen Latin American countries and find that devaluations have a negative impact on output. Contractionary effects of devaluation that slow output growth also appear in the majority of twenty-two developing countries under the investigation by [14: 85 – 108].On the other hand, concludes that devaluations have a negative impact on output in the short-run, however, they are neutral in the long-run. Other studies used a single country;reference [15: 271 – 293] estimate a five-variable VAR (output, government spending, inflation, real exchange, and money growth) for Mexico. They find that most of the variation in Mexican output is attributable to its "own shocks," but devaluations lead to decline in output. Reference [16: 98 – 111] Discovers that an appreciation of the real exchange rate leads to a positive GDP growth in Russia and a negative GDP growth in Japan and China.

### **3.3 Impact of inflation on output**

The issue on relationship between inflation and growth has generated an enduring debate between structuralisms and monetarists. The structuralisms believe that inflation is essential for economic growth. In contrast, the monetarists see inflation as detrimental to economic progress. It is now accepted that inflation has a negative effect on economic growth. But the economic studies in past wasn't inflation important.

Until the 1970 appearance high-inflation crisis seen associated with a general decline in the macroeconomic performance and with balance of payment crisis.

### **4. Exchange rate**

Crude oil traded internationally is prices in U.S dollars. The relevant price of crude for any exporter or importer is the dollar-price multiplied by the rate of exchange. The domestic price ( $p^d$ ) and the dollar price ( $p^{\$}$ ) are connected as follows:

$$p^d = R p^{\$}$$

Where R is the exchange rate, i.e., units of local country per dollar. This identity has two implications. The first, is that since oil supply and demand decisions are taken at the national level, then an important determinant of the level of production and consumption is the cost in national currency. Since transactions are (carried out) in U.S dollars, the exchange rate will be a cost element. Second, the exchange rate is determined and influenced by a host of factors, many of which are beyond the control of exporting and importing countries. Hence, fluctuations in the "relevant" oil price are not only caused by the factors that determined the dollar price but, in addition, by those exogenous variables that determine the exchange rate movement.

### **5. Inflation**

GCC countries have been characterized with their very low inflation rates over a long period of time, crossing the 5% threshold only few times in the past three decades. The rates of inflation in these countries are close to each other because their economies are exposed to similar shocks.

The shocks affecting the US economy are different from those affecting GCC economies. For instance, the Federal Reserve decides to lower its interest rate in response to a recession, GCC economies could be facing a boom that requires an opposing policy to be practiced. Similarly, when the US suffers a large current account deficit, it can allow its currency to depreciate until the deficit is eliminated, which doesn't work for the best of GCC countries interest because it contributes to growing imported inflation.

## **6. Why inflation is "a Bad Thing"**

Inflation causes trouble for economic systems in four interrelated ways. First, inflation erodes the money unit's purchasing power, the so-called "inflation tax". Second, the inflation rate over any time interval frequently surprises people, so that individuals and enterprises end up with different amounts of purchasing power than they originally planned. Third, at any moment the inflation rate over any future time interval is uncertain. Such "price-level uncertainty" makes economic planning more contingent and speculative "than it would otherwise be". Fourth, inflation occurs unevenly over an economy's price array. If one country has an extremely high inflation rate relative to the rest of the world, its currency will depreciate very rapidly (Zimbabwe is an obvious recent example of the effect of hyperinflation). But the differences between inflation rates across the developed world are very small and so will not have much of an impact on a country's competitiveness [17: 2 – 4].

### **6.1 The monetary system in the inflation process**

A banking system backs its money supply with a "portfolio" of private loans, credit to the public sector, and international reserves, less its total net worth. Since assets identically equal liabilities plus net worth at any moment, any increase in banking-system assets must be accompanied either by a money-supply increase or a decrease in other assets, similarly, a net increase in banking-system assets must accompany any money-supply increase.

### **6.2 Simultaneously**

A monetary authority that "tightens" money-supply growth must therefore simultaneously "tighten" growth of the banking system's total claims. If the banking-system is acquiring foreign exchange reserves and providing loans to the government, the monetary authority can hold money-supply growth to zero only by forcing a reduction in private-sector credit. This explains why monetary authorities often respond ambivalent to inflation pressure. If they fight inflation by "making room" in the banking system for loans to the government or for foreign-exchange inflows, they work against their "credit-availability" objective.

## **7. Interest rate**

Interest rates are one of the most important drivers of the foreign markets. The base interest rate of a country is set by its respective central bank. It is used by a central bank as a tool to manage the economy—either by raising the interest rate to curb inflation, or lowering the interest rate to promote growth [18].

Similar to the inflation rates, interest rates in the GCC countries converge. As explained earlier, these rates are closely linked to their US counterparts. They are widely affected by the decisions of the US Federal Reserve and are constrained as monetary tools to achieve the monetary targets because of the fixed exchange rate regime. For example, in 2003 and 2004, interest rates in the US were lowered when the GCC countries enjoyed a boom in their economies. In September 2007, US interest rates were further lowered by 225 basis points (cumulative) to stimulate a stagnant economy, while GCC countries were suffering high inflation levels in their economies.

