

## **The Role of R&D Investment in Global Value Chains: Insights from BEA's TiVA Statistics**

Topic: Input-Output Analysis: Trade and Global Value Chains Policies - VI

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Research and Development (R&D) is a crucial driver of economic growth, enabling companies to develop new technologies, products, and services that increase productivity and competitiveness. However, less attention has been paid to R&D impacts on domestic production across industries, especially the role that R&D plays in facilitating domestic engagement in global value chains. The Bureau of Economic Analysis (BEA) recently published statistics on Trade in Value Added (TiVA), providing insights into the importance of R&D activities in the global economy and their contribution to domestic production. This research paper aims to analyze TiVA measurements and Supply and Use Tables (SUTs) to identify the critical role of R&D investment in the global value chains of the United States. Specifically, this paper highlights that R&D investment plays a vital role in US exports by interacting with non-R&D industries, contributing to the competitiveness of the US in the global market. The findings demonstrate the importance of continued investment in R&D to maintain the US position in global value chains. The paper concludes by discussing the future roles of R&D investment in shaping the global economy and its significance for fostering innovation and technological advancements. Overall, this research provides insights into the essential role of R&D investment in the US economy and its impact on globalization across all industries.