

## **Fluctuating price of oil and how it affect the global economy**

### Abstract:

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. This creates an inflationary effect (mainly cost push inflation which is accompanied by a situation of unemployment). 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 causes of oil price hike in recent times and its impact on the economy of some selected countries. It has been found out that although oil price hike adversely affects a large number of economies, it does not necessarily affect all the countries in the same way.

### Introduction:

The oil, specially the fuel is an indispensable commodity for each and every country in this age of civilization. Without the fuel the pace of the development of any country will be hampered drastically. The world history has witnessed how the oil price shock in the global market has created inconvenience for all of the countries more than once since the emergence of OPEC (Oil and Petroleum Exporting Countries) Union. In recent time, the world is experiencing severe fluctuation in the prices of oil. The price of oil showed huge increase since the beginning of the twenty first century. But the prices of oil reached all time high in the current year. The prices are

found to break every record in the last year reaching above \$140 per barrel. (Econbrowser, 2008; Jones, Donald Leiby, and Paik, 2004)

The oil prices have started rising significantly particularly since 2002. In the early days of 2002 the global economy emerged from a phase of huge economic down turn, which had been caused by the bursting of the bubbles of information and communication technologies and 9/11 attack on World Trade Centre in U.S.A. During 2002 the world economy launched a major recovery process, which was led by the developed countries like U.S.A and emerging economies like China. Significant growth of U.S. and Chinese economies, the two most powerful countries in the present economic scenario, has helped in providing a huge boost to the demand for oil along with other resources and consequently caused their prices to rise significantly. Changes in the level of prices are expected to produce huge impact on the economies of the oil exporting as well as oil importing countries.

The fall in purchasing power of people, owing to inflation, would in turn cause a decline in the demand for commodities. As a result there would be overall decline in the sale of the products and consequently a fall in production and thereby employment. The paper seeks to analyse the impact of oil price fluctuation on global economy. For doing so, a rigorous review of existing literature is conducted on the issue under consideration, i.e. fluctuation in oil prices and its impact. Then, the data on some macroeconomic variables like real GDP, inflation, etc. of some of the important countries in the current economic scenario are used and a descriptive analysis of the impact of oil price fluctuation on the global economy is carried out.

Literature review:

In this section, the collection of literature might give a very clear idea regarding different aspects of oil price fluctuation and its impact on the global economy. Prices of oil presented great shock during the last few years. The global prices reached soaring height during this phase causing huge economic turmoil throughout the world. The changes in global oil prices attracted the concentration of a number of scholars to investigate the causes and effects of these changes.

This literature review section is subdivided into three parts. The first subsection looks at the recent trend in the oil prices, the second section will study the theoretical impacts of oil price hike on different macroeconomic variables, and the third subsection will discuss the empirical findings of a number of existing researches. These researches are essentially on the impact of oil price rise on different macroeconomic variables in various countries.

Severe fluctuations of oil prices:

As mentioned earlier in this paper, prices of oil have started increasing since the early days 2002. However, oil prices started to show significant changes since the US invasion in Iraq in 2003 as Iraq has a huge oil reserve (Joans & Leiby, 1996). The conflict occurred almost simultaneously with an increase in global demand for petroleum, but it also brought down the current production of oil in Iraq. This has been partially blamed for oil price increases. With the decrease in production capacity in Iraq the crude oil price rose to a new height in 2004-2005. During 2004-05, the oil price became as high as US\$70 per barrel after the attacks of the hurricanes. In U.S., the average level of West Texas Intermediate (WTI) oil price became US\$57 in 2005. The rise is still continuing and expected to continue in future also. ((Joans & Leiby, 1996).