A clear illustration of what happens when the two economic styles of these economies move opposite each other. Also in 2008, the GCC monetary authorities were obliged to reduce their key interest rates in response to the US its monetary policy (cutting interest rates) as a result of the global financial crisis [19].

The challenge aggravates with the negative correlation between the US and GCC economic growth rates; a slowdown of the US economy paired with a strong demand on oil by emerging markets, which would keep oil prices high and contribute to booming GCC economics [20].

## **8. How interest rates work**

### ***Interest rates and the economy***

The economy is a living, breathing, deeply interconnected system. When the fed changes the interest rates at which banks borrow money, those changes get passed on to the rest of the economy. For example, if the fed lowers the federal funds rate, the banks can borrow money for less. In turn, they can lower the interest rates they charge to individual borrowers, making their loans more attractive and competitive. If an individual was thinking about buying a home or a car, and the interest rates suddenly go down, he or she might decide to take out a loan and spend, spend, spend! The more consumers spend, the more the economy grows. That's why the stock market tends to go up when the fed lowers interest rates, or even hints at thoughts of lowering interest rates. Lower rates are doubly good for the stock market, because it makes other investments less attractive. (*source: federal reserve bank of san Francisco*).

Lower federal funds rate also decreases the value of the dollar on the foreign exchange market. While a long-term drop in the value of the dollar is bad news for the US economy as a whole, it can be good short-term news for domestic manufactures. When the dollars go down, it becomes more expensive to buy goods and services from foreign companies. This encourages companies to buy domestic products, injecting more cash into the economy (*source: federal reserve bank of san francisco*). Because the fed's monetary policy decisions have such a powerful influence on the strength and direction of the economy, banks, lenders, borrowers and investors spend a lot of energy analyzing the fed's every move and word. Countries with persistent current-account deficits tend to have higher real interest rates than surplus countries [21: 2 – 4].

Three factors were relevant to the oil price. First, it's absolute level, which determined the base from which the shares of the state and concession holder were calculated. It also determined, of course, the amount of foreign exchange required by importers to pay for their oil supply. Second, applicable tax regime, which determined "how the total revenue from oil exports would be shared between the state and the concession holder". Third, there was the crucial point about its low production cost and, therefore, its high margin of profit. Production costs in Venezuela were around 80% barrels, in the Middle East only about 20% barrel. The economic rent, high in Venezuela but higher in the Middle East was the basic for the competitive strength of oil in general and for Middle East oil in particular.

## **9. Economic activity**

Economic activity, as approximated by gross domestic product (GDP) in the countries of the organization for economic cooperation and development (OECD), is considered the major demand-side factor that affects crude oil prices. In 1973, the industrialized OECD accounted for 84% of total world oil consumption (excluding the centrally planned economies).

## **10. Prospects for the future**

Forecasts of the oil market have always been difficult to make and there is every reason to suppose that the task is getting more difficult. A number of good analyses have appeared in the literature over the 1982-1985 periods. Most of these agreed that oil prices would raise in real terms before 1990, but there was no agreement about how much the rise would be, none of these studies had forecast the sharp fall in prices or even a price collapse among the various possible price paths which could result from certain combinations of events in the market. The common conclusion that the oil price is too unstable to allow reliable forecasts of the oil price trend.

The future of the oil market is thus uncertain, but a discussion of its uncertainty is useful in helping to understand the range of occurrences which are most likely to result from the behavior of certain key variables which determine the oil market. That tend us to questions, about the relationship between oil supply and pricing over the past 15 years; and recent changes in the structure of oil supply and demand.

## **11. The economic impact of oil price increases**

The oil prices increase transfers of resources from net oil-importing countries to net oil-exporting countries, and the amount of a country's resources that gets transferred depends on the importance of oil imports in its total income.

A calculation of the instantaneous cost of higher oil prices is really made. In the short-time, a country can do nothing to change its decisions on consumption, investment, output levels, factor mix, and so on. All it can do is to pay the higher oil bills. Let us suppose it does this by merely running down its foreign reserves (or increasing its foreign borrowing). By how much will it have to reduce foreign reserves? The required change in the reserves, expressed as a percentage of GDP, is just the percentage increase in oil price times the share in GDP of oil impacts. Thus beyond the instantaneous cost of higher oil prices, changes then take place in the economy in reserves to both the increase in prices and the loss of real wealth.

Resulting from lower foreign reserves; First, there is an attempt to reduce the cost of the higher oil prices to the economy, essentially by reducing its need for oil imports. Second, and more important for our purposes, the costs of higher oil prices are unevenly distributed among the various groups in society. Let us consider how the production system of the economy responds, and then examine the consumption side. In the energy-producing sector, higher oil prices encourage the expansion of domestic sources of oil and alternative energy sources.

In the non-energy sector, producers initially face higher production costs, by three ways, first, they try to

substitute other-fuels for oil and maybe reduce consumption energy by using more of other resources. Second, by try to pass on the cost increase in higher prices.

Third, is to cut output and hence demand for all production inputs, including oil. Obviously, the process will depend on the initial structure of a country's production, trade, consumption and the possibilities for changing the structure through the various substitutions mentioned earlier.

