"Impact of Oil Price Fluctuations on Indian Economy"

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Abstract

This paper examines empirically how oil price fluctuations impact India's economy. Crude oil is most essential commodity and also the most traded product which influences an economy. Petroleum known as 'liquid gold' and it is compared to gold because it is an exhaustible resource and also of its economic value. Primary purpose of the study is to understand government policies for petrol sector and identify major causes for this amplifying rise in petrol prices and its adverse effect on general public of India. Petrol prices rise mostly because of the cost of the crude oil and refined products in the international market and the government's pricing policy and absence compensation to oil companies.

In any economy the energy sector plays an important role; the growth of the economy largely depends on the energy sector. There are various sources of energy consumption, such as coal, crude oil, natural gas, hydroelectric, solar, wind, and nuclear energy. Out of India‘s total energy consumption, crude oil accounts for 24 per cent, natural gas 6 per cent, coal 40 per cent, combustible renewable and waste 27 per cent, hydroelectric power 2 per cent, and nuclear energy and wind energy about 1 per cent each; solar energy has an insignificant share. The paper attempts to study transmission mechanism of an increase in petroleum prices on the prices of other commodities and output in India.

KEYWORDS: Oil Price, Indian Petroleum Industry, Government Policies, Effect on general public, Price Fluctuations, Administered Price Mechanism, Transmission Mechanism, Inflation.

Introduction:

Economic growth is inextricably linked to energy. Energy is required for almost all economic activities. Petroleum, which comprises of crude oil and refined petroleum products, is one of the prime sources of energy in the world. In any economy the energy sector plays an important role; the growth of the economy largely depends on the energy sector. There are various sources of energy consumption, such as coal, crude oil, natural gas, hydroelectric, solar, wind, and nuclear energy. Out of India‘s total energy consumption, crude oil accounts for 24 per cent, natural gas 6 per cent, coal 40 per cent, combustible renewable and waste 27 per cent, hydroelectric power 2 per cent, and nuclear energy and wind energy about 1 per cent each; solar energy has an insignificant share. "India was fourth largest energy consumer in the world after China, the United States, and Russia in 2011, and despite having notable fossil fuel resources, the country has become increasingly dependent on energy imports"

This paper attempts to get forward the reasons for soaring petrol prices in India. Crude oil is most essential commodity and also the most traded product which influences an economy. Petroleum is also known as “liquid gold” and is compared to gold because it is an exhaustible resource and also of its economic value. Purpose of this study is to understand the government policies for petrol sector and identify major causes for this amplifying rise in petrol prices and its adverse effect on general public of India. The petrol prices rise mostly because of the cost of the crude oil and refined products in the international market and the government's pricing policy and absence compensation to oil companies. Thus, the government needs to extend the subsidy to the targeted consumers in such a manner which does not impinge on the freedom of oil companies to set prices in the market place. Thus, the study would try to empirically test this relationship between changes in crude oil prices and its impact on Indian Economy.

Objectives of the Study:

The study sets the following objectives:

1. To study the Historical background of Indian Petroleum Industry.

2. To study the fluctuations in Crude Oil Price in the since last few years.

3. To evaluate the impact of oil price fluctuations on Indian Economy.

Research Methodology:

This study is completely based on secondary data. The paper attempts at descriptive analysis based on the secondary data sourced from journals articles and media reports. The secondary data collected from different books, national and international journals, Government reports, publications from various websites which focused on various aspects of Impact of Oil Price Fluctuations on Indian Economy.

Historical Background of Indian Petroleum Industry:

In India, history indicates that this sector was largely regulated by government only. To a great extent this can be determined to be cause of India‘s poor share in the world‘s oil and gas production and petroleum product consumption. Some of the biggest problems associated with the sector include excessive dependence on import of energy products and very little participation of the private players in the sector. India was fourth largest energy consumer in the world after China, the United States, and Russia in 2011, and its need for energy supply continues to climb as a result of country‘s dynamic economic growth and modernization over the past several years. India‘s economy has grown at an average annual rate of approximately 7% since 2000, and it proved relatively resilient following 2008 global financial crisis.