During the year of 1987, there occurred a shift in the process of setting oil prices. The system of setting oil price had experienced a shift from standard oil price system (a price system with a

fixed nature in which the standard was the Arabian light) to a new method of fluctuating price system which has a close link to the market price. The late 1980s and early 1990s witnessed only a temporary hike in prices during the period of Gulf crisis. Until 1995, the prices of oil were more or less stable with the prices hovering between US\$14 and US\$20 per barrel. However, since the beginning of the year of 1996, prices of oil started to fluctuate wildly outside this range and the price of oil did not fall below the level of U.S.\$30 even in 2000 when OPEC increased oil production significantly. Although the prices continued to rise after the year of 2000, the increasing trend came to a halt during the start of the Iraq war in 2003. At the beginning of the Iraq war, prices of petroleum experienced a decline and therefore generated a huge expectation among people that this decline would continue in future also. However, this expectation did not happen in reality. In fact, at the end of the War, price started to rise again and that too at a rapid pace. In 2004, the prices of oil exceeded the level of US\$ 35 and continued to increase further. In October, 2004, prices even surpassed the abnormal level of US\$ 50. Towards the end of 2004, there occurred a very temporary decline in the price level, but it did not take much time to resume its growth and followed a upward rising trend during 2005 also. At the end of 2005, the oil prices exceeded the level of US\$60. The price continued to rise in the subsequent years also. Until recently, the prices have been following the same upward rising trend and once rose to an abnormally high level of U.S.\$140. However, the present trend of the oil prices is found to be somewhat declining causing significant recovery of the FTSE100 companies. (Anonym, "FTSE100...", 2008). (Econbrowser 2008; Krugman, 1994; International Energy Agency ; 2003 and 2004)

Theoretical impact of oil price hike on global economy:

Prices of oil are considered to be a very important determinant of the economy's performance across the world. On an overall basis, an increase in oil price results in a transfer of income from importing countries towards the exporting nations through a change in the terms of trade in favour of the exporting nations. There are certain important factors on which the extent of direct effect of the price change on economy is dependant. Among these factors the most important ones are the ratio of total costs of oil to national income, the magnitude of the dependence on oil import and the capacity of the final users in reducing the consumption level of oil and making a shift towards other alternatives. Apart from these, the responsiveness of gas prices to oil prices, the intensity of use of gas in the economy and effect of increasing oil prices on the prices of other alternative sources of energy, electricity etc. influences the extent of the direct impact of hike in oil prices on a country's economy. The higher the level of increase in oil prices, the longer will be the period for the sustainability of higher prices and as a result, it will lead to larger impact on important macroeconomic variables which are used to determine the performance of the economy. (Lee, Ni, and Ratti, 1995; Mundell, 1968; Jones, Donald Leiby, and Paik, 2004)

For oil exporting countries, real GDP is increased by oil-price hike through increase in higher earnings from exports. However, in later period, in most of the cases, a part of this gain in GDP would be offset by the reduction in demand for exports from the importing countries because of the poor economic condition of these trading partners. This is because hike in oil prices actually leads to increase in prices of other commodities too. (Mundell, 1968; Jones, Donald Leiby, and Paik, 2004)

Apart from the immediate effects just discussed above, some indirect or adjustment effects also take place after a rise in oil prices. These adjustment effects generally result from the adjustment in real wages, prices and from the prevalence of structural rigidities in the economy. These adjustment effects are realised in the following way: - As oil prices move upwards, the economy is likely to face inflation which in turn results in significant increase in the cost of inputs, reduction in demand for commodities other than oil, and a significant fall in investment in the countries which are basically net importers of oil. Consequently, tax revenues decrease and budget deficit surges to a large extent owing to the fact that government expenditures are highly rigid and all these cause a hike in interest rates. On the other hand, an effort of maintaining real wages at the previous level, results in an upward pressure on nominal wage rates. Increased wage rates coupled with declined demand ultimately results in higher level of unemployment. These effects are supposed to be more severe and proportional to the level of increase in prices of oil. Impact on oil prices on GDP, wages and unemployment are magnified by the impact of the higher prices on the confidence level of consumers and businesses. (Kaufmann, 2003; Hamilton, 1996; Stonier, and Hague 1980, Keane, and Prasad, 1996)

Apart from the impacts mentioned above, some other effects may be noted. Usually, oil-importing countries undergo a large-scale deterioration in their balance of payment accounts, which in turn places a severe downward pressure on their exchange rates. Consequently, imports become dearer (more costly) and value of exports falls, which ultimately lead to a fall in national income. If the Central Bank and government do not change their monetary policies under this situation, the dollar would tend to rise due to increase in demand of oil producing nations for international or foreign exchange reserves denominated in dollar. (Hamilton, 1996; Sill, 2007)

