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WORKING PAPER

# Technological Change and Productivity Growth in Indian Electronics Industry

Sanjaya Kumar Malik



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# Technological change and productivity growth in Indian electronics industry

*Sanjaya Kumar Malik\**

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*[Abstract: The electronics industry is the largest and fastest-growing industry in the world. Because of their complementary and enabler properties, electronics are increasingly diffusing into communication, computing, healthcare, defence, transportation, energy, and countless other applications around the world. Electronics are the driving force behind emerging technologies such as artificial intelligence, blockchain, cloud computing, internet of things, advanced robotics, 3D printing, 5G, and so on. The electronics industry is the most-prioritized industry of the government of India as it lies in the heart of the Make in India and Digital India programme of the country. The domestic electronics industry has nevertheless been crippled with declining share of value addition in output and negative productivity growth over the last three decades. Employing the unbalanced panel data on electronics manufacturing firms from ProwessIQ database for the period spanning from 2000-01 to 2021-22, the paper analyses the technological efforts by the electronics manufacturing firms to delineate the dismal productivity growth in Indian electronics industry. The paper underscores an abysmal technological effort made by the firms in the electronics industry, that explains the dismal productivity growth in the Indian electronics industry during the last two decades. Further, the selective policy measures are not seen to have accelerated the technological efforts by firms in the electronics industry, instead there was a declined allocation of resources towards the technological activities to revive the productivity growth of the electronics industry.]*

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**Keywords:** *Technological change, total factor productivity, electronics industry, India*

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