INTERNATIONAL JOURNAL OF SOCIAL SCIENCES
& INTERDISCIPLINARY RESEARCH
Vol.1 No. 4, April 2012, ISSN 2277 3630

Online Available at indianresearchjournals.com

IMPACT OF CRUDE OIL PRICE ON INDIAN ECONOMY

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ABSTRACT

In this paper, an empirical analysis is used to compare the effects of crude oil price on Indian economy because India's imports of oil are increasing. Our import dependence has reached 80 per cent and is likely to keep growing. At the same time 2008 saw an unprecedented rise in oil price on the world market. Oil price volatility has also increased. Though future oil prices are difficult to predict, they are generally expected to rise. The oil prices have started rising significantly since the initiation of the twenty first century. Theoretically, one can judge the impact of an oil price shock. The immediate effect of the oil price shock is the increased Cost of production due to increased fuel cost. Whenever there is an overall inflation in the economy, the cost of production would also rise causing a decrease in supply. On the other hand, inflation implies a fall in the purchasing power of people. In short, oil price fluctuation has adverse effects on the economy. The paper seeks to find out the impact on the Indian economy.

KEY WORDS: Crude Oil Price, Indian Economy, Inflation, Price Volatility, Oil Price Trends, India's GDP, Price Controls and Subsidies.

INTRODUCTION

India's growing dependence on imported oil products and the dramatic rise in the prices of crude oil to as high as $148/bbl. the international market in July 2008, followed by an equally dramatic fall, pose significant policy challenges. The Government's efforts to insulate domestic Consumers, at least to some extent, resulted in huge fiscal burden for the Government and financial problems for the public sector oil marketing companies. But for the steep fall in crude Price, it would have most likely disrupted the growth process of our economy. Crude oil is one of the most necessitated worldwide required commodities and India is importing 100 million tons of crude oil and other petroleum products and spending huge amount of foreign exchange. Such huge imports of petroleum products will have large impact on Indian economy especially when the crude oil prices in the international market shoots up. Any slightest fluctuation in crude oil prices can have both direct and indirect influence on the Indian economy. The rise in crude oil prices has affected the Indian economy quite significantly and the country has to produce about one trillion worth of GDP to fulfill the needs of its huge population. In order to produce this one trillion dollar worth of output, India needs 2.5 million of oil per day which is 6.5 percent of total world demand for oil.

ABOUT CRUDE OIL

Crude oil is a naturally-occurring substance found in certain rock formations in the earth and this is mixture of mud & organic material is rich in hydrogen & carbon. Over millions of years this layer of organic rich mud becomes buried thousands of feet deep in the earth and temperature of the earth becomes hotter as you go deeper in to the earth. The combination of increasing temperature & pressure on the organic mixture causes change in to crude oil.

OVERVIEW OF LITERATURE

Oil price shocks have received considerable importance in the empirical literature. Macroeconomists have viewed changes in the oil prices as an important source of economic fluctuations as the oil shocks of mid and late 1970s was followed by low growth, high unemployment, and high inflation in most of the developed countries. However, the shocks of late 1990s and of 2000, although they were of the same size and magnitude comparable to 1970s, but in contrast, GDP growth and inflation have remained relatively stable in much of the industrialized world. But this was the situation only until 2007, 2008 has witnessed a worst recession around the developed world, conforming to what had happened after 1970s oil shock.

OBJECTIVE OF THE STUDY

1. To study the economic growth of Indian crude oil.
2. To analyse trend in oil price.
3. To study the relationship between oil prices & inflation.
4. To analyse the factors that affect to the crude oil prices.
5. To study the steps taken by the govt. and RBI to minimize the impact of crude oil on Indian economy.
6. To study the impact of higher oil prices on Indian economy.

