

Abstracts of the Ph.D. Thesis

Abstract of the Thesis submitted by the Research Scholars who carried out studies at the Gokhale Institute of Politics and Economics, to the University of Pune for the Degree of Ph.D.

Title: Macro-economic Impact of Price Shocks Originating from the Infrastructure Industries (An Exercise in Macro-econometric Modelling)

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This thesis examined the various macroeconomic consequences of the steep hikes in the prices of infrastructure inputs – the critical intermediate goods in the economy. For this purpose, eight infrastructure inputs, namely, Coal inclusive of Lignite, Crude Petroleum and Natural Gas, Petroleum Products, Fertilisers, Cement, Iron and Steel, Electricity and Railway Transport Services were considered and studied for the implications of sharp increases in their prices over the period 1970-71 through 1994-95. Given the thrust of this work on the macro aspects, a composite price index of these eight infrastructure inputs (with weights in terms of the “value added” from the National Accounts Statistics) was constructed to study the implications of their price behaviour. The basis for this work was the observation that the economic impact of sudden and steep increases in the prices of these infrastructure inputs was all pervasive and they were considered as one of the causes of the periodic downswing of economic activity, experienced at various points of time.

Theoretical Rationale

From the supply side, such sharp increases in the prices of infrastructure inputs can adversely affect the incentives to produce and result in the reduced utilisation of existing production capacities. These prices have great relevance for industrial costs and, therefore, carry tremendous inflationary potential. The major group of industries whose production processes are intensive in the use of these inputs is that of investment goods, which, as a result, are likely to witness a substantial price rise. Once the cost-push impulses generated by hikes in infrastructure inputs translate themselves into increases in many final prices, the overall price level increases. The consequent decrease in real balances and incomes is likely to depress real private consumption and a reduction in real value of investible resources is likely to contract real private investment. Infrastructure price hikes can affect the employment generation in the non-agricultural sector by impacting the consumer prices and hence the labour costs as well as by impacting the level of non-agricultural output.

Infrastructure Industries in the Indian Context

In India, given the dominant presence of public sector in infrastructure industries, an increase in their relative prices is viewed as the means of surplus generation for the public sector, which, in turn, is expected to impact positively the real aggregate spending (both current and capital) of the public sector. However, in view of the greater inter-dependence of public sector enterprises (PSUs) producing various infrastructure inputs, steep hikes in the prices of even a few infrastructure inputs are likely to increase the cost