

CHAPTER 8

CONCLUSION

In this chapter the whole study is summarised and then conclusion based on foregoing analysis are put together

The study entitled " To Study the Impact of Crude Oil on Indian Budget: A Statistical Analysis" was undertaken with the objective of analysing the effect of increase in crude oil prices on Inflation, Gross Fiscal Deficit and Indian defence Budget

A large number of studies exist which relate oil prices and inflation, fiscal deficit and inflation but no study exist to see the relationship between oil prices inflation and fiscal deficit. This study has attempted to study the effect of International crude price on Inflation, Fiscal Deficit and Defence budget. The study also examined the relationship of crude oil with Pay & Allowance of Defence Budget and also fuel expenditure of defence. This paper would give the policy makers a statistical model which would predict the inflation, fiscal deficit, Pay & Allowance of Indian Defence Forces and Fuel expenditure of Indian Defence Forces based on the price of oil. This would help in taking measures to anticipate the oil price and take remedial action to reduce expenditure.

The Indian Budget consists of Plan and non-plan expenditure. The non-plan revenue expenditure is accounted for by interest payments, subsidies (mainly on petroleum, food and fertilizers), wage and salary payments to government employees, grants to States and Union Territories governments, pensions,

police, economic services in various sectors, other general services such as tax collection, social services, and grants to foreign governments. The Non Plan Revenue Expenditure which constitutes Rs 865596 crores will be the major study of this thesis. Out of Rs 865596 crores expenditure for fin year 2012-2013, Defence service is 113829 crores and Subsidies are 190015 crores. The Subsidies include fuel & agriculture subsidy.

Higher international oil prices lead to inflation in India, as it increase the budget deficit which invariably drives up interest rates and slows down the economic growth. Oil consumption is increasing steadily over the last 30 years whereas increase in production has not been commensurate with increase in consumption. This has led to huge import of crude oil pushing the import bill up.

At present nearly 80% of crude oil requirement of India is imported as the production capacity is only about 7.5 Lakh barrels per day, whereas consumption is 32 Lakh barrels per day. The Oil prices are not stable and fluctuate based on international conditions. This fluctuation in the oil prices effect the budgetary planning in a big way. At present the Government of India is giving a subsidy in petroleum sector to the tune of Rs 68481 crores. This has led to Increase in Government borrowing and the fiscal deficit.

Fiscal deficit is now universally considered as a complete measure to judge the macroeconomics strength and fiscal health. It also reflects the ability of the government to control the core of the problem of fiscal imbalance that the government faces. For a developing country the fiscal deficit should not be more than 3 % of GDP. In case of India it has been hovering around 5% which needs to be reduced

The analysis begins in Chapter 1 by first tracing the history of crude oil prices, inflation and fiscal deficit. In Chapter 2 the objective, Research Methodology, Hypotheses in addressing the issue have been covered.

Chapter 4 analyses the impact of crude oil prices on Inflation. The Inflation leads to change in fiscal and monetary policy. Fiscal policy is issued by Ministry of Finance whereas monetary policy is issued by Reserve Bank of India (RBI). Based on Inflation rate the RBI changes the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). Thus less the CRR and SLR more money flow are available for lending and more growth. Similarly increase in inflation leads to increased non plan expenditure in terms of dearness allowance increase to government employees and other expenditures. Inflation in India is calculated based on WPI and thus an Statistical analysis on the relationship between wholesale price index(WPI) and crude oil price was and it was seen that the relationship between them is a curvilinear model and can be modelled using a cubic equation. The cubic model predicts WPI Index based on crude oil price and thus inflation rate for a particular period can be found out. Thus the suggested model can be used to predict the inflation rate for future on an assumed increase or decrease in crude oil price and can be a tool for planning by the Ministry of Finance.

Chapter 5 covered the impact of crude oil on Gross Fiscal Deficit. The concept of revenue Deficit and Fiscal deficit were discussed. It was analysed that due to increasing import bill the BOP is getting affected resulting in more borrowing from international agencies leading to increase in fiscal deficit. In addition the

increase in import bill is not passed on to the consumer but the GOI gives a subsidy which has resulted in under recoveries by Oil Marketing companies to the tune of 1.38 Lakh crores. This loss of the OMC's is covered by GOI through Oil Bonds which further increases the fiscal deficit. Statistical analysis between Gross Fiscal deficit and Crude oil prices was carried out and it was seen that the relationship between them is a curvilinear model and can be modelled using a power equation. The cubic model predicts Gross Fiscal Deficit based on crude oil price. The Government of India has been trying to reduce the fiscal deficit and toward this FRBMA was passed by parliament but has not been able to control the fiscal deficit. One of the main reasons for this is the increase in international crude price. Thus this model can be used to predict the Gross Fiscal Deficit based on International crude oil price. This would help the Government of India to tighten its budget and reduce the Gross fiscal deficit.

Chapter 6 covered the impact of crude oil on Defence Pay & Allowance. The defence Pay & Allowance itself is very large and is approx 55000 Crores. With every DA increase this budget increases. Concept of Dearness Allowance was discussed and how it is calculated based on AICPI. With increase in crude oil price, the AICPI increase and thus a statistical analysis between AICPI and Crude Oil price was carried out and it was seen that the relationship between them is a curvilinear model and can be modelled using a Growth equation. The Growth model predicts AICPI Index based on crude oil price. A statistical analysis between AICPI and Defence Pay & Allowance was carried out and it was seen that the relationship between them is a curvilinear model and can be modelled using a compound equation. The Compound model predicts Defence Pay & Allowance based on AICPI Index. The Crude oil price has a correlation

with AICPI Index which has a correlation with Defence Pay & Allowance. Thus rise in crude oil price will lead to rise in AICPI Index and subsequently Defence Pay & Allowance. Thus a model is available with the budget planners to plan the budget in case the crude oil price fluctuates widely.

Chapter 7 covered the impact of crude oil on Defence Fuel Budget. The defence fuel budget is very large and is approx Rs 6000 Crores. With increase in crude oil price, the Defence fuel budget increases and thus a statistical analysis between Defence fuel budget and Crude Oil price was carried out and it was seen that the relationship between them is linear and can be modelled using a Linear equation. The linear model predicts Defence fuel budget based on crude oil price and thus the defence forces need to go for fuel efficient vehicles and equipment so that the consumption reduces and impact of increase in crude oil price reduces.

The dissertation has achieved its entire objective and has also left a scope for further research as only Non plan revenue expenditure of Annual Budget has been covered. There is a considerable scope in defence budget also to cover the complete transportation budget which could not be done in the short time due to non availability of data