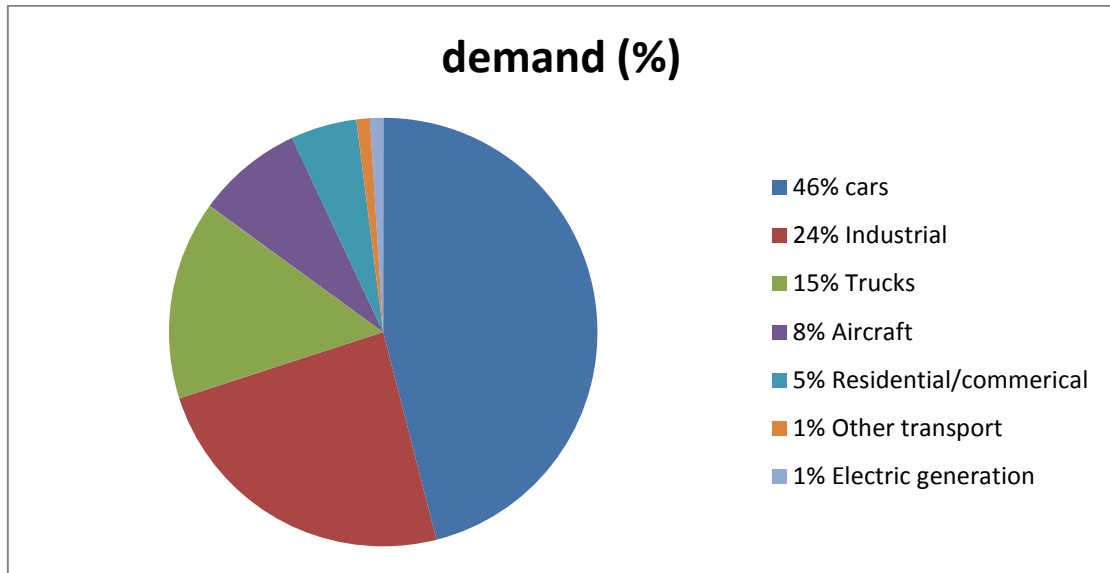
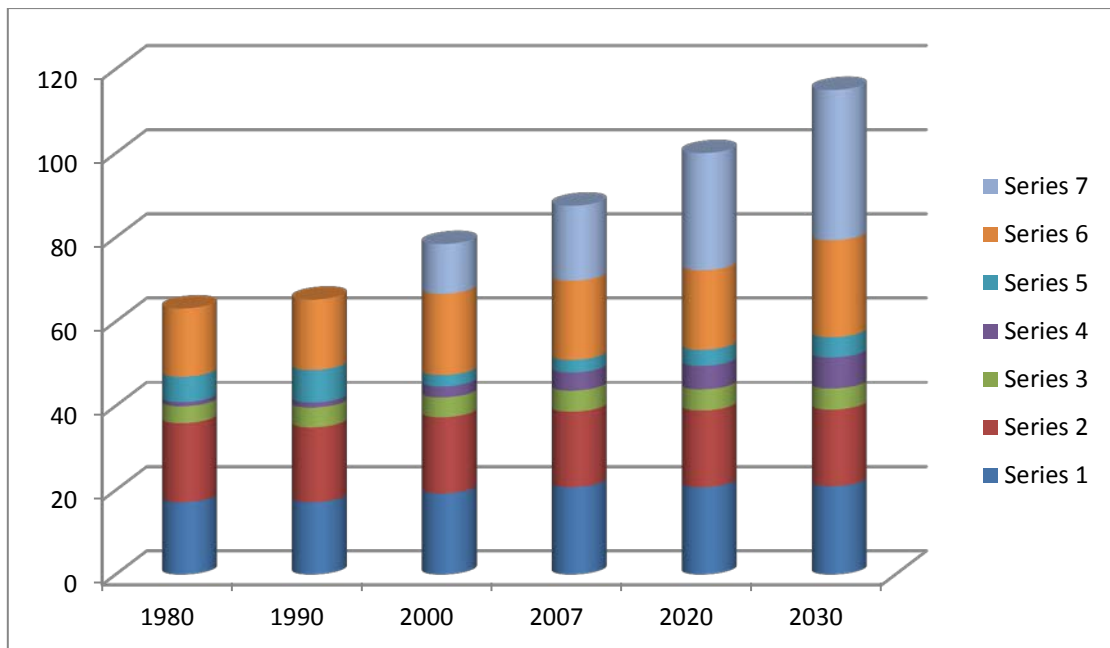


Figure 1: U.S. demand for petroleum, by sector. Source: EIA (2008)

