

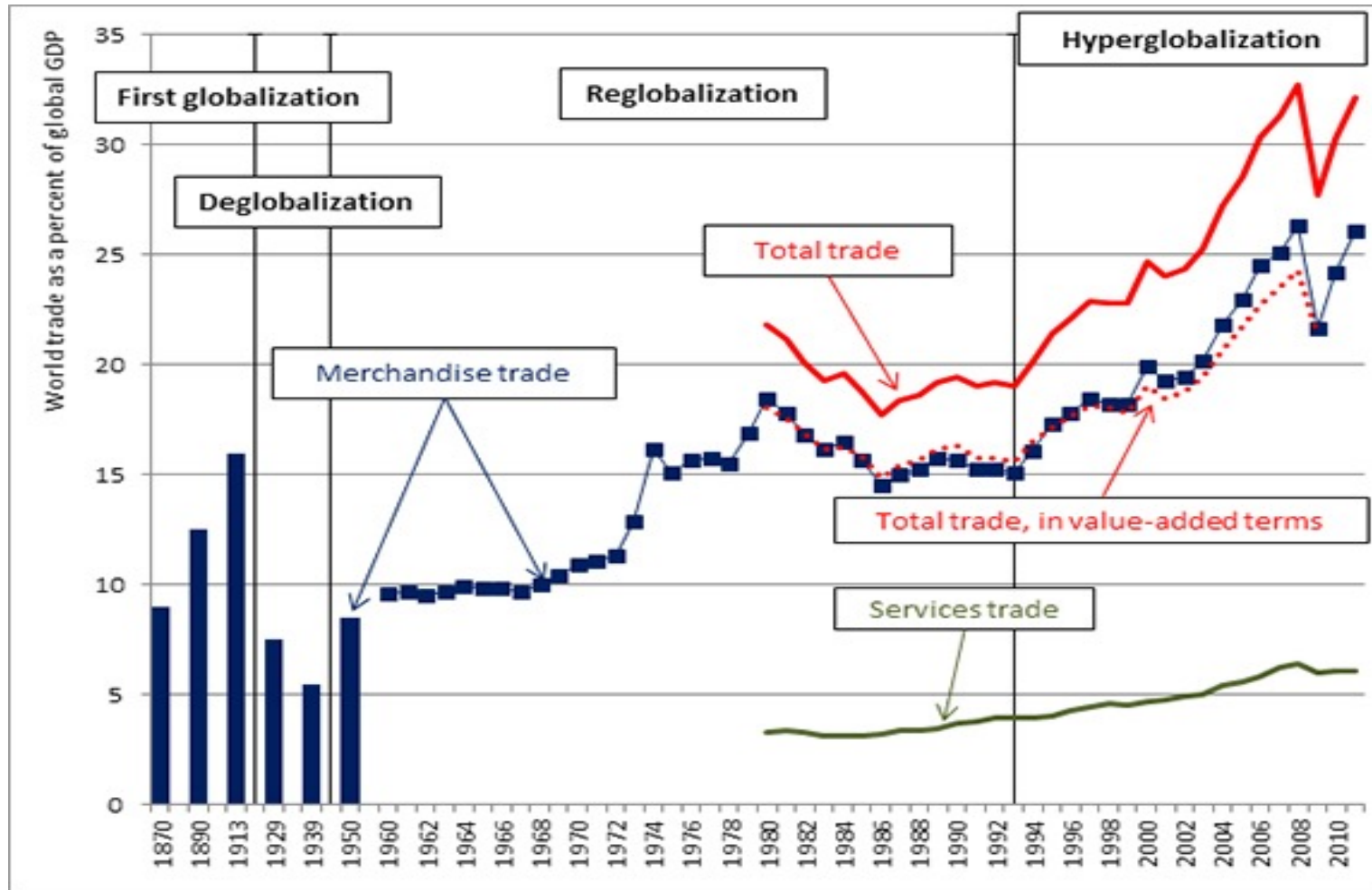
International Trade, Global Value Chains, and Inclusive Growth: Lessons from Emerging Economies

