

# EXPLORING THE EVOLUTION OF INDIA'S ECONOMIC STRUCTURE: THE CASE OF MANUFACTURING-SERVICES INTER-LINKAGES

Topic: Feedback Session 2b

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## 1. The research question

The Indian economy has seen a rapid increase of the service sector share in its GDP since the early 1990s or during the post-reforms period. The manufacturing sector share in output stagnated during the same period. There was no commensurate increase in the employment share of the service sector and the manufacturing employment share also remained largely stagnant. Greater scope of technological advancement and rapid productivity increase in sectors like manufacturing and now services have placed these sectors at the centre of discussion on economic development through structural change. Based on the historical experience of industrialised nations, manufacturing sector in particular and some service sub-sectors like Information and Communication Technology have been debated as drivers of economic development. It has been well established that the pattern of structural change witnessed in India, particularly during the post-reforms period has been distinct from the established pattern of structural change experienced by early and newly industrialised economies. With this backdrop this research paper is motivated by some questions that have not been addressed in the literature. They are;

a) How has the integration of manufacturing and services evolved within India's production structure during the post-reforms period? Has rapid service sector growth during this period accompanied a greater integration within India's production structure?

b) How do manufacturing and services compare in terms of their output and employment stimulating impact on the Indian economy? What are the implications of manufacturing and services production and demand linkages for the structural change and growth process of the Indian economy?

## 2. The method used

The paper draws theoretical insights from the classic works of Albert O. Hirschman and Nicholas Kaldor which provide theoretical foundation for the analysis in this paper from a structuralist perspective. The research on the evolution manufacturing and services production and demand linkages along the course of economic development across various developed and developing regions in the world has established some well developed patterns around these linkages. This paper makes an attempt to evaluate the Indian experience with the backdrop provided by such observed patterns. The paper uses the methodology of input-output analysis to calculate input cost shares in total intermediate inputs, backward linkages and analysing the demand distributions of manufacturing and service sectors.

## 3. Data used

The analysis in this paper uses the five available Input Output Transactions Tables (IOTTs) for India during the post 1991 reforms period. These are for the years 1993-94, 1998-99, 2003-04, 2007-08 and 2013-14, covering 2 decades of liberalization in India. The first four have been procured from the Central Statistics Office, Government of India and the last one has been produced by National Council of Applied Economic Research.

## 4. The novelty of the research

This research makes a contribution to the debate on structural change and economic development both in terms of the questions it has raised and its findings. No study has delved into the production and demand linkages of the manufacturing and service sectors using IOTTs, in order to understand structural change in India since the liberalization reforms initiated in 1991. The paper finds that manufacturing sector has been much more integrated within India's production structure both, as an input and as a stimulator of output and employment for other sectors, as compared to services. Service sector in this rapid growth phase saw a larger share of value added being generated in modern producer services like ICT, finance and real estate, which contributed much

less to employment. The dependence of manufacturing on these service inputs has not been found to have increased as opposed to the internationally established patterns of such dependence which tends to increase over the course of economic development. The role of final demand as a source of service sector demand was much more than intermediate demand. Within final demand private consumption has been the major source of service sector demand. At the same time service sector share in India's private consumption has risen steeply over this period, and was much higher than that of manufacturing. This finding is also incompatible with India's stage of economic development when compared to international experiences. The analysis suggests the existence of a crucial link between the evolution of the production structure and demand pattern in India, which needs to be taken up for further research to elucidate the causal channels associated with this link.