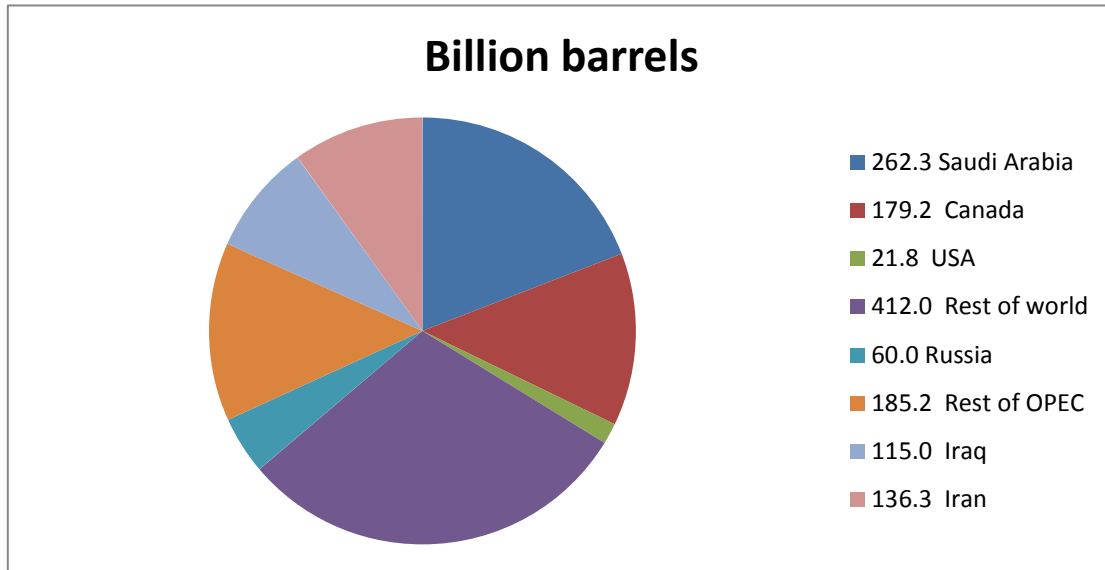
Note: breakdown for cars and trucks was imputed from figures for motor vehicle gasoline and diesel consumption.





**Figure 2:** World oil consumption. Sources: EIA (undated, 2009a, 2008f).

*Note: OECD = organization for economic co-operation and development.*



**Figure 3:** Global Reserves of oil. Sources: EIA (2008i).

*Note: oil includes crude oil and condensate.*

## 12. Spot markets

Spot markets in London and New York have developed from small secondary markets, used for marking up shortfalls in deliveries or selling excess crude, to become the primary means for determining oil prices. Today's highly liquid markets bring together a network of buyers and sellers who use a wide variety of trading instruments. Contracts run in the tens of millions every day. With the advent of international markets, differences in prices across regions, other than those justified by differences in transportation costs or oil "quality" (e.g., specific gravity, viscosity, sulfur content), can't persist: traders arbitrage such differences a ways. Because of trader's ability to arbitrage, the markets influence on oil prices goes far beyond just the oil traded on the markets.

## 13. Futures markets

The growth of spot markets for crude oil and refined oil products has set the stage for the other major development in the structure and operation of the international oil markets: the emergence of high-volume futures trading and other forms of derivatives [22]. Futures contracts typically don't result on actual delivery or acceptance of the product. They provide a means for both sellers and purchasers to hedge risks of movements in oil prices that they would find unfavorable. Both spot and future markets allow price signals to be transmitted quickly across time as well as space: an expectation of future supply constraints will quickly be reflected in both today's futures prices and today's spot prices as inventory holders build stocks.

#### **14. What is the relationship between oil prices and inflation?**

The price of oil and inflation are often seen as being connected in a cause and effect relationship. As oil prices move up or down, inflation follows in the same direction.

The reason why this happens is that oil is a major input in the economy-it is used in critical activities such as fueling transportation and heating homes-and if input costs rise, so should the cost of end products. For example, if the price of oil rises, then it will cost more to make plastic, and a plastics company will then pass on some or all of this cost to the consumer, which raises prices and thus inflation. The direct relationship between oil and inflation was evident in the 1970s, when the cost of oil rose from a nominal price of \$3 before the 1973 oil crisis to around \$40 during the 1979 oil crisis. This helped cause the consumer price index(CPI), a key measure of inflation, to more than double from 41.20 in early 1972 to 86.30 by the end of 1980.

However, this relationship between oil and inflation started to deteriorate after the 1980s. During the 1990s Gulf War oil crisis, crude prices doubled in six months from around \$20 to around \$40, but CPI remained relatively stable, growing from 134.6 in January 1991 to 137.9 in December 1991. This detachment in the relationship was even more apparent during the oil price run-up from 1990 to 2005, in which the annual average nominal price of oil rose from \$16.56 to \$50.04. During this same period, the CPI rose from 164.30 in January 1999 to 196.80 in December 2005. Judging by this data, it appears that the strong correlation between oil prices and inflation that was seen in the 1970s has weakened significantly.

#### **15. Relationship between inflation and unemployment rate**

Inflation and unemployment have an inverse relationship, so an increase in unemployment will reduce the inflation rate. It is possible for a nation to have high unemployment and high inflation at the same time because of factors such as oil price, which is a situation known as stagflation. Central banks set an acceptable level of inflation. To reduce inflation, they will reduce the amount of money available for businesses to borrow if the unemployment rate gets too low.

15-1 Inflation increase the cost of all items sold on the market, including the cost of hiring an additional worker.

When inflation increases, workers demand higher wages from employers. The employer will have to meet these expectations and raise wages if unemployment is low. Additionally, he must increase product costs to cover these rising expenses. This situation creates a self-reinforcing inflationary spiral where store prices lead to wage increases, and wage increases lead to higher store prices.