History of Indian Petroleum Industry, it is significant to note that until independence of country, the petroleum industry was largely dominated by private entities. It was only after independence that government took control of the sector. Moreover at the time of 1970s when oil crisis hit the country, nationalization of international oil majors took place. It was, after this that Administered Price Mechanism

(APM) was suggested by the Oil Co-ordination Committee. This mechanism was aimed to assure the stabilization of petroleum prices across the country. Moreover, through APM producers, marketers and refiners were compensated for operating costs and also procured a fair return on their assets. Historically, Indian Government has controlled the prices of a number of petroleum products. After its initial success, APM had to depart due to the growing international market and the slow growth of Indian economy.

The oil industry is said to be the wheel of the economy and its strategic linkage with almost all other sectors cannot be overlooked. The APM was scrapped off due to changing oil policies of the gulf countries. On all occasions when the oil prices escalated, world economy went into a zoom. In the deregulated system, price rate is the one that floats with changes in global crude rates with producers' and retailers' margins added on and the government taxes added over it. Thus, administering the oil prices on continuous basis was totally un-viable.

Exceptionally high crude oil prices in the international market and almost stagnant domestic crude oil production has caused a drain on country‘s foreign exchange reserves. The Government is committed to mitigating these challenges and has, in fact, met with accelerated domestic exploration through its NELP i.e. New Exploration Licensing Policy initiative. Some of the world class oil discoveries have recently been reported from blocks offered under NELP regime. Five NELP rounds have resulted into 110 PSCs being signed and Sixth round offering 55 exploration blocks is still underway. Besides augmenting domestic reserves, India has successfully ventured overseas to acquire oil and gas assets, also entered into long term Liquefied Natural Gas (LNG) contracts as measures for enhancing energy security (FACTS Global Energy Asia Pacific Refinery Configuration and Construction, 2009).

India was the fourth largest consumer of oil and petroleum products after the United States, China, and Japan in year 2013, and it was also fourth largest net importer of crude oil and petroleum products. The gap between India‘s oil demand and supply is widening, and as demand reached nearly 3.7 million barrels per day (bbI/d)in 2013 compared to less than 1 million bbl/d of total liquids production. Despite of having large coal reserves and a healthy growth in natural gas production over the past two decades, India is increasingly dependent on imported fossil fuels. The current petroleum and natural gas minister, Dharmendra Pradhan, who took office in the late May 2014, reiterated goal of making India self-sufficient in energy resources. India is also looking to further develop and harness its different renewable energy sources. These actions would effectively increase India‘s energy supply and create more efficiency in the energy consumption. India already began implementing oil and gas pricing reforms over past two years to foster sustainable investment and help lower subsidy costs

Impact of Increases in Oil Prices on the prices of other commodities and output in India:

International crude oil prices experienced a sharp increase in the recent period. From a 25 years low of USD 11 per barrel in February 1999, the reference price of crude oil used by the International Monetary Fund (IMF) increased to a peak of almost USD 35 per barrel in the first week of September 2000. All oil-importing countries faced the specter of this 'oil shock' and India, Being a net oil importer was no exception. Although burden of the price increase at the international market was not fully passed on to domestic consumers in India, the combined oil pool deficit exerted pressure on Government finances, affecting macroeconomic outlook and inflation in the ensuing year. The world economy has witnessed four bouts of oil price shocks in past thirty years, viz., 1973-74, 1979-80, 1990 and recent one from early 1999. Oil price hikes typically generate cost push inflation leading to fall in output and shifts in the terms of trade. The recent increase in oil prices has come after sustained ebb in inflation in the developed countries. Favorable global economic conditions such as unutilized capacity and low underlying inflationary pressure have helped developed countries greatly in moderating the adverse impact of oil shock. However, developing countries may be affected more than developed countries due to the lack of oil- conservation techniques and absence of appropriate oil substituting technology in the production process.

