CHAPTER 3

LITERATURE REVIEW

Oil price increases have received considerable coverage in most of the economic literature. Macroeconomist have viewed changes in oil price as an important source of economic fluctuation as the oil shocks of 1970s was followed by low growth, high unemployment and high inflation in most of the countries. In recent time the oil touching $140 per barrel in 2008 had the world reeling into recession. The rise in oil prices increases the subsidy which increases the fiscal deficit which further adds to inflation. Hence a relationship exists between Oil price, subsidy, fiscal deficit and inflation. A large number of literatures have been reviewed to understand these relationships in relevance to economy particularly Indian economy. Abstract of the literature are discussed in subsequent paragraphs.

Sharma *et al.* (2012) have done an empirical analysis to compare the effects of crude oil price on Indian economy as the imports are increasing day by day. At present the imports is about 80 % and due to the growing economy this will only increase as no fresh findings/well have been discovered. Though the future oil price is difficult to predict but because of sustained growth the demand for oil will only increase. The increase in crude oil prices have been buffeted by many factors primarily being the production, natural causes, speculative trading and high demand. The Imbalance between growing demand and scarce supply has led to upward pressure on oil and this trend is expected to continue. The authors established the causal relationship between oil consumption and economic

growth increases. Rise in oil prices will affect Indian economy even if Government absorbs the shock because it will increase the fiscal deficit which in turn will increase the inflation. If the Government decides to pass the increase to consumers then also the inflation increases. The authors have suggested certain measures like removing of subsidy to reduce oil demand and thus improve the economy.

Bhanumurthy *et al.* (2012), in their Working Paper titled "Oil Price Shock, Pass-through Policy and its Impact on India" have analysed the impact of transmission of international oil prices and domestic oil price pass-through policy on major macroeconomic variables in India with the help of a macroeconomic policy simulation model. Three major channels of transmission *viz.* import channel, price channel, and fiscal channel are explored with the help of a structural macroeconomic framework. The policy option of deregulation of domestic oil prices in the scenario of occurrence of a one-time shock in international oil prices as well as no oil price shock situation analysed through its impact on growth, inflation, fiscal balances and external balances during the 12th Plan period of 2012-13 to 2016-17. The simulation results indicate that in the short run the deregulation policy would have adverse impact on the growth as well as on the inflation. But if this policy is complemented with the policy of switching of subsidy bill to capital expenditure it might result in positive growth effects in the medium and long run. Given, the current pass through policy, one-time oil shock has adverse impact on growth and inflation in the year of shock while it mitigates slowly over time. The model shows that with the oil shock and with current partial pass-through regime, a 10 percent rise in oil prices result in a 0.6

percent fall in growth while in the full pass-through situation, it can reduce the growth by 0.9 percent. Overall, the paper opines that the pass-through has differential impact on growth and inflation over the 12th Plan period. Hence, the policy of oil price deregulation must be carefully weighed and prioritised.

Pandey (2005) concluded that one of the significant developments affecting the global economy in the current scenario is the phenomenal increase in the crude oil prices. Crude oil is an import raw material for manufactured goods, thus an unprecedented increase in the price of oil is bound to threaten the economy with inflationary tendencies. It is left to the policy makers to design suitable policy prescriptions so that the oil price hike does not hamper the economic growth performance of the nation. The author has delved into the possible conflicts which policy makers experience while framing policies for curbing the adverse impact of oil price hike.

Prusty (2012) commented that an increasing trend in fiscal deficit, especially revenue deficit, of all state governments in India has been noticed since 1987-88. The paper has explored the relationship between state fiscal policy and inflation in India by using panel data during the period 1989-90 – 2009-10. The test result suggests that there exists a bi-directional causality between real GDP growth and inflation, and gross fiscal deficit and inflation. However, panel regression fixed effects result confirms that gross fiscal deficit of each state government is positively and significantly influencing inflation in India during the period. The above result suggests prudent state fiscal policies to control inflation in India.

Habibullah *et al.* (2011) have attempted to determine the long-run relationship between budget deficit and inflation in thirteen Asian developing countries, namely; Indonesia, Malaysia, Philippines, Myanmar, Singapore, Thailand, India, South Korea, Pakistan, Sri Lanka, Taiwan, Nepal and Bangladesh. Using annual data for the period 1950-1999, the model estimated indicates the existence of a long-run relationship between inflation and budget deficits. Thus, the paper concluded that budget deficits are inflationary in Asian developing countries.

Pai (2011) has related the the fiscal deficit to the price of oil. The study concluded that every $10/bbl rise in oil prices would impact India's fiscal deficit by 0.8% of GDP. In fact, in a recent report by Morgan Stanley (2011) suggests, it is even worse. It suggests 0.9% of GDP in FY2011 ($85/bbl) and 1.3% of GDP for FY2012 ($100/bbl) as the additional subsidy on account of oil price rise.

Malakar (2011) has argued whether decline in oil prices will help India due to a weakening rupee and high inflation. The paper opines that the abatement in the international crude oil prices, which are currently hovering at above 110 dollars per barrel, would help in the prevention of imported inflation in India and aid in bringing down the government subsidies. The author also added that if crude prices move from the current price band upwards or downwards then what would be its effect on the Indian economy. For instance would growth slow down? In an existential sense growth will never slow down. But since India is a major importer of crude importing more than 80% of its requirements, the Balance of Payment in the

country will definitely go up. If prices go up then it would affect the economy. It would definitely be good for India if crude prices fall.

McMahon *et al.* (1979) have estimated the effect of higher crude-oil prices on the inflation rate in the U.S. The paper estimated a price equation, within a model of wage-price interaction to capture the inflationary impact of crude oil prices. Since increase in crude oil prices appear to be a continuing source of exogenous shocks on the system, simulations are presented that estimate the net effect of these increases

Vegh (1988) has tried to analyze the relationship between inflation, tax and the level of government spending in a public finance context. The key feature of the model developed is that it recognizes the possibility chat conventional taxes, such as the consumption tax, may carry increasing marginal collection costs. As a result, and unlike previous findings in the literature, the inflation tax becomes an increasing function of government spending. Furthermore, the more inefficient the tax collection system, the larger the increase in the inflation tax for a given increase in government spending.

Tiwari and Tiwari (2011) have examined the linkage between fiscal deficit and inflation in India. The study has focussed on to examine the factors that are responsible for increasing fiscal deficit in India, by taking into account all factors that can affect the status of fiscal deficit. The study finds that inflation is not at all cause of fiscal deficit. However, government expenditure and money supply are found to be important determinants of mounting fiscal deficit.

Vieira (2000) has investigated the inflationary effect of central government deficits in a sample of six European Union members, namely Belgium, France, Germany, Italy, Netherlands and the UK, focusing on post-war annual data. While the answer from conventional economic theory and from the monetary authorities is in the affirmative, the evidence from the empirical literature is an unsettled maybe. The results do not support the formulated hypotheses, suggesting the possibility of more flexible fiscal policies in the EU.