

Supply Shocks and Inflationary Pressures in Global Value Chains: The Role of Network Centrality

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We examine supply shock propagation through global value chains. To capture network heterogeneity, we construct a 30,000-node international input-output table by disaggregating sectoral data using product-level trade microdata. Integrating this with an identification of supply shocks leveraging micro-level quantity fluctuations, we find that high network centrality dampens price pass-through by 40%. In contrast, while centrality typically amplifies quantity adjustments, this mechanism vanished during the COVID-19 recovery, suggesting that physical bottlenecks restricted substitution pathways. These findings suggest that price stability at the network core masks accumulating physical shortages, creating latent risks of non-linear inflationary surges as supply constraints eventually bind.