The objectives of this paper to study the impact of an increase in oil prices on prices of other commodities and output in India. In the Indian contest, the possible impact of petroleum price hikes, which are administered, often generates debate among the public. The postponement of adjustment in administered prices may delay the buildup of inflation pressures in the short run, but subsequently gets translated into an invariably bigger shock. Any hike in such prices apart from a direct impact, has an indirect impact on prices of those commodities which use them as inputs and can lead to a wage price spiral as evidenced during oil shock of the 1970s. However, the impact could be nullified through appropriate and judicious use of monetary policy instruments, provided the origin of the inflationary pressure in the economy is clearly delineated and policy perspectives are drawn accordingly.

Conventional wisdom suggests that any oil shock in the domestic market could lead to increase in prices of other commodities in two distinct phases. The first phase is an immediate one and occurs as a result of hoarding of commodities in anticipation of a future price rise. In the second phase, a price rise in petroleum products generates a cost-push effect whose impact is felt only after the completion of an average production cycle in the economy.

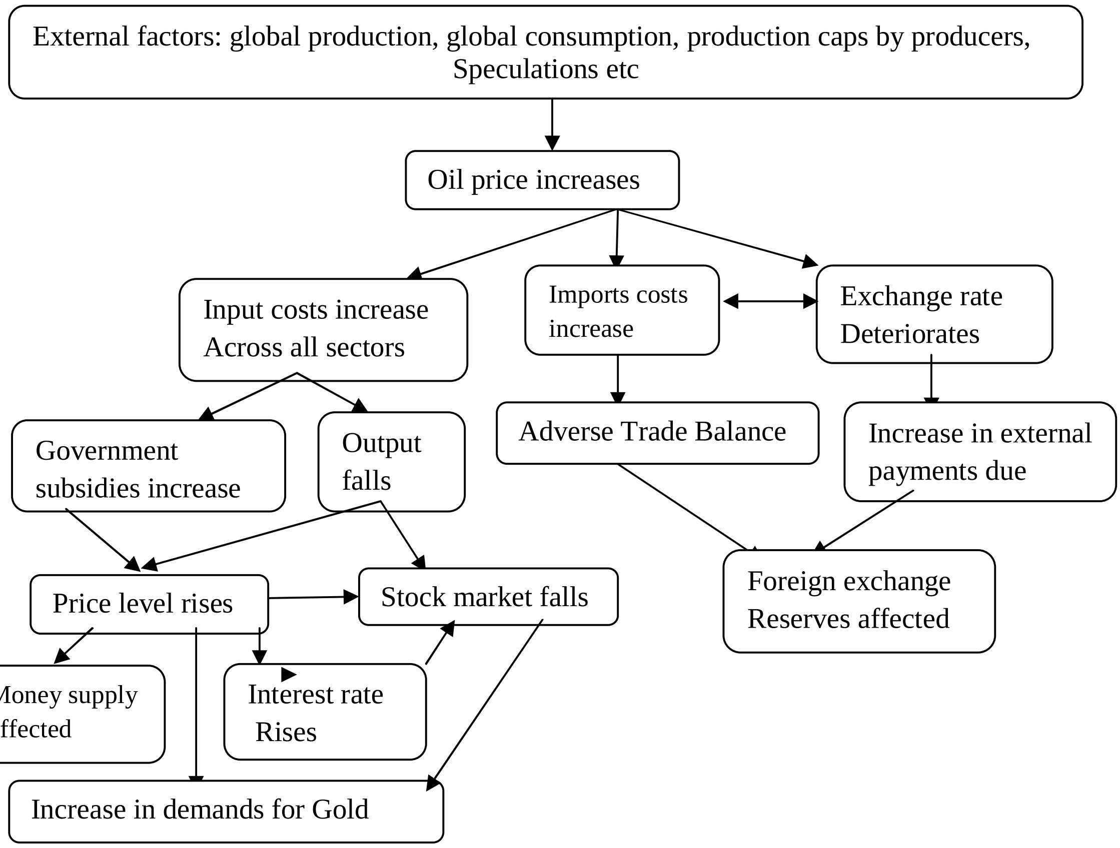
Impact of changes in Oil price on Indian Economy:

The study indicates that oil prices generally follow economic principles of supply and demand in the long run. Also there exists a weak but significant relationship between oil price changes and fluctuations on Indian Economy. As India is the net importer of crude oil so its economy is highly sensitive to oil prices shocks in the international crude oil market. India imported USD 156.97 billion worth crude oil and products in 2012-13 and oil imports account for 34 per cent of the total import bill and a dollar increase per barrel raises trade deficit by USD 900 million. Thus, rise in crude oil prices affect Indian Economy in a significant manner as the country has to produce about $1 trillion of GDP to sustain its huge population and to do so it requires about 2.5 million barrels of oil per day which is 6.5 % of world's total oil demand.