CRUDE OIL PRICES HAVE BEEN BUFFETED BY MANY FACTORS

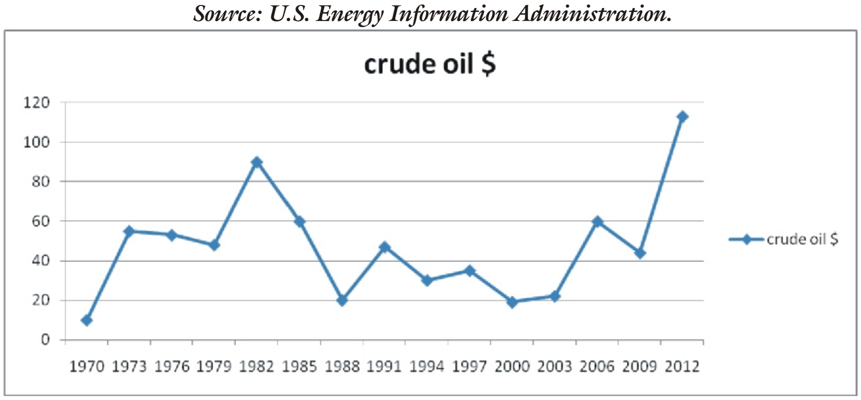
- **PRODUCTION:** Production in industries such as manufacturing, transportation, and electricity generation demands a substantial amount of oil. Therefore, oil supply side measures in harmony with economic growth are needed. In addition to supply side measures, demand side management measures are also needed. The oil intensity in India is much larger than those in the developed countries.
- **NATURAL CAUSES:** In recent years, global community has witnessed many events which in turns have volatility effects on the price level of crude oil. Like hurricane Katrina and other type of tropical cyclone have hit the major portion of globe, which as a result driven the crude oil prices to reach at its peak.
- **INVENTORY:** In throughout the world, oil producers and consumers get stock their crude oil for their future requirements. This gives rise to speculation on price expectations and sale/arbitrage chances in case any unexpected thing cracks during supply and demand equations. Any upward or downward movement in inventory level shoots up volatility in price index of crude oil.
- **DEMAND:** With a sharp rise in economic demand, requirement of crude oil is increasing to manifold in context to the limited supply. The high demand economy of crude oil is putting undue pressure on the available fixed resources. The major gap created between demand and supply of crude oil is forcing the price curve of crude oil to rise in upward direction.

ECONOMIC GROWTH AND OIL PRICE TRENDS

Price of crude oil is the critical importance to today's Indian economy and given that oil is the largest traded well, both in volume and value terms. Higher oil prices increase economic growth by raising 'real resource' prices, through what we can call 'the revenue effect.' The pro-growth impact of oil does not stop there, because fast increasing values of merchandise trade due to higher 'real resource' prices directly leads to fast growth of liquidity When oil prices start to decline, investors and economists get worried. Oil prices in large part reflect global sentiment towards our economic future - prosperous, growing economies need more oil while slumping, shrinking economies need less, and so the price of crude indicates whether the majority believes we are headed for good times or bad. That explains the worry - those worried investors and economists are using oil prices as an indicator, and falling prices indicate bad times ahead. The imbalance between scarce supply and growing demand, and expectations that this imbalance will persist in the future; have led to upward pressure on oil prices and greater market reactions to any actual or perceived disruptions in available supply. Under such tight market conditions, it is often the case that only large price increases can re-establish equilibrium between supply and demand. Consequently, large or rapid movements in oil prices are not inconsistent with the fundamentals of supply and demand; such price movements, by themselves, do not indicate that prices have become divorced from fundamentals.

Historical Crude Oil Price Movements

Source: U.S. Energy Information Administration.



RELATIONSHIP BETWEEN ECONOMIC GROWTH AND OIL PRICES

There are a number of evidences to support bidirectional or unidirectional causality between energy consumption and economic growth. Despite the expanding literature on the study of causal relationships between energy consumption and economic growth, to the best of the author's knowledge, there have been some studies specifically addressing the causal relationship between oil consumption and economic growth. The direction of causality between oil consumption and economic growth has significant policy implications for countries, enjoying implicit generous subsidies for energy. On the other hand, if unidirectional causality runs from energy consumption to income, reducing energy consumption. Numerous studies have been conducted to examine the relationship between energy consumption and economic growth; the overall findings show that there is a strong relationship between energy consumption and economic growth.

IMPACT ON INDIA'S GDP AND INFLATION

India's crude oil import bill may cross USD100 billion if the global price stays firm at USD 100-USD 120 a barrel. If that happens, it will upset the delicate fiscal balance, expand deficit, increase the subsidy bill that continues to bloat year after year and fuel inflationary expectations. Rising crude oil prices will impact inflation whether the government absorbs the burden or passes it to the consumer by increasing prices of petroleum products. If the government acts as a buffer, the oil subsidy bill will rise and affect fiscal deficit. This will indirectly fan inflation. The recent strengthening of crude oil prices could impact economic growth momentum in the country for the current fiscal. The main factors that would be responsible for economic growth moderation in 2011-12 would be crude oil prices and RBI's tightening of monetary policy in response to oil prices. Rising crude price will lead higher inflation and higher inflation attracts monetary tightening. Monetary tightening would lead to a squeeze on aggregate demand, impacting economic growth. There will be an impact on the price level and on inflation. Its magnitude will depend on the degree of monetary tightening and the extent to which consumers seek to offset the decline in their real incomes through higher wage increases, and producers seek to restore profit margins.