As far as impact of oil price hike in long term is concerned, the policy responses on the part of the government to a combination of higher level of inflation, increased unemployment, reduced exchange rate and lower real GDP affect the extent of impact on the economy in the long run. Government undertakes several policies to combat the adverse effects of increasing oil prices. Although government's efforts are not capable of completely eliminating the negative impacts discussed above, it can, however, minimise the extent of the negative impacts. To reduce the extent of adverse effect of oil price increase, the policies, however, have to be appropriate; otherwise, these will only worsen the situation. For example, contractionary monetary and fiscal policies, which contain inflationary pressures, could aggravate the recessionary effects on income and unemployment. On the other hand, expansionary fiscal and monetary policies make a delay in the fall of real output destined to be brought about by the increased level of oil prices and reduce inflationary pressure. This could reduce the extent of negative impact of higher prices in the longer run. (Bernanke, Gertler, and Watson, 1997; International Energy Agency, 2003;)

Empirical evidence of the impact of high oil prices on global economy:

To examine whether the theorised effects of oil price hike hold good in reality, a number of empirical researches have been conducted. This subsection will review a number of those empirical studies that have made attempt to find out the impact of increasing oil prices on the economies of different countries.

First, this sub-section will discuss the findings of the research conducted by the International Energy Agency. In 2004 the International Energy Agency conducted a rigorous study on the impact of the high oil prices on the economies of OECD countries and developing countries of the world.

To examine the vulnerability of the OECD economies to oil price shock that have started since the beginning of the twenty first century, the International Energy Agency had carried out a simulation exercise. While quantifying the impact of high oil prices, it had assumed the level of oil prices to be constant at US\$25 per barrel over the period, 2004-2008 in case of OECD. On the other hand, in the case of sustained higher price, it had considered the prices to be as high as US\$ 35 per barrel. Apart from these, another assumption was made regarding the nominal value of dollar exchange rates. Nominal exchange rates in terms of dollar were held constant for the entire five years period. The study found the oil prices to have a significant negative impact on the performance of the OECD economies over short run. It was found that the GDP had declined owing to the deterioration of terms of trade that had resulted from increase in oil prices. Decline in the GDP had caused reduction in consumption and investment. GDP of OECD countries was found to be 0.4 percent lower in 2004 compared to the base period (the period of lower prices). The impact of higher prices was found to be higher on inflation rate. The study found the consumer price index to be five percent higher during 2004 as compared to the base period. In the presence of higher oil prices unemployment also increased. Around 400,000 jobs were lost across all OECD member countries. The trade balance of the OECD member countries also deteriorated in short run as higher oil prices had made the cost of imported oil and inflation increase. However, one notable thing regarding the findings of the empirical study is that the economic effect of higher oil prices considerably varied across OECD countries according to the degree of dependence on the imported oil. (International Energy Agency, 2004)

As far as effects of higher oil prices on the economies of developing countries are concerned, the effects were found to be more pronounced. The empirical research found that the impact had been more severe in case of the poorest and most indebted countries. The study made a

projection regarding the fall in GDP in developing countries in an environment of increasing oil prices. It projects a 0.8 percent fall in GDP and 1 percent fall in current account balance in Asian countries. Similar kinds of effects were found to take place in other developing countries also, particularly in the Sub-Saharan economies. (International Energy Agency, 2004)

There is another important empirical research, which has studied the impact of oil prices on the member countries of the IMF by conducting simulations on the IMF multi-country model. This study was conducted by Hunt, Isard and Laxton (2002). In their study, the first set of simulations described the responses of real GDP and inflation to oil price increase of various duration, the second set of simulations made an attempt to describe the responses of real GDP and inflation to the oil price shocks of transitory and more persistent nature, the third one described asymmetric types of responses of microeconomic agents to the real wage changes. (Hunt, et. al, 2002)

The researchers found a negative association between oil prices and economic activities. However, they recognised a greater change in economic activities when oil prices had increased than when oil prices had declined. It was found that workers responded in an asymmetric way to oil price hike and decline. They pushed wages to higher level for resisting the fall in their real consumption level that had resulted from oil price hike, but they did not resist any kind of increase in their consumption resulting from declining oil prices. (Hunt, et. al, 2002). Hunt et. Al (2000) found a downward pressure on inflation during oil price decline, but an upward pressure on inflation during oil price hike. They also found significant fall in real GDP owing to oil price hike in U.S. and European region.