India has persistently been depending on the imported crude oil (mainly from the oil and petroleum exporting countries in the Middle East) to meet the lion's share of its requirement. The import dependence for crude and consequent vulnerability of the country to oil price shocks has exacerbated over the recent past owing to rapid growth of the Indian economy post 1991 that has fuelled the rapid growth in oil consumption.

Given the paramount importance of petroleum for Indian economy and its increasing import dependence on this front, the domestic pricing of crude oil and petroleum products assumes enormous significance for the country. The pricing regime not only influences the cost of energy for economy as a whole but also has significant implications on economic growth and welfare. The pricing of crude and petroleum products in country has been influenced by a multiplicity of politico-economic factors and (oft-contradictory) interests of various actors and interest groups involved in the matrix, such as consumers, particularly the vulnerable sections, the producers, refiners, marketing companies, and the government.

Impact of Oil Price Shock on Indian Economy:



There has been outrage among the general public about price hike of petrol. The common man already burdened with inflationary pressures, increased petrol prices will further shrunk the real household income. There have been strong reactions from opposing political parties as well as sharp reactions from the general public against the price rise. The primary reason behind increase in the petrol prices is the rise of dollar against rupee. We need to understand why the rupee is depreciating against dollar like a free fall. One of the many reasons cited for depreciation is the ongoing euro crisis.

The government‘s fiscal deficit is increasing i.e. the government is spending more than it is what it is earning. This is because increased expenditure is not matched by increased tax rates. Hence, people are left with more money, out of which some of money is diverted towards the imports which results in more imports than exports leading to trade deficit. The major portion of our imports is oil. Since oil imports have to be paid in dollars, importers need to buy dollars and sell rupee leading more demand of dollar and excess of rupee in the market. Now if prices of oil products are not increased, deficit will keep on increasing further impacting our economy. An increase in price will result into fall in the demand which means that fewer dollars will have to be paid for the oil imports, leading to lower trade deficit which will in turn lead to release of pressure on the rupee dollar rate.

Another effect of not increasing prices oil products is that, government will need to compensate the OMCs for the subsidy offered. The government will finance this deficit by borrowing from the market leading crowding out of the private investment which will slow down our economic growth. It may lead to higher interest rates which will increase common man‘s EMIs. The prices of petrol have been increased. This will have some effect on trade deficit and rupee dollar value but in order to have more pronounced effect, government needs to increase the price of diesel, kerosene and LPG. An increase in prices of these will help government reduce its fiscal deficit, meaning less borrowing from market leading to more funds available for the private investment. Hence better economic growth.

Conclusion:

Overall, our results suggest that the maximum impact of oil price fluctuations is felt on price level and net exports. Given India’s high dependence on oil imports, India faces the impact of imported inflation, which is the general price level rise in a country because of rise in prices of imported commodities. For the expanding economy like India, such vulnerability to oil price shocks is not sustainable and thus it becomes crucial to come up with efforts to an expedite process of exploring domestic avenues and diversify its sources of oil supply. Further, there is an urgent need for the development of non-conventional (including renewable) sources as a substitute for conventional sources to meet the energy needs. Energy subsidy reforms along with regulations, standards, and targets directing efficient level of utilization of oil as a fuel are important to reduce dependence on oil imports. This applies to developed and developing nations alike.

A viable and sustainable pricing system for petroleum products is a key requirement of stable, long term growth of the economy. Similarly, a financially strong and globally competitive oil industry provides an enduring platform to strengthen energy security of country. It is therefore very important that oil companies should have the freedom to set prices based on competitive market conditions. The government needs to extend subsidy to targeted consumers in such a manner which does not impinge on the freedom of oil companies to set prices in the market place.

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