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Technical Change in India's Rural Organized Manufacturing Industries

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Introduction

This article is written by Nabanita Mitra and Debarshi Das. Given the robust performance of India's rural organized manufacturing industries in recent times, this study attempts to understand the nature of the technical change underlying it. The paper examined rural industries with Industry Codes 15 to 36 for the period 1998–99 to 2007–08, both at the aggregate and disaggregated levels.

Key Highlights

1. The first phase (1998–99 to 2007–08) of growth in rural industries was driven by rising labor productivity (output per unit of labor) and capital productivity (output per capital). Capital intensity (high percentage of investment in fixed assets i.e., machines, capital, plant to produce) did not change much.
2. In the period 1998–99 to 2007–08, rural industries and rural industries exhibited Hicks-neutral technical change (a change which raises the marginal productivity of labor and capital in same proportion) at the aggregate level: both labour and capital productivities rose. **Labour productivity increased steadily from 2.74 in 1998–99 to 5.72 in 2007–08, whereas capital productivity levels showed a rise from 0.24 in 1998–99 to 0.49 in 2007–08.** This was a period of fast growth: rising capital productivity ensured a healthy and rising profit rate.
3. At the disaggregated level, several industries (Industry Code 15 to Industry Code 36) showed diverse directions of technical change during 1998–99 to 2007–08 most exhibited an increase in labor productivity, indicating the adoption of labor-saving technologies while capital productivity fell in some and rose in others.
4. After 2007–08, however, the pattern of technical change altered dramatically. Labor productivity rose mildly (labor productivity merely increased by 1.36%), while capital productivity fell sharply (capital productivity declined by 37.59% during 2008–09 to 2016–17—**a sharp reversal when compared with the rise in capital productivity** (104.17%) during 1998–99 to 2007–08). Not surprisingly, the growth rate suffered as the 2000s ended.
5. The direction of technical change of all rural industries switched to Marx-biased in the period 2008–09 to 2016–17: labor productivity rose but capital productivity fell.

Read more: https://www.epw.in/journal/2020/42/special-articles/technical-change-indias-rural-organised.html

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