Nina Pavcnik
Dartmouth College

ECA Productivity Conference
World Bank, Washington DC

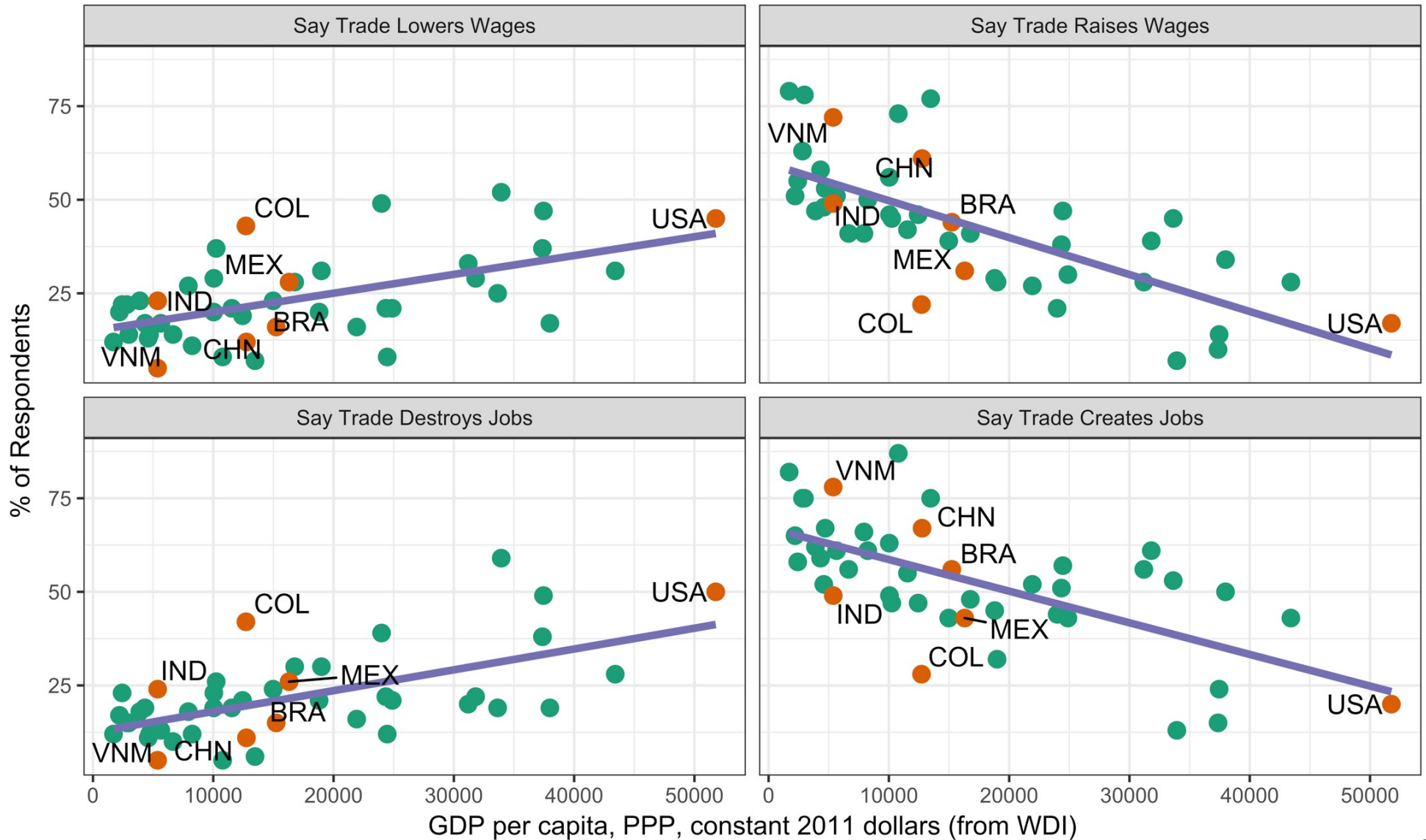
June 6, 2024

Expansion of Global Trade



- Trade between high and lower-income countries has increased drastically over the last 30-35 years, much of it through expansion of GVCs

Perceptions about trade's impact on livelihood of workers vary within and across countries



Source: Pavcnik (2017), 2014 Pew Global Attitudes Survey

Trade and Labor Markets

- The effects of trade on labor markets & transitional adjustment dynamics to trade are of key interest for policy makers and general public
- Economists have long predicted that international trade generates winners and losers in low- and high- income countries alike
 - Most economic models of international trade, even the ones without any frictions in labor or credit markets predict this
- Increased international trade is not the main reason for increased wage inequality in lower income countries (Goldberg and Pavcnik 2007, Helpman 2016, Pavcnik 2017)
- Important new insights on the mechanisms through which trade and GVCs influences employment opportunity and worker earnings; inequality and poverty