15-2 When unemployment is high, the cost of goods at the store will still increase during an inflationary period, but the employer will be able to hire cheaper workers if the current workers complain. Wages will not rise while unemployment remains high. Workers will have to borrow money or reduce the amount of goods they purchase. If workers can't get loans, stores will have to lower prices to continue to sell products, reducing inflation.

15-3 The cost of imported goods affects the inflation rate. If a country imports oil and oil prices are low, it can have low inflation while having low unemployment. Dependence on energy imports is risky, because a

decline in the value of a nation's currency will increase its energy costs, and the exporting nation may decide to sell to other markets instead of lowering energy prices. According to northwestern university, low oil prices allowed the United States to have 4% unemployment along with low inflation during the late 1990s.

15-4 A central bank has conflicting objectives. The bank must try keep inflation from making goods too expensive, while also ensuring that citizens of a country can find jobs. If the bank focuses on unemployment alone, inflation will rise. According to the Federal Reserve, a policy only designed to reduce inflation can create long-term unemployment, and prices will be higher in the future because workers who lack skills because of long-term unemployment will be less productive.

15-5 Central banks plan for a small amount of inflation. According to the Federal Reserve, an inflation rate of 2% per year is helpful because it reduces the risk of deflation. With deflation, wages will drop in the future, creating a strong incentive for employers not to hire workers, because they can hire them for lower wages next year and their current inventory will sell for lower prices.

## **16. Why are oil prices rising?**

A large reason is that developing nations, like China and India, have been growing rapidly. These economies have become increasingly industrialized and urbanized, which has contributed to an increase in the world demand for oil. In addition, in recent years fears of supply disruption have been spurred by turmoil in oil-producing countries such as Nigeria, Venezuela, Iraq, and Iran [23:8 – 9]. As far as the implications of higher oil prices, there are both microeconomic and macroeconomic answers to that question.

## **17. How do high oil prices affect the economy on a "micro" level?**

A consumer already understands the microeconomic implications of higher oil prices. When observing higher oil prices, most of us are likely to think about the price of gasoline as well, since gasoline purchases are necessary for most households. When gasoline prices increase, a larger share of households budgets is likely to be spent on it, which leaves less to spend on other goods and services. The same goes for businesses whose goods must be shipped from place to place or that use fuel as a major input (such as the airline industry). Higher oil prices tend to make production more expensive for businesses, just as they make it more expensive for households to do the things they normally do.

## **18. What effects do oil prices have on the "macro" economy?**

Oil price increases are generally thought to increase inflation and reduce economic growth. In terms inflation, oil prices directly affects the prices of goods made with petroleum products. Oil prices indirectly affect costs such as transportation, manufacturing, and heating. The increase in these costs can in turn affect the prices of a variety of goods and services, as producers may pass production costs on to consumers. The extent to which oil price increases lead to consumption price increases depends on how important oil is for the production of a given type of good or service.

Oil price increases can also stifle the growth of the economy through their effect on the supply and demand for

goods other than oil. Increase in oil prices can depress the supply of other goods because they increase the costs of producing them. In economics terminology, high oil prices can shift up the supply curve for the goods and services for which oil is an input. High oil prices also can reduce demand for other goods because they reduce wealth, as well as induce uncertainty about the future [24].

**19. Economic development and oil exploration in GCC**

**19.1 Kuwait**

**19.1.1 Economic development and oil exploration in Kuwait:**

Kuwait covers a total area of approximately 18,000 sq.km. the estimated population in 1990 before the invasion was about 2.1 million with 38% Kuwaitis and 62% non- Kuwaitis. In 1985, the total population was about 1.7 million with 40% Kuwaitis, while in 1980 the total population was only 1.3 million of which Kuwaitis constituted 42%. The non- Kuwaitis who constituted a heterogeneous group belonging to various nationalities were less than a quarter of million in 1965 and exceeded 1.3 million in 1990. This increase of expatriated in Kuwait shows Kuwaitis dependency on expatriates for its developmental schemes. The per capital income of Kuwaitis is considered to be one of the highest in the world.

**19.1.2 Oil development in Kuwait**

In 1934, was established the first company of oil in Kuwait, the named is the Kuwait oil company (KOC). This company was authorized about 6000.sq.miles area as concession land to explore for oil in Kuwait. The company started its exploration and discovered oil in the BURGAN oil field in 1938. In 1951, the second oil field known as MAGWA and oil was discovered in AHMADI in 1952, RAUDHATAIN in 1955, BAHRA in 1956; SABRIYA in 1957; MINAGISH in 1959. And in 1948, the American independent oil company (AMINOIL) started exploration on the on shore part of neutral zone and discovered oil in the WAFRA oil field in 1953.

- Average Brent oil price, exchange rate, inflation and GDP.

**Table 1:** Relationship between oil price and exchange rate, inflation, GDP.( Kuwait )

<b>Year</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Oil price	-	\$114.6	\$110.0	\$107.5	\$89.0
Exchange rate	3.48	3.63	3.57	3.53	-
Inflation	4.50%	4.91%	3.20%	2.71%	3.36%
GDP	30.8%	41.8%	43.2%	38.8%	37.4%
Fiscal surplus		15.8	12.7	12.9	8.3

*Sources:* central bank of Kuwait, IBS calculations and estimates, US. Energy information administration.

