

Global Value Chains: Implications for International Comovement, Transmission of Risk and Resilience

Outline

This course will introduce the new literature on general equilibrium international macroeconomic models of global value chains. These models will be used to study the role of global value chains in international comovement in GDP growth amongst countries, and the implications for how shocks transmit across countries. Subsequent lectures will tackle adapting global value chains to mitigate aggregate risk and increase economic resilience. Finally, we will study several applications of models of supply chains with risk in mitigating or amplifying climate risk, or spreading the economic consequences of the pandemic worldwide.

Lecture 1: *Trade, Global Value Chains and International Comovement*

- Ghironi, Fabio and Marc Melitz (2005) "International Trade and Macroeconomic Dynamics with Heterogeneous Firms" *Quarterly Journal of Economics*, 120, 865-915.
- Boehm, Flaaen and Pandalai-Nayar "Input Linkages and the Transmission of Shocks: Firm-Level Evidence from the 2011 Tohoku Event" *Review of Economics and Statistics* and older companion paper
- Huo, Levchenko and Pandalai-Nayar (2020) "International Comovement in the Global Production Network" *Forthcoming, Review of Economic Studies*
- Acemoglu, D., V. M. Carvalho, A. Ozdaglar, and A. Tahbaz-Salehi (2012, September). The network origins of aggregate fluctuations. *Econometrica* 80(5), 1977–2016
- Backus, D. K., P. J. Kehoe, and F. E. Kydland (1992). International real business cycles. *Journal of Political Economy* 100(4), 745–

Lecture 2: *Risk and Resilience in Global Value Chains*

- Khanna, Morales and Pandalai-Nayar (2024). Supply Chain Resilience: Evidence from Indian Firms (NBER WP 30689)
- Grossman, Helpman and L'Hullier (2023). Supply Chain Resilience: Should Policy Promote International Diversification or Reshoring? (*Quarterly Journal of Economics*)
- Castro-Vincenzi, Gracio, Khanna and Pandalai-Nayar (2025). Supply Chains, Trade and Economic Fragility
- Costinot Vogel and Wang (2025). An Elementary Theory of Global Supply Chains." *The Review of Economic Studies* 80, no. 1 (February 7, 2013)

Lecture 3: *Applications: Supply Chain Diversification*

- Castro-Vincenzi, Khanna, Morales and Pandalai-Nayar (2025). Weathering the Storm: Supply Chains and Climate Risk, NBER WP 32218
- Bonadio, Huo, Levchenko and Pandalai-Nayar (2020) "Global Supply Chains in the Pandemic" NBER WP 27224
- Bonadio, Huo, Kang, Levchenko, Pandalai-Nayar, Toma and Topalova (2025) "Global Supply Chains in the Pandemic" NBER WP 34302