Methodology:

The present paper aims at discussing the impact of the soaring oil prices on the global economy. In order to get proper insight of the effects caused by the shocking change in prices of oil and food the possible causes that might have brought about such change might also be discussed. In order to find out the major causes of oil price hike, the paper uses a method of analysis of the available literature published in different scholarly journals and books. The research articles published by government agencies have also been considered. Internet sources were also not ignored in this study. A measurable number of articles have been selected by judgment sampling technique to gather a wide range of authentic data and related literature. For the present paper, six countries have been taken under consideration, U.K., U.S., Japan, Italy, Germany and Canada. For all these countries data on annual changes in real G.D.P and inflation rates, the two most vital indicators of the performance of the overall economy, over a period of 1999-2008 have been collected from several authentic internet sources. On the basis of these data and oil price data collected from some existing literature, efforts have been made to analyze the effect of oil price changes on some of the major macroeconomic variables.

Keeping in mind the vastness of the topic, the sample size may not be enough to present a very detailed account but still the articles chosen are able to present sufficient information and related discussion on the topic. Though the primary focus of the study is the impact of the rise in price of oil, still a short discussion on the causes of the oil price hike may be relevant to the discussion. While choosing the articles, care was also taken to include articles focussing on the situation in the countries selected for the present study against the global picture.

The qualitative method chosen for the study is helpful in presenting a descriptive overview of the entire situation along with the perception of the analysts and researchers. The data collected

provide an analytical impression regarding the impact of oil price hike on important macroeconomic variables.

Analysis of the findings:

This section will first analyse the causes of oil price hike, which is relevant to understand the effect of increase in oil prices on macroeconomic factors. Then it will focus on the collected data to describe the impacts of increase in oil prices on global economy. For examining the impacts, the effects of oil price shock will be analysed for each of the countries, separately.

Factors influencing hike in the prices of oil:

Increase in demand of crude oil is said to be one of the most vital causes of rise in price of oil. It is seen that the demand for crude oil across the world grew at an average rate of 1.76% per annum, starting from 1994 till 2006, reaching a height of 3.4% in 2003-2004. The demand in the developing countries is overwhelming due to their economic development increasingly depending on mechanization. The increase in demand for crude oil has been predicted to be about 37% more than the level of 2006 by the year 2030 and the developing economies including China and India may be the greatest contributors to demands owing to their increasingly urbanized lifestyle. With the rapidly growing economy, the sector that is considered to be the highest consumer of oil is the transportation sector in the form of new demand for vehicles of personal use. These vehicles are powered by internal combustion engines. About 75% of increase in consumption is predicted by 2025 in the countries like China and India. Growth in population also causes an increasing demand of oil. The world population is expected to be double the level in 1980 by the year 2030. (Yoshiki, 2009; Olson, 1988)

Reduction or removal of the state fuel subsidies in order to reduce the government's cost of subsidization also can be treated as a cause behind surging oil price as the state subsidies were responsible to shield consumers from price rises in many countries. According to Reuters (2008), countries like China and India, along with Gulf nations contributed 61 percent of the increase in global consumption of crude oil from 2000 to 2006. As per a statistical review by BP, China uses three times more energy per unit of GDP than USA. ("BP Statistical Review of Energy – 2008", 2008) The Chinese factories are also not made keeping in mind the current energy level. Thus the country shows highest risk from surging oil prices also (Pritchard, 2008). Other than Japan, Hong Kong, Singapore and South Korea, the government of most Asian countries subsidize the prices of domestic fuel. As different countries subsidize the prices, it becomes less and less probable that high oil prices would have an impact with respect to reduction in overall demand, thus forcing governments in weaker financial situations to surrender and consequently, stop their subsidies. Therefore nations like Indonesia, Taiwan, Sri Lanka, Bangladesh, India, and Malaysia have either raised regulated fuel prices or pledged that they will. (Anonym, 2008)