#1 Worker Firm Affiliation Matters

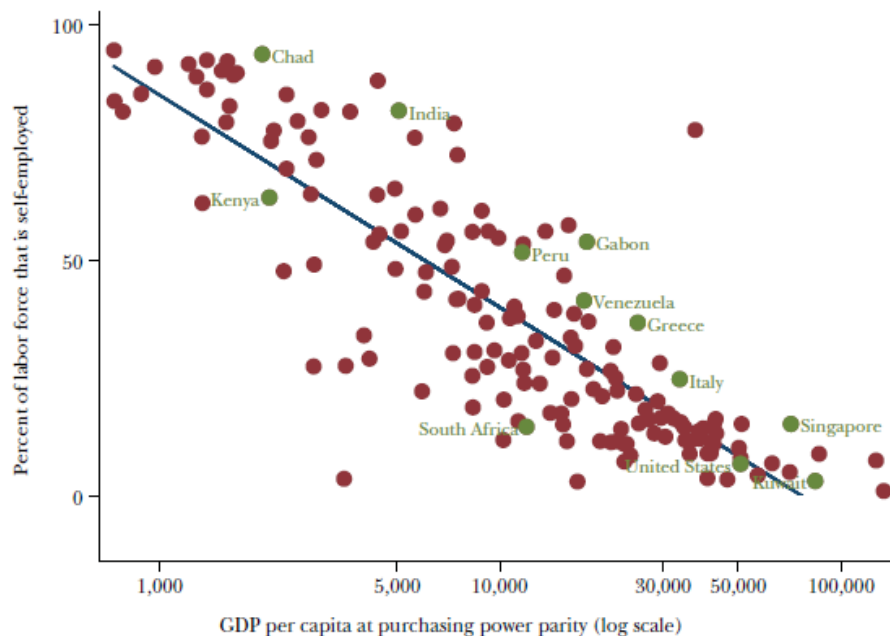
- Firms differ in performance within narrowly defined industries
- Better-performing firms tend to pay more (fair wages, efficiency wages, profit sharing)
- Better-performing firms are better positioned to withstand and adjust to import competition and to take advantage of exporting opportunities
- International trade exacerbates the initial earnings differences for workers across better and worse performing firms

Worker Firm Affiliation Matters, as does Worker Education

- Declines in industry employment from import competition are concentrated in less-productive firms (Menezes-Filho and Muendler 2011)
- Exporting increases wage inequality between firms in an industry
 - Better-performing firms tend to pay more
 - Exporting further increases the relative wages of workers employed in these firms (Yeaple 2005, Bustos 2011a, 2011b, Verhoogen 2008)
- Exporting increases the wage gap between more and less educated workers within firms
 - Consumers in high-income countries demand high-quality products
 - Production & marketing of high-quality requires skill (Verhoogen 2008, Brambilla, Lederman, Porto 2012)

#2 Informal Sector Plays a Role in the Adjustment to Trade

Self-Employment and GDP per Capita in 2013

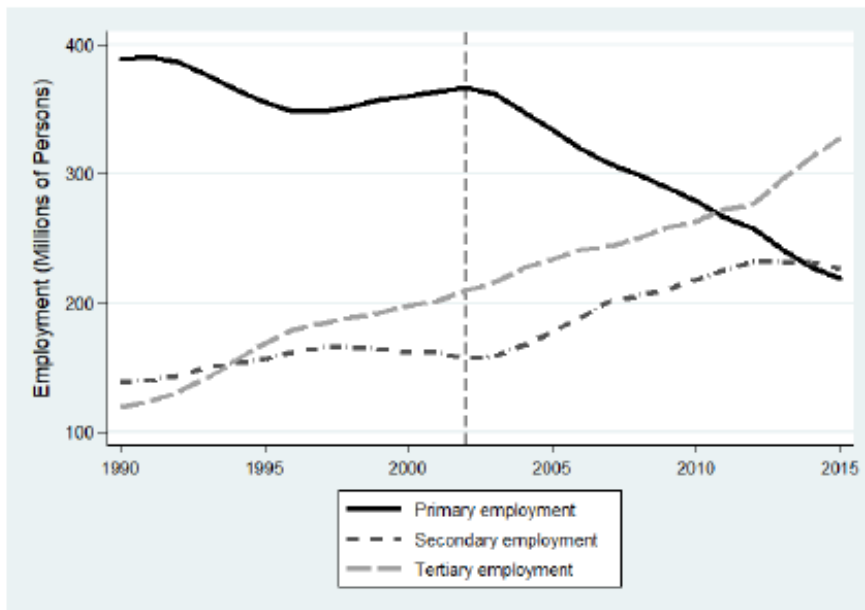


Source: World Development Indicators. See online Appendix for countries.