During 2012 the GDP robust growth by higher oil production coupled with strong oil prices, Kuwait's GDP saw marginal growth in 2013 as oil output stabilized amid steady oil prices. During 2011, Kuwait inflation rate recorded the highest rate of 4.91%, the reason for this is the rise in the world oil prices. And mainly attributed to the increase in housing services and education.

- Oil price peaked at \$114.6 per barrel in 2011. Falling to \$25.6 in 2014, impact on government spending
- Fiscal surplus in 2014/15 will be KD 8.3 billion or 18.1 percent of GDP, down from KD 12.9 billion or 26.3 percent of GDP in 2013/14. This incorporates our estimate that nominal GDP will fall by 6.3 percent in fiscal year 2014/15 year-over-year.
- Increase the supply of oil, especially outside the oil-exporting countries such as the United States of America (shale oil production) work to reduce world oil prices.
- An inverse relationship between the dollar exchange rate and the price of oil.
- Lower oil price leading to a decrease in wealth and money and thus gives the index lower spending on vital projects in the country, leading or affect the overall economy of the country.

**Table 2:** Government Revenues and Expenditure( Kuwait )

<b>KWD (MN)</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13</b>
Oil revenues	16,585	19,947	28,570	29,970
Non-oil revenue	1,103	1,555	1,667	2,039
<b>Total revenue</b>	<b>17,688</b>	<b>21,502</b>	<b>30,236</b>	<b>32,009</b>
Capital expended	1,308	1,841	1,799	1,811
Other expended	9,943	14,380	15,209	17,497
<b>Total expended</b>	<b>11,251</b>	<b>16,221</b>	<b>17,008</b>	<b>19,308</b>
Surplus	6,437	5,281	13,229	12,701

Sources: ministry of finance.

We should know the fiscal balance isn't the only factor causing a surplus or deficit. We need to consider other important dimensions not necessarily associated with the annual budget numbers. These include: what is the growth rate of the economic? What is the inflation rate? What is the level of investment and business confidence? What is occurring with consumer spending? What is the level of employment and unemployment? These are all other highly significant factors that will affect that simple fiscal balance. However,

Table of note certainly increase in oil revenues year after year and this increase reflected surplus than strengthens the financial pillars of the state and works on economic and social problems and working on solutions macroeconomic growth. Fiscal surplus is working to create new cities to create a strong infrastructure as well as to set up power plants to cope with the increase in population this leads to increase employments.

### 19.2 Saudi Arabia

The development of the Saudi Arabia economy has gone hand in hand with the establishment and expansion of the Saudi state during the last fifty years. The process of building the state, fortified by oil revenues distributed through the modern institutions of bureaucracy, worked to unify this economically diverse country. So pervasive has been the influence of these relatively young institutions that few vestiges of the old economy survive unchanged.

The discovery of oil in the eastern province in 1938 came just six years after another major development: the establishment of the kingdom of Saudi Arabia, which unified a number of diverse areas of the peninsula under one rules. Moreover, the rebuilding of Europe after World War II and its need for cheap, reliable sources of oil greatly enhanced the position of the newly established Saudi Arabia oil industry. The combination of these three events formed the basis of the current structure of the Saudi economy.

**Table 3:** Gross Domestic Product by institutional sectors at current prices (Q1-2014)( Saudi Arabia )

Sectors	GDP (SAR MN)		ANNUAL GROWTH RATES	
	Q1-13	Q1-14	Q1-13	Q1-14
Oil sector	320,455	327,197	(13.0%)	2.1%
Non-oil sector	372,901	395,676	10.8%	6.1%
Private sector	268,100	285,238	10.1%	6.4%
Government sector	104,801	110,438	12.7%	5.4%
<b>Total</b>	<b>693,356</b>	<b>722,873</b>	<b>(1.6%)</b>	<b>4.3%</b>
Import duties	3,014	3,580	(21.0%)	18.8%
GDP	696,370	726,453	(1.8%)	4.3%
Inflation	2.97%	3.30%		

Source: Saudi central department of statistic & information

The year 2013/14 saw a shift in oil supply/demand landscape as non-OPEC nations including the US increased oil output thereby reducing dependence on imports. This affect oil prices, however, intermittent geopolitical events that a led to temporary supply disruptions held up oil prices. Meanwhile, non-oil sectors continue to report strong Y-0-Y GDP growth that stood at 6.1% at the end of Q1-14 as compared to Q1-13. The overall GDP yearly growth at the end of Q1-14 stood at 4.3% led by 6.4% growth in private sector GDP. The inflation rates of the general cost of living index were affected by the rises in its various groups. Housing, water, electricity, gas, and other fuels group.

### 19.3 Qatar

Qatar's economic ascent of recent years has few parallels. It wasn't preordained by its bountiful carbon resources, nor did it occur merely by chance. Many countries blessed by resources have failed to prosper and

develop.

In Qatar, successful development of its hydrocarbon resources followed from visionary and committed national leadership, robust and mutually rewarding relationship with international partners, and vigorous execution. Geopolitics in the Arabia gulf and the shifting tides of energy demand in distant markets have also played a role. In the first phase of the development its gas resources, focused on meeting its domestic needs. Qatar worked hard to break through constraints that impeded exports of liquefied natural gas (LNG).

