

CHAPTER 2

OBJECTIVE AND RESEARCH METHODOLOGY

The study aims at analysing the effect of crude oil prices on the Indian annual budget in terms of Fiscal deficit, Under recoveries or subsidy, Inflation and effect on the defence budget.

2.1 Statement of the Problem

With nearly 80%¹⁴ of crude oil requirement of India being imported and with increasing oil prices, the budgetary planning of Government of India is greatly affected as the increase in international oil price increases the subsidy, increases budget deficit, increases inflation and the defence budget.

2.2 Aim of the Study

This study aims to evolve a statistical model between oil prices and inflation, fiscal deficit, subsidy and defence budget for prediction of effect of oil prices on inflation, fiscal deficit, and subsidy and defence budget.

2.3 Research Questions

The Indian Budget is the most important tool available with the Government for implementing its policies. The Budget caters for Plan and Non- plan expenditure. Ideally in any government the planned expenditure should be more than the non planned as planned expenditure caters for development. In the budget proposal for 2012-13, the Budget Estimate (BE) for Plan is Rs

¹⁴ Calculated based on production and consumption data of petroleum in <http://www.indexmundi.com/energy.aspx?country=in&product=oil&graph=consumption>

521025 Crores¹⁵ whereas the BE for non Plan is Rs 969900 Crores¹⁶. Hence 65% of the budget is used for non-plan expenditure which does not improve the infrastructure or growth of the economy. Any rise in oil price further pushes up the non-plan expenditure resulting in higher borrowing, higher fiscal deficit and higher inflation.

This study examines the factors which affect the oil price, the pricing mechanism and evaluate through statistical model its impact on inflation and fiscal deficit. The major research questions that the study intends to address are

1. How does increase in international crude oil price affect the Indian Budget?
2. What is the effect of increase in International crude oil price on the inflation?
3. How does the international crude oil price affect the subsidy?
4. What is the effect of increase in international crude oil price on the defence budget?

2.4 Hypotheses.

1. Hypotheses 1.

Ho = Increase in oil prices have no impact on Inflation

Hi = Increase in oil prices has an impact on Inflation

¹⁵ <http://indiabudget.nic.in/ub2012-13/bag/bag1.pdf>

¹⁶ Union Budget and Economic survey www.indiabudget.nic.in

2. Hypotheses 2.

Ho = Increase in oil prices have no impact on fiscal deficit

Hi = Increase in oil prices has an impact on fiscal deficit

3. Hypotheses 3.

Ho = Increase in oil prices have no impact on Pay & Allowance component of Defence Budget

Hi = Increase in oil prices has an impact on impact on Pay & Allowance component of Defence Budget

4. Hypotheses 4.

Ho = Increase in oil prices have no impact on Fuel, Oil and Lubricant component of defence budget

Hi = Increase in oil prices has an impact on Fuel, Oil and Lubricant component of defence budget

2.5 Objectives

The Objectives of the research are:-

- (a) To study the impact of oil price on subsidy and fiscal deficit in India
- (b) To study Impact of oil price on inflation in India, and
- (c) To study impact of oil prices on Indian defence Budget.
- (d) To contribute towards Research body of Knowledge

2.6 Scope of the Study

The study has been restricted to only finding out the effect in change in oil price to fiscal deficit, inflation, subsidy and defence budget. Change in oil price directly affects Balance of payment, Foreign exchange reserves etc which are not being covered in this study. Change in oil prices also affect railways and other sectors which have been kept outside the preview as they do not form part of Indian budget. In addition, increase in inflation will lead to additional expenditure in terms of pay and allowance of central government servants other than defence, which is not being calculated or modelled. In case of defence only unclassified data / analysis of the study would be included in the report.

2.7 Research Methodology

This study is based on collection and analysis of existing literature and data relating to the research question under study. There exists a reservoir of information both at national and international level, which can be effectively tapped for this study. The data related to Indian budget can be accessed from the budget documents where as the data related to Inflation and Fiscal deficit can be culled out of RBI. Data with respect to Petroleum production/consumption can be culled out of Ministry of Petroleum or from US Department of Energy's Office of the Strategic Petroleum Reserve, Analysis Division. Energy Information Administration. The methodology in brief is as under

- (a) Study of publication and data from 1995 onwards of:-

- (i) Ministry of finance
 - (ii) Economic Survey of Government of India
 - (iii) Budget estimates of Government of India
 - (iv) Petroleum Planning & analysis cell, Ministry of Petroleum
 - (v) Ministry of Statistics
 - (vi) Ministry of Defence
- (b) Study of publication of:-
- (i) World Bank and IMF studies on oil pricing and its impact on economies
 - (ii) World crude prices
 - (iii) OPEC website
 - (iv) The US government, department of energy, energy information administration
 - (v) US department of energy's office of the strategic petroleum reserve, analysis division.
- (c) Publication research studies and papers issued by various economic bodies/institutions
- (d) Relevant information from various research journals
- (e) Related articles on various databases and websites
- (f) Analysis by appropriate Statistical tools.

2.8 **Chapterisation Scheme.** The proposed chapters for the study report are as follows:-

1. Chapter 1. This chapter will give an introduction to the subject with details of oil produced and consumed by India, details of inflation, subsidy and budget deficit.
2. Chapter 2. This chapter covers statement of the problem, objectives, scope, research methodology, research questions and chapterisation.
3. Chapter 3. This chapter covers the Literature review in the area of effect of international oil price on Indian economy
4. Chapter 4. This chapter covers effect of oil prices on Inflation.
5. Chapter 5. This chapter covers effect of oil prices on subsidy and Fiscal deficit.
6. Chapter 6. This chapter covers effect of oil prices on Pay and Allowance of defence budget.
7. Chapter 7. This chapter covers effect of oil prices on Fuel, Oil and Lubricants of defence budget.
8. Chapter 8. This chapter covers conclusion, summary and recommendations.