- Informal sector accounts for a large share of employment in developing countries
 - 80% of manufacturing workers in India, 68% in Vietnam, 30% in Brazil
 - & tends to employ less educated workers (important to consider if we want to understand the effects of trade on poverty)
- International trade can contribute to economic development and poverty reduction if it promotes reallocation of workers out of agriculture and out of microenterprises to formal firms

China's WTO Accession and Moving out of Agriculture

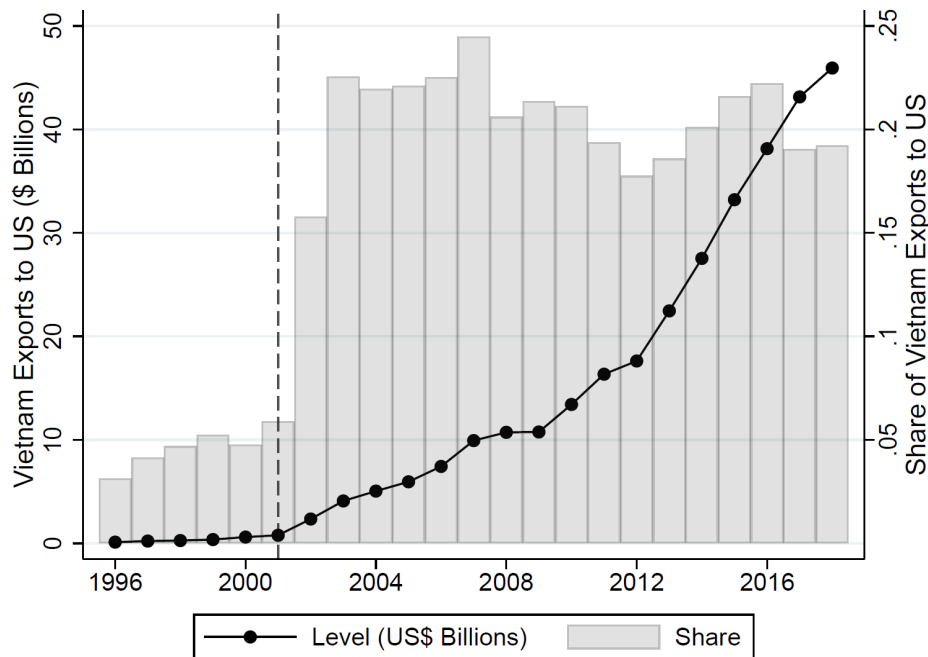
Decline in Agricultural Employment after 2001



Source: Erten and Leight (2021)

- WTO accession in 2001 reduces uncertainty about U.S. trade policy facing exporters from China
- Counties in China more exposed to the reductions in U.S. tariff uncertainty experience relative
 - Increase in exports and FDI
 - Expansion of employment in manufacturing and mining
 - Contracting of employment and investment in agricultural sector
 - Increase in total and per capita GDP

