Supply chains in times of crisis: Evidence from Kenya’s production networks*

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Abstract

What role does a firm’s network position play for its trajectory during times of heightened uncertainty and the recovery from a severe aggregate shock? The ongoing pandemic put spotlight on the role of supply chain structures for firm dynamics. This paper draws on up-to-date firm and transaction level data to study the impact of Covid-19 related shocks on formal firms in Kenya up until March 2021. We find that linkages to international supply chains were more robust during the crisis and imports and exports recovered more swiftly than their counterparts. While many supply chain linkages were put on hold during the first weeks of immense uncertainty, firms seem to have adjusted their supply chains only in minor ways in the short-run. In the medium-run old and newly formed firm-to-firm relationships gained in important relative to younger ones (less than 24 months of age). Further, firms with a more diversified supplier and/or buyer based faced a less dramatic initial downturn. We find diversification on the extensive margin to matter more than on the intensive margin. Firms with a customer base that is more diversified on the intensive margin, however, experienced a more dynamic recovery. Finally, studying the transmission of domestic and foreign demand shocks, we find a substantially higher elasticity of firm level outcomes with respect to demand shocks during the crisis relative to the pre-crisis period.

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