

Economic Reforms and Changes in Energy Consumption in India: A Structural Decomposition Analysis

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India's economic reform was initiated in mid 1991 by the Government of India. Some strategies for energy sector were adopted. This paper investigates the pattern of energy consumption changes during reform period i.e., 1991-92 to 1996-97 and various factors responsible for these changes based on Input-Output model. Here we develop a Structural Decomposition Analysis. Six different factors have been identified here: (i) Technical changes, (ii) Changes in final demand structure, (iii) Changes in the interaction term of technical changes and final demand structure, (iv) Changes in energy exports, (v) Changes in energy imports, (vi) Changes in energy change in stock. Then we separate technical changes and final demand structure again, which explain the energy consumption changes. The most significant role as revealed from the empirical results have been played by the final demand structure, technical changes and interaction term between final demand structure and technical changes.

Introduction

Faced with rising inflation and a BOP crisis in mid 1991, Government of India introduced a fairly comprehensive, policy reform package-currency devaluation, deregulation, delicensing, privatization of public sector. A sudden drying up of inward remittances and the West Asian markets because of the Gulf War, and the collapse of the Soviet Economy then India's largest trading partner -- were the proximate economic causes of the crisis. Moreover, domestic political instability accentuated the economic troubles, as critical decision got postponed and fiscal discipline loosened. Government of India initiated these policy changes to overcome the critical situation. Over the last six years, these initiatives have generated an intense debate. The desirability of the reforms and their effects continue to be divided.

The overall picture of the Indian economy after reforms are as follows: The rate of growth of GDP (at factor cost) that averaged 6.5 per cent during 1991-92 to 1996-97. More remarkably the growth rate has averaged 7 per cent during the last three years of the eighth plan. The primary and secondary sectors annual growth rates since 1991-92 were lower at 2.5 per cent and 6.3 per cent. The tertiary sector, with about two fifths share in the GDP grew fastest in the same period. Thus, the GDP and the primary and tertiary sectors maintained their growth rate in the 1990's. Though modest, the secondary sector witnessed a statistically significant slowing (0.4 per cent). The manufacturing sector has shown the greatest improvement in performance. The growth of manufacturing

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