On the supply side it is seen that the slow down in oil supply is a significant cause of rising prices. Fossil fuel being limited in amount and the consumption being rapid, it is now evident that the global oil production is on the verge of decline and this fact is a long term contributor of price rise. Increasing technical difficulties in extracting the remaining oil from the reserves also cause rise in prices of oil as more advance technologies are normally more expensive. Though some argue that the demand for oil will decrease more rapidly than the supply owing to the increasing awareness in global warming and shift towards alternative energy sources, still experts comment that the accessible sources of oil will be completely exhausted in near future

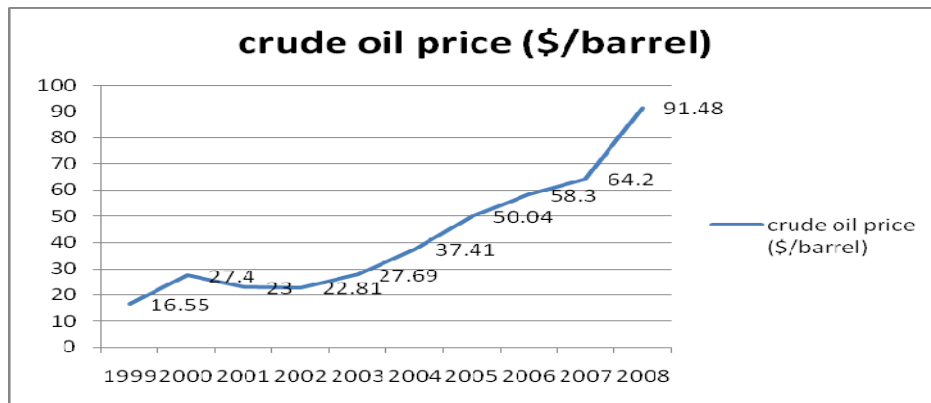
causing dependence on more expensive heavy oil. Alternative energy is also considered quite expensive compared to conventional energy. (Olson, 1988; Brook et. al, 2004)

Some financial causes are also involved for the rise in price of oil. The tripling of oil market size is termed to be a cause of price rise but often it is speculated to be the opposite, i.e., the increase in investment is often said to follow the price rise and not the cause the same. OPEC Secretary-General Abdullah al-Badri referred to the confusing causes of oil price rise. He opposed the supply and demand equation to be treated as the probable cause. According to Badri, current world consumption of oil at 87 million bpd is far exceeded by the market for oil, which equals about 1.36 billion bpd, or more than 15 times the actual market demand (Anonym, "OPEC Sec-gen..."2008). Since oil is being traded in US dollars, the changes in values of US dollars are also said to have impact on the oil prices. But later discussions showed that oil price is not significantly correlated to the value of the dollar compared to the currency of other country. Loose monetary policies may also be blamed for the increase in oil price and devaluation of dollar. Labor strikes, threats from hurricane to oil platforms, threats or challenges faced by risks of fires and terrorist at the refineries and similar other factors are also considered as the causes of short term price rise but these have no significance to long term increase in the price of oil. (Brook et. al, 2004)

Impact of oil price fluctuation on global economy:

It will not be a over statement that the present hike in price level or in other words, the main reason behind the current inflation is the hike in crude oil price. Any upward boosts to the oil price have a spiral effect on the general price level. This is because crude oil price influences

