

Lockdowns and Export Growth: The Role of Domestic Production Networks

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Using inter-provincial input-output tables to map domestic production networks, this study empirically examines how COVID-19 lockdowns in upstream and downstream provinces affect local export performance. Leveraging granular customs trade data at the province-partner-product level from January 2018 to December 2020 and applying a generalized difference-in-differences (DID) design, we uncover three key findings: Firstly, asymmetric impacts: Lockdowns in downstream provinces significantly reduce export growth, whereas upstream lockdowns exhibit negligible effects. Secondly, temporal dynamics: The adverse effects are short-lived, concentrated primarily in the first two quarters of 2020. Thirdly, heterogeneity: The negative consequences are more pronounced for ordinary trade (vs. processing trade), differentiated goods (vs. homogeneous goods), and durable goods (vs. non-durables). Mechanism analysis reveals that disruptions to economies of scale—rather than liquidity constraints—better explain these patterns. Results remain robust to alternative specifications, placebo tests, and instrumental variable strategies addressing potential endogeneity. These findings highlight the critical role of domestic supply chain positioning in shaping regional resilience to external shocks.