

## Exports, FDI and Firm Productivity : A Study of Indian Organised Manufacturing

RAM UPENDRA DAS\*  
ANUP KUMAR JHA\*\*  
ADELIADA MEHMETAJ\*\*\*  
MEENAKSHI RISHI\*\*\*\*

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### Abstract

Paper examines the combined impact of trade and investment liberalisation on firm productivity, addressing key mechanisms underlying productivity gains in exporting firms. Building on the self-selection (SS) and learning-by-exporting (LBE) hypotheses, we investigate their coexistence and interplay within the context of Foreign Direct Investment (FDI). Using a Simultaneous Equations Model (SEM) incorporating exports, FDI, and Total Factor Productivity (TFP), we analyse firm-level data from the Indian CMIE Prowess dataset. Our findings confirm the simultaneous validity of the SS and LBE hypotheses in the Indian context. Specifically, a 10 percent increase in exports raises TFP by approximately 3.6 percent, validating the LBE hypothesis that exposure to international markets enhances firm productivity. Additionally, FDI emerges as a significant driver of productivity, with a 10 percent increase in FDI linked to a 4 percent rise in TFP. These results underscore the joint productivity-enhancing potential of trade and investment liberalisation, offering critical policy insights.

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### I. Introduction

THERE ARE TWO distinct but not mutually exclusive hypotheses that postulate why exporting firms can be expected to be more productive than non-exporting firms (Bernard and Jensen, 1999). The first hypothesis points to the self-selection (SS) of more productive firms into export markets. The reason behind the SS hypothesis is that exporting entails additional costs often function as entry barriers to less productive firms in a country. Firms

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\* Professor, Research and Information System (RIS) for Developing Countries, India Habitat Centre, Core IV-B, Fourth Floor, Lodhi Road, Delhi 110003, INDIA

\*\* Assistant Professor of Economics, Patliputra University, The PG Department of Economics, 2nd Floor, Mahatma Gandhi Bhawan, CoCAS, Opposite Rajendra Nagar Terminal, Kankarbagh Main Road, Patna, Bihar 80020, INDIA

\*\*\* Chief Science Officer, ConsciESG, 1136, Christna Mill Dr. Newark DE, New Jersey 19711, USA

\*\*\*\* Professor of Economics, Seattle University, Albers College of Business and Economics, 901, 12th Avenue, Seattle, Washington WA 98122, USA

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Thirdly, our empirical findings suggest that FDI like trade liberalisation also has a positive impact on domestic manufacturing productivity. From a policy perspective, this finding suggests that emphasis should also be on further liberalising FDI, to pursue additional productivity gains in manufacturing. This may be achieved through providing R&D support and skill upgradation. Investment in research and development (R&D) infrastructure and providing incentives for innovation will also help enhance the absorptive capacity of domestic firms. This coupled with skill development and education and training programs will equip the workforce with the skills needed to absorb and utilise new technologies.

Finally, our empirical result that the impact of FDI on domestic manufacturing productivity is positive for both exporting and non-exporting firms provides a crucial policy insight. Foreign firms often bring advanced technologies, management practices, and know-how. Non-exporting firms can indirectly benefit from this technology transfer through various channels like imitation involving observation and learning from the technologies and practices of foreign firms. Moreover, supply-chain relationships can expose domestic firms to new technologies and quality standards. This can be mediated via labour mobility as skilled workers trained by foreign firms may move to domestic firms, bringing their expertise with them; and through access to new and/or improved inputs that foreign firms may introduce into the domestic market. These advantages are predicated on policies that promote competition, facilitate technology transfer, and support the development of domestic firms.

As mentioned above, Indian manufacturing has been moribund over the last decade and manufactured exports are a paltry 1.9 percent of India's GDP. Yet despite these challenges, India is poised to be the fifth-largest economy by 2027. One can only imagine the additional growth potential that would be unleashed via the export-FDI-productivity linkages explored in this paper.

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