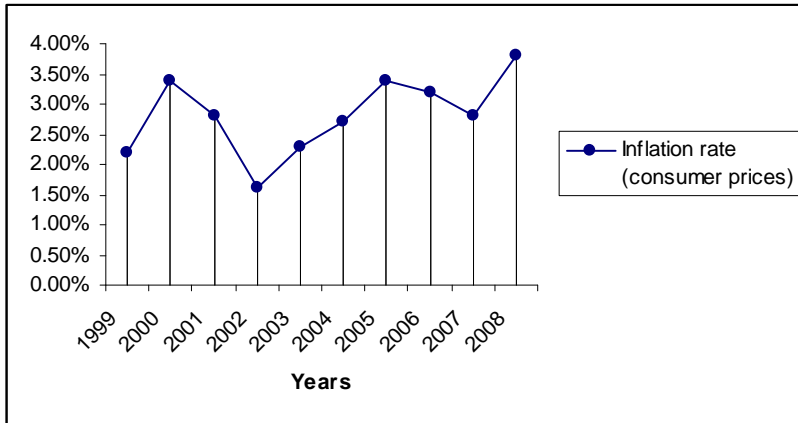
many other price levels in a direct or indirect way. As an example, in case of auto industry, a rise in oil price will result in the rise in gasoline, petroleum or diesel. This is going to increase transportation cost invariably. The following illustration depicts the rising cost of crude oil per barrel:



Data source: “HISTORY OF ILLINOIS BASIN POSTED CRUDE OIL PRICES”, n.d.

With the rise in transportation cost of transporting raw material from their source to the production site will certainly rise and that will result in higher total cost of manufacture of automobiles, i.e., lower profit for the automobile industry or higher price of the automobile to the consumers. A rise in price of automobile will reduce its demand. Furthermore, as mentioned earlier, rise in price of the fuel will make transportation through owned vehicle dearer. So it will also provide a negative impact to the auto sales figures. Again, with rise in the price level or amidst an inflationary environment, the disposable income in the hands of the public will become less. This is because, for a substantial segment of consumers, automobiles still are a luxury good and hence its consumption will certainly fall. Thus, inflation will cause a decline for the automobile industry in all aspects. Another interesting fact may be mentioned here – inflation can also change the consumer’s preference towards vehicle. Larger fuel inefficient luxurious cars

might get replaced by their smaller variants, which on one hand, have a lesser price and on the other, are fuel-efficient. (Flint, 2008) The changing consumer preferences in USA regarding automobiles in recent years clearly depict this fact (demand for small car is rising in USA whereas that for luxury cars declining).

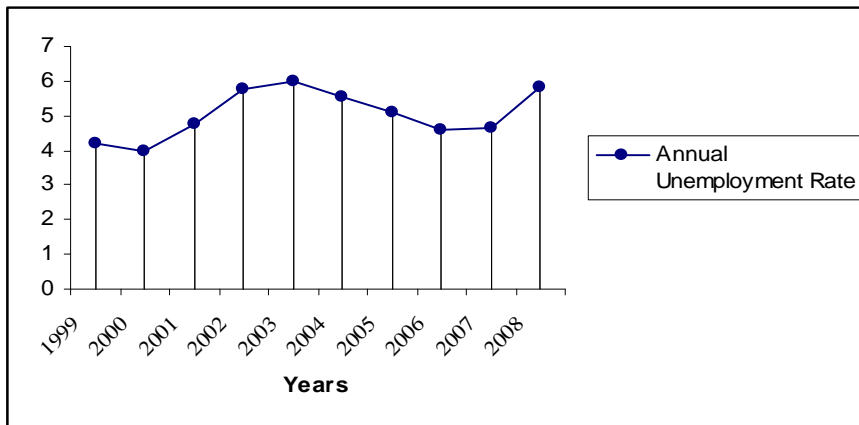


Data source: “United States Inflation rate (consumer prices)”, 2008

In the above illustration, we see the Inflation Rate by the Consumer Price Index over the years.

The inflation rate started soaring up during 2007 and persisted throughout 2008 till date.

Following general logic, we may therefore derive that as the purchasing power falls, demand for automobile will also fall, resulting in lesser production and a cut in labor force in the auto industry to curtail cost. The following trend line shows the status of unemployment in the economy as a whole.

