

IS TECHNOLOGY-DRIVEN STRUCTURAL CHANGE PRESENT IN INDIA? AN ANALYSIS OF INDIAN ORGANISED MANUFACTURING SECTOR

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ABSTRACT

Using aggregated data from ASI and CMIE, we analyzed the output, employment and innovation trends (in terms of R&D) of Indian organized manufacturing sector. It is a widespread argument that high-tech industries are key drivers of economic development. Such argument is based on two factors. One, it is assumed that high-tech industries are high growth industries which led to increases in their share in total output. Thus structural change occurs in favour of high-tech sectors. Second, as price competition rises, low-tech industries are also inclined to increasing their technological intensiveness. This also results to structural shift towards high-tech sectors. The present study has found that the Indian manufacturing sector has also registered such 'high-tech structural change' but its nature is different than assumed in the earlier literature based on developed countries. Technology-driven structural change is present in Indian manufacturing but it is very slow and small. In Indian manufacturing sector, the share of low and medium low-tech industries remains by a substantial share of total output and employment. Thus there is small structural transformation occurs in past three decades. It is also seen that variation in growth rates of low-tech and high-tech industries are very less. This does not support the premise that only high-tech industries are growth generating industries. In Indian manufacturing, R&D intensity is very less which indicating low investment in innovation activities.

KEYWORDS: Employment, Innovation, Technological Intensiveness, High-tech Structural Change, R&D Intensity