In 1997, Qatar first shipment reached the shores of Japan. Top leadership commitment and perseverance, the creation of vital infrastructure, new openings for reliable gas supplies in the far East, and successful partnerships with international oil companies eventually enabled Qatar to sell its LNG in bulk and at a profit in Japan. Qatar built a competitive LNG value chain with a global reach. Qatar successful by scaling up, integrating downstream and building a reputation as a reliable and flexible partner and supplier.

**Table 4:** Quarterly Gross Domestic Product by Economic sectors at current prices( Qatar ).

*GDP (QAR MN)*

<b>Sectors</b>	<b>Q2-13</b>	<b>Q3-13</b>	<b>Q4-13</b>	<b>Q1-14</b>
Mining & Quarrying (including oil& GAS)	95,094	98,928	99,693	102,618
Non-oil sector	80,475	84,115	87,506	88,555
Private sector	63,278	66,543	69,573	70,006
Government sector	17,197	17,572	17,933	18,459
<b>Total</b>	<b>175,569</b>	<b>183,043</b>	<b>187,199</b>	<b>191,173</b>
Import duties	1,151	1,220	1,279	1,210
<b>GDP</b>	<b>176,720</b>	<b>184,263</b>	<b>188,478</b>	<b>192,383</b>
Inflation			3.07%	3.57%

Sources: *Qatar information Exchange*

Qatar has made significant progress on developing the non-oil sector, especially after it secured the rights to host Fifa world cup 2022. The country plans to spend close to USD 140 billion in the next five years as it prepares for the world cup. This will likely narrow fiscal surplus that remained robust till 2013.

Qatar has one of the highest annual inflation levels in the GCC reported at 3.5% in Q1-14 due to rising rents, transportation and communication expenses.

**19.4 Bahrain**

The economic expansion was underpinned by strong structural drivers in the form of demographic dynamism, economic diversification, and an advantageous location.

The contribution of these factors was significantly enhanced by a decade of economic reform designed further develop the education system, improve the business climate, and upgrade the national infrastructure, among other things. Growth further benefited from a long period of high oil prices, rising government spending, a real estate boom, and high demand for health care and educational services.

This work highlights Bahrain's track record as a regional pioneer of economic diversification. While partly attributable to maturing hydrocarbons sector, the track record also reflects Bahrain's long-standing investments in human capital and regulatory reform. Bahrain economic has continued to record growth even in the face of major challenges created by the global crisis. With hydrocarbons production normalizing and continued momentum in the non-oil economy, real GDP in 2013 is expected to exceed 5.0%. Bahrain's long history of economic openness has led to a high degree of integration in the global economy. A benchmarking of Bahrain's standing in a number of international indices underscores substantial competitive strengths in area such as human development, macroeconomic stability, finance services, efficient business regulations, openness to trade, and ICT readiness.

**Table 5:** Quarterly Gross Domestic Product by Economic sectors at current prices

*GDP (BHD MN)*

<b>Sectors</b>	<b>Q2-13</b>	<b>Q3-13</b>	<b>Q4-13</b>	<b>Q1-14</b>
Oil sector	762,8	853,1	880,9	796,7
non-oil sector	2,198.9	2,234.6	2,261.8	2,245.6
Private sector	1,844.3	1,878.3	1.893.2	1,885.4
Government sector	354.6	356.3	368.6	360.2
<b>Total</b>	<b>2,961.6</b>	<b>3,087.7</b>	<b>3,142.8</b>	<b>3,042.3</b>
Import duties	33,8	35,1	31,1	32,5
<b>GDP</b>	<b>2,995.4</b>	<b>3,122.8</b>	<b>3,173.9</b>	<b>3,074.8</b>
Inflation			3.90%	2.57%

*Sources: central informatics Organization*

The political situation in Bahrain continues to affect the non-oil sector resulting in delayed budget approval and low infrastructure spending. A normalization of output levels at one of the key oil fields led to a strong recovery in oil production during 2013 that helped offset the slow growth in the non-oil sector.

Inflation decline that stood at 2.57% at the end of the Q1-14 compared to Q4-13. A decline in house rents and food prices resulted in decline in price levels and inflation.

**19.5 United Arab Emirates**

oil was discovered in the united Arab Emirates (UAE) just 50 years ago. During that time, UAE has been able transform itself into a rapidly modernizing country, which is fast becoming a major economic hub and a key



player on the international economic landscape.

**Table 6:** development and growth economic in AUE

Key economic Indicators	2010	2011	2012	2013E	2014F
UAE GDP Share In GCC	25.1%	24.1%	23.9%	24.1%	24.3%
Nominal GDP - AED BN	1,055.6	1,280.2	1,409.5	1,455.2	1,514.4
Nominal GDP - USD BN	287.4	348.6	383.8	396.2	412.4
Real GDP Growth %	1.67%	3.88%	4.37%	4.76%	4.36%
Inflation, Avg.	0.88%	0.77%	0.88%	1.67%	2.39%

Sources: International Monetary Fund (IMF)

USA GDP had already surpassed pre-crisis level by 2011 when it reported a nominal GDP of USD348.6 billion. According to the revised estimates from the IMF, UAE GDP grew by 3.2% during 2013 and is expected to post a stronger growth of 4.1% in 2014. UAE focus continues to remain on developing the non-oil sector in order to counter the expected weakness in the oil sector, which accounted for 1/3<sup>rd</sup> of the economy GDP. The non-oil sector is expected to get further boost from increased investment spending for the world expo 2020. This would have an obvious impact of negatively affecting the current account balance as indicated by the IMF, making the economy vulnerable to oil price shocks. On the other hand, the inflation pressure increased, resulting in inflation edging up to its highest level, reported at 2.39% in Feb-14, in more than five years as a result of rising rents and food prices.

