

**Value Added in Industry  
Infrastructure and  
Development Banking :  
An Optimal Control  
Formulation  
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In this paper, we report estimated single equation models explaining the value added in the industries in India as well as fifteen states. The choice of the states has been dictated mainly by the relative ease of obtaining data. An effort is made to assess the relative effort with respect to development banking and infrastructure, and to draw conclusions about where either of these instruments need to be pushed to maximise returns vis-a-vis incremental value added. To this end, optimal control technique has been used. Thus, an illustration of the use of this relatively new technique, for determining the allocation of funds is another important aspect of this paper.

**Introduction**

The design of economic policies is considerably complicated due to the complex dynamic structure of the economic system. There are various techniques available, to tackle such issues. One such, of a fairly recent origin, is that of optimal control. In this paper we illustrate its utility vis-a-vis the problem of devising a policy mix comprising of allocation of resources for enhancing the infrastructure and the development banking effort (in terms of disbursements) so as to increase the value added of industrial output. In order to do this we have estimated single equation models for various states as well as for India. As this is an illustrative, and hence a laboratory kind of an exercise, we have used rock bottom variety of model.

**Our Model(s)**

In India the three all India development banks viz., Industrial Finance Corporation of India (IFCI), Industrial Credit and Investment Corporation of India (ICICI) and Industrial Development Bank of India (IDBI) by providing not only medium and long-term funds but also by providing missing ingredients required for industrial development to industrial enterprises, stimulate the industrial investment in