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Titre: Do (all) sectoral shocks lead to aggregate volatility? Empirics from a production network perspective (with Omar Joya, American University, Kabul)

Abstract: Productive diversification has long been acknowledged as a volatility-reducing strategy. Yet, recent theoretical contributions have shown that, in strongly diversified economies, idiosyncratic shocks could translate into aggregate volatility via the network of inter-industry linkages. By exploiting exogenous cross-country-sector variations in demand shocks during the 2008 Great Recession, we provide empirical confirmation that the production network properties of a sector affected by an individual shock determine its propensity to transmit volatility to the rest of the economy. More precisely, shocks to sectors that are located in denser parts of the network are smeared out over a large number of alternative paths of propagation due to substitution effects, whereas shocks to sectors that are more influential within the production network generate aggregate fluctuations through contagion effects. We also find that the impact of sectoral shocks on aggregate volatility (1) is not conditional on country-level differences in trade and financial policies, and (2) is larger for developing countries because they tend to have more isolated influential sectors and larger structural holes in their productive systems. Our results therefore help articulate the two opposite views on the impact of productive diversification on aggregate volatility.