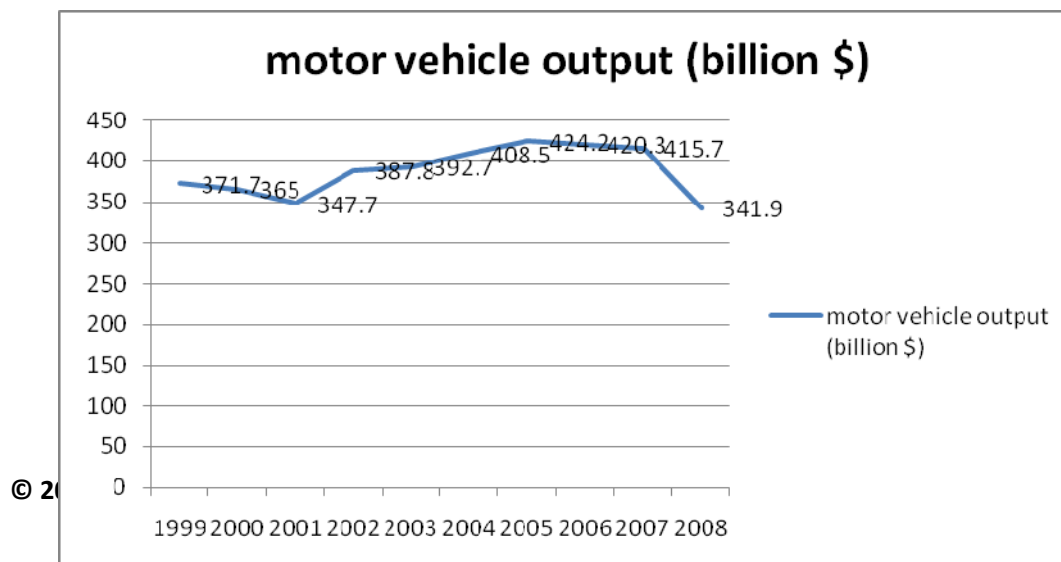


Data source: United States Department of Labor, 2009

In the above chart, we see the Unemployment Rate over the years. The rate was rising nearly from 2001 and reached its peak in mid-2003. It started falling till mid-2006. Then again it gained impetus and soared upwards. So we see in the recent years (2006 onwards), the unemployment rate is increasing sharply and it surely affected the sales rate of the automobiles.

The unemployment rate also shows a more or less inversion - the trend lines empirically supporting the “Phillip’s Curve” analysis (Fisher, 1973), that is, the rise in the prices lowered the real purchasing power of the consumers, thereby lowering the auto sales.

Now let us look at the sales figures’ trend in the automobile industry of USA. The following chart reveals the trend in motor vehicle output over the years:



Data source: Bureau of Economic Analysis, 2008

Data source: Bureau of Economic Analysis, 2008

In the above figure we find a sharp fall in output or supply of motor vehicles, which should imply a fall in employment in the automobile industry. The fall is sharp in keeping with the sharp rise in inflation over 2007 to 2008; fall in overall unemployment rate over the same period and a rise in crude oil price.

Let us now look at the effect of oil price fluctuation on real GDP, inflation rate, and unemployment for some countries with the help of tabular presentations. For doing these the study will try to relate the variation in real GDP over the period of 1999-2002 to the variation in oil prices over the same period for each country under consideration.

Recent variation in real GDP in U.S.A: Table 1-A presents recent Variation in oil prices in U.S.A over the period of 1999-2008 from the statistics on annual changes in G.D.P given below.

Table 1-A: Annual percentage change in G.D.P. in U.S.A.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
4.45	3.66	0.751	1.599	2.51	3.637	3.07	2.871	2.189	0.517

Source: EconStats, n.d.

It can be summarised that since 1999 G.D.P declined continuously up to 2001. In the next three years it recovered again corresponding to recovery Measures taken. But after 2004, it declined continuously up to 2008. This kind of decrease in annual real G.D.P. coincided with the rise in crude oil prices implying a negative association between oil price hike and real GDP.

Recent variation in real GDP in U.K:

Table 1-B: Annual percentage change in G.D.P. in U.K.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
3.042	3.802	2.372	2.053	2.77	3.259	1.839	2.909	3.12	1.630

Source: EconStats, n.d.

From the Table 1-B given above similar kind of association is found between real G.D.P. and the global oil price changes in U.K. as in U.S.A.

Recent variation in real GDP in Japan:

Table 1-C: Annual percentage change in G.D.P. in Japan.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
0.142	2.86	0.184	0.262	1.414	2.744	1.934	2.424	2.107	1.433*

Source: EconStats, n.d.