STEPS TAKEN BY THE GOVT. AND RBI TO MINIMISE THE IMPACT

STEPS TAKEN BY GOVERNMENT:

- Provided huge amount of subsidies to oil companies: The country is struggling to attract investment in the fuels sector. The government actively started wooing not only private participation but also foreign private participation in all the energy sectors of the country. In order to make investments in the energy sector attractive, the government had to implement strong reform measures in this sector. In 1991, the Indian government began major and irreversible structural changes aimed at radically reforming the economy. These efforts have continued and have already resulted in massive deregulation and a significant opening of the Indian economy.
- Increased domestic price of diesel and petrol: I Import parity pricing has been a commonly used approach in a regulatory context or inn making a case for tariff protection. The argument in support of this approach is that in a situation where there is no domestic manufacture of a product, the cost of supplying it in the domestic market will be the landed cost which is the import parity price. However, even in a situation where there is domestic manufacture import parity price can be taken as the international competitive price that sets the ceiling for the domestic price. When domestic refiners are given the import parity price, they enjoy a rent which is equivalent to the differential in ocean freight and associated costs as between crude and products. Since the price increase will be larger in remote and hilly areas, the Government may want to consider some other way of softening the impact of freight in these areas.
- Start looking for alternate energy options to prevent future oil shocks: Oil being the most important of our fuels today, the term "alternative energy" is commonly taken to mean all other energy sources and is used here in that context. Realizing that oil is finite in practical terms, there is increasing attention given to what alternative energy sources are available to replace oil. Alternative energy refers to energy sources that have no undesired consequences such for example fossil fuels or nuclear energy. Alternative energy sources are renewable and are thought to be "free" energy sources. They all have lower

carbon emissions, compared to conventional energy sources. These include Biomass Energy, Wind Energy, Solar Energy, Geothermal Energy, Hydroelectric Energy sources.

STEPS TAKEN BY R.B.I.:

- Increase in CRR: Cash Reserve Ratio is that portion of banks total deposits which Banks have to park with Central Bank. A bank earns its income through lending at higher rates and paying low rate of interest on Deposits. So any increase in CRR leads to lesser amount of money at disposal of banks, which can be given as advances and loans, thereby sucking liquidity in market.If RBI decides to increase the percent of this, the available amount with the banks comes down. RBI is using this method (increase of CRR rate), to drain out the excessive money from the banks.

  Some of the expected outcomes of the hike in key rates by the Reserve Bank of India are:

(i) Inflation will be contained and inflationary expectations will be anchored.

(ii) The recovery process will be sustained.

(iii) The government's borrowing requirements and the private credit demand will be met.

(iv) Policy instruments will be further aligned in a manner consistent with the evolving state of the economy.

- **Repo Rates:** Repo rate is the rate at which the RBI lends shot-term money to the banks against securities. When the repo rate increases borrowing from RBI becomes more expensive. Therefore, we can say that in case, RBI wants to make it more expensive for the banks to borrow money, it increases the repo rate; similarly, if it wants to make it cheaper for banks to borrow money, it reduces the repo rate.

IMPACT OF HIGHER OIL PRICES

The boost to economic growth in oil-exporting countries provided by higher oil prices in the past has always been less than the loss of economic growth in importing countries, such that the net effect has always been negative. The growth of the Indian economy has always fallen sharply in the wake of each major run-up in oil prices. This is mainly because the propensity to consume of net importing countries that lose from higher prices is generally higher than that of the exporting countries. Demand in the latter countries tends to rise only gradually in response to higher prices and export earnings, so that net global demand tends to fall in the short term. In particular, the results do not take into account the secondary effects of higher oil prices on consumer and business confidence or possible changes in fiscal and monetary policies. The loss of business and consumer confidence resulting from an oil shock could lead to significant shifts in levels and patterns of investment, savings and spending. A loss of confidence and inappropriate policy responses, especially in the oil-importing countries, could amplify the economic effects in the medium term.

PRICE CONTROLS AND SUBSIDIES

Many emerging market and developing economies use subsidies and other administrative measures to control domestic fuel prices. These administered prices are generally set below global market prices and, therefore, artificially boost the demand for oil. Indeed, essentially all of the increase in oil consumption this year is expected to be in India where fuel prices are subsidized and demand is not fully responsive to price signals. Price controls and subsidies interfere with the economic link between market prices and consumption.

CONCLUSION

India's imports of oil are increasing. Our import dependence has reached 80 per cent and is likely to keep growing. At the same time 2008 saw an unprecedented rise in oil price on the World market. Oil price volatility has also increased. Though future oil prices are difficult to predict, they are generally expected to rise. Given our increasing dependence on imports effect to the Indian economy. By the increase in the price of crude oil the inflation increases, Government have to spend too much on subsidy, our exports become weaker, investment decreases and GDP is also affected.

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