### 19.6 Oman

**Table 7:** Key Economic Indicators ( Oman )

Year	2010	2011	2012	213E	2014F
Oman GDP Share In GCC	5.1%	4.8%	4.9%	4.9%	4.8%
Nominal GDP - OMR BN	22.6	26.9	30.1	31.0	31.6
Nominal GDP - USD BN	58.8	70.0	78.3	80.6	82.3
Real GDP Growth %	5.59%	4.49%	4.99%	5.07%	3.40%
Inflation, Avg.	4.19%	3.29%	2.88%	1.25%	2.69%

Sources: International Monetary Fund IMF

Oman maintained a steady growth in nominal GDP over the past four years ranging between 4.5% and 5.6%. This came on the back of marginal increase in hydrocarbon output in the sultanate coupled with rising followed by steady oil prices in the latter years. On the other hand, a decline in oil revenue growth and increasing infrastructure investment will put pressure on fiscal surplus.

The recent rise in investment activity led to one of the strongest growth in money supply during Q1-14 on the

back of higher lending to the construction sector and growth in personal facilities.

Meanwhile, despite higher money supply, inflation has remained under control as the sultanate reported one of the lowest inflation levels in the GCC.

**Table 8:** Government revenues and expenditure( Oman ).

<i>Sectors</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<b><i>Revenues</i></b>	<b><i>3,139.9</i></b>	<b><i>3,602.1</i></b>	<b><i>3,214.4</i></b>
<i>oil revenues</i>	<i>2,326.0</i>	<i>2,834.5</i>	<i>2,586.9</i>
<i>Gas revenues</i>	<i>359.0</i>	<i>398.9</i>	<i>363.2</i>
<i>Other revenues</i>	<i>454.9</i>	<i>368.7</i>	<i>264.3</i>
<b><i>Expenditure</i></b>	<b><i>5,513.4</i></b>	<b><i>3,541.0</i></b>	<b><i>2,599.0</i></b>
<i>Current expenditure</i>	<i>3,875.9</i>	<i>1,586.0</i>	<i>1,693.3</i>
<i>Investment expenditure</i>	<i>1,118.9</i>	<i>785.0</i>	<i>543.0</i>
<i>Participation &amp; subsidy to Private sector</i>	<i>518.6</i>	<i>402.4</i>	<i>362.7</i>
<i>Actual expenses under Settlement</i>	<i>0.0</i>	<i>767.6</i>	<i>0.0</i>
<b><i>Fiscal surplus / deficit</i></b>	<b><i>-2,373.5</i></b>	<b><i>61.1</i></b>	<b><i>615.4</i></b>

Sources: central bank of Oman.

## 20. Result of the study

- 1- The truth is that nobody has any real level of certainty what oil prices are going to do in the future, this is pretty much the way it always is in the oil and natural gas industry.
- 2- Oil markets rarely behave rationally, so in the end, no one really knows. Then again, that means anybody guess is as good as.

## 21. Discussion

the recovery of Brent crude oil prices at \$40 a barrel at the beginning of 2015 to more are \$60 a barrel in May 2015 is a positive sign was the result of concerted number of developments, including the recovery of demand in a number of world markets and including America, Europe, India, China, Japan and Korea. As well as factors that boosted the rise in oil prices are reducing the number of towers and drilling platforms in the united states, as well as oil stocks rise in China. Also, reports especially from the organization of petroleum exporting countries (OPEC) these reports that suggest global demand for oil will fall from 31 million barrels per day to 28 million and build on it for the organization of two options aren't a third has either cut production from its current level of 31 million barrels per day or willingness to take the drop in oil prices for a long time. The reason is the continued growth of supplies of crude supply from rival producers from outside the organization until at least 2017.

## **22. Conclusions**

The high degree of OPV impacts aggregate consumption, investment, and industrial production. Resulting under OPV decrease consumer demand the randomness of consumption. This prompts the decrease of physical investment expenditure in both the short and medium-term. Industrial production is also affect under oil prices volatility (OPV), due to the impact of price volatility on consumer demand and production costs, however, because production cost uncertainty can be offset through price increase. The effects of OPV on consumer, investor, and producer behavior, strongly influence both the level of inflation and the level of unemployment.

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- [1] In finance, a derivative is a security whose price is dependent on or derived from one or more underlying assets, such as stocks, bonds, commodities, or currencies. Its value is determined by fluctuations in the underlying asset. Futures contracts, forward contracts, options, and swaps are the most common types of derivatives. Derivatives are generally used to hedge risk but can also be used for speculative purposes.
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