From the Table 1-C given above, no convincing negative association between real G.D.P and oil price hike is found in Japan.

Recent variation in real GDP in Germany:

Table 1-D: Annual percentage change in G.D.P. in Germany.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1.932	3.129	1.239	0.011	-0.269	1.058	0.763	2.882	2.534	1.405

Source: EconStats, n.d.

From the Table 1-D given above, no convincing negative association between real G.D.P and oil price hike is found in Germany as in Japan. .

Recent variation in real GDP in Italy:

Table 1-E: Annual percentage change in G.D.P. in Italy.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1.925	3.582	1.822	0.458	-0.014	1.529	0.551	1.841	1.457	0.251

Source: EconStats, n.d.

From the Table 1-E given above, no convincing negative association between real G.D.P and oil price hike is found in Italy as Germany and Japan.

Recent variation in real GDP in Italy:

Table 1-F: Annual percentage change in G.D.P. in Canada.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
5.532	5.233	1.784	2.925	1.881	3.07	3.066	2.759	2.653	1.32

Source: EconStats, n.d.

From the Table 1-F given above a negative association is found between real G.D.P. and oil price changes in Canada as in U.K. and U.S.A.

Recent variation in inflation in U.S.A:

Table 2-A: Annual percentage change in inflation in U.S.A.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
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2.193	3.367	2.817	1.596	2.298	2.668	3.375	3.226	2.858	3.018
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Source: EconStats, n.d.

From the Table 2-A given above, a positive association is found between real G.D.P. and oil price changes in U.S.A.

Recent variation in inflation in U.K

Table 2-B: Annual percentage change in inflation in U.K.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1.317	0.867	1.182	1.274	1.363	1.344	2.041	2.3	2.346	2.504

Source: EconStats, n.d.

From the Table 2-B given above, a positive association is found between real G.D.P. and oil price changes in U.K.

Recent variation in inflation in Japan:.

Table 2-C: Annual percentage change in inflation in Japan.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
-0.29	-0.7	-0.685	-0.887	-0.298	–	-0.299	0.3	–	0.6200*

Source: EconStats, n.d.

From the Table 2-C given above, no clear association can be found between found between real G.D.P. and oil price changes in Japan.

Recent variation in inflation in Germany:

Table 2-D: Annual percentage change in inflation in Germany.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
0.635	1.4	1.904	1.355	1.031	1.79	1.92	1.784	2.276	2.497

Source: EconStats, n.d.

From the Table 2-D given above, a more or less positive association is found between real G.D.P. and oil price changes in Germany.

Recent variation in inflation in Italy:

Table 2-E: Annual percentage change in inflation in Italy.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1.657	2.575	2.323	2.61	2.812	2.274	2.206	2.217	2.038	2.47

Source: EconStats, n.d.

From the Table 2-E given above, no clear association can be found between found between real G.D.P. and oil price changes in Italy.

Recent variation in inflation in Canada

Table 2-F: Annual percentage change in inflation in Canada.

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1.744	2.738	2.507	2.276	2.742	1.841	2.23	2.01	2.146	1.597*

Source: EconStats, n.d.

From the Table 2-F given above, no clear association can be found between found between real G.D.P. and oil price changes in Italy.

Conclusion:

On the basis of the findings of the present study it can be said that there has been a very pronounced adverse effect of oil price hike on the economies of the countries like U.K., U.S.A, and Canada. Impact of oil price hike on real G.D.P has been found to be much larger than on any other variable. However, for the rest of the countries under consideration, i.e. Japan, Germany, and Italy, no clear relationship between oil price hike and real G.D.P. or inflation has been found. So, although theory suggests a strong adverse effect of oil price hike on economic performance of a country, particularly of oil importing countries, in practice such kind of impact does not necessarily hold in every economy. However it has generated an overall global impact on inflation and unemployment status, specifically in the automobile industry. The negative impact is felt gradually on almost all the sectors, more particularly to the sectors depending on fuel. Overall, the study leaves further scope for research in the alternative segments of fuel generation such that a cost-benefit analysis might be performed in order to gauge the profitability of investment in these segments by the oil companies.

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