Vietnam: Exporting and Moving Out of Informality

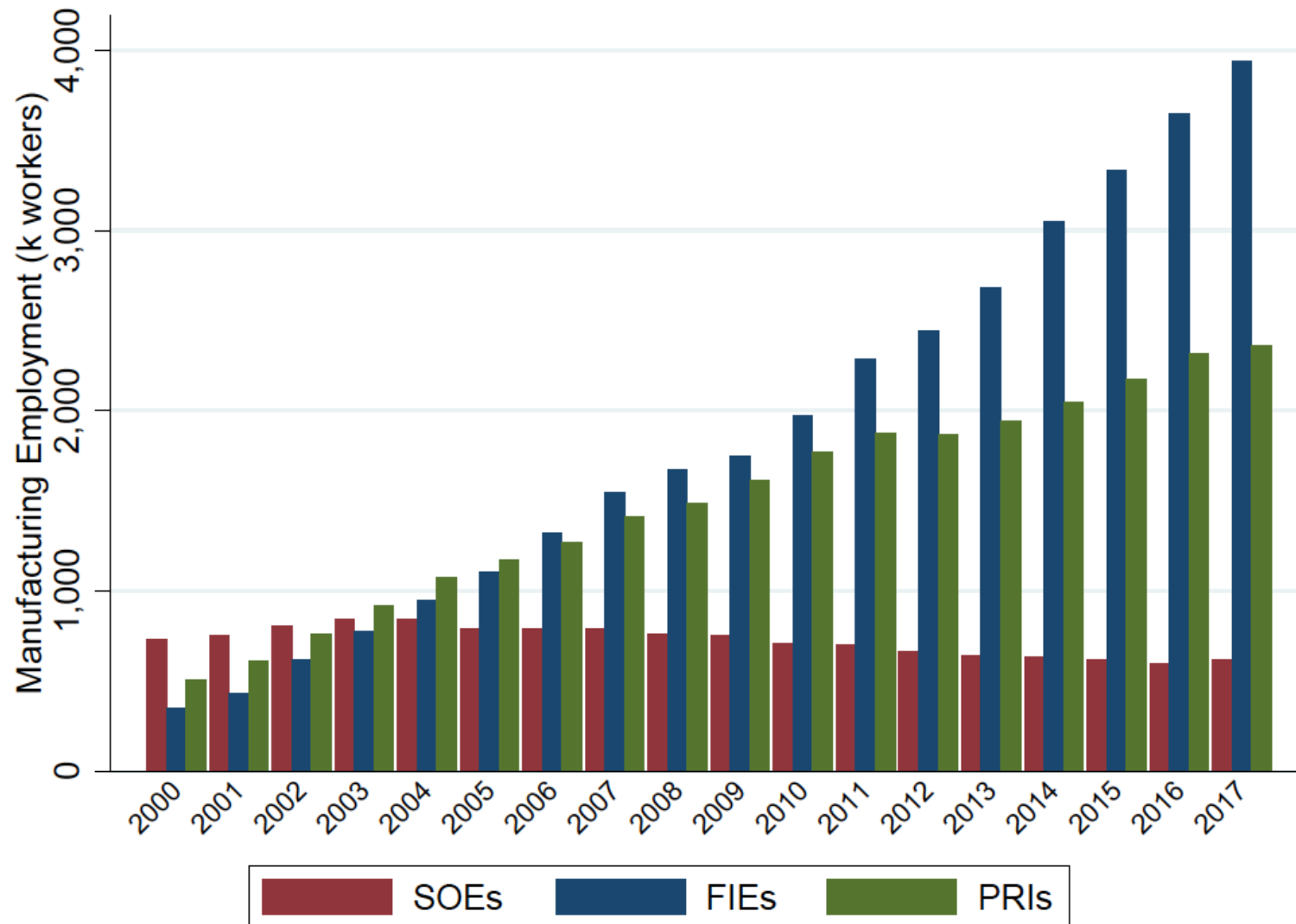


- The 2001 U.S. Vietnam Bilateral Trade Agreement drastically reduced import taxes on Vietnamese exports to the U.S., leading to rapid expansion of exports to the U.S.
- U.S. is a key export destination in world markets
- Exporting opportunities promote the reallocation of workers out of microenterprises to the formal sector in a lower-income country setting such as Vietnam (McCaig and Pavcnik 2018)

Incorporating informality expands our understanding of the effects of trade on workers

- General equilibrium labor market effects of export opportunities matter
 - Exporting influences labor market outcomes of workers beyond workers employed in formal manufacturing
 - Export opportunities promote the reallocation of workers out of microenterprises to the formal firms (McCaig and Pavcnik (2018))
 - Export opportunities increase wages in local labor markets (McCaig (2011))
- Shift from informal to formal firms changes how worker is attached to the labor market (McCaig and Pavcnik (2018))
 - Work longer & more regular hours
 - Less likely to hold multiple jobs
 - Higher earnings, more likely to receive benefits
 - Stable jobs are characteristic of a middle-class (Banerjee and Duflo 2007)

Entry of foreign affiliates of MNCs is the main driver of formal manufacturing employment in Vietnam



Source: McCaig, Pavcnik, and Wong 2023

Employment growth in new affiliates of MNCs more pronounced than in private domestic or state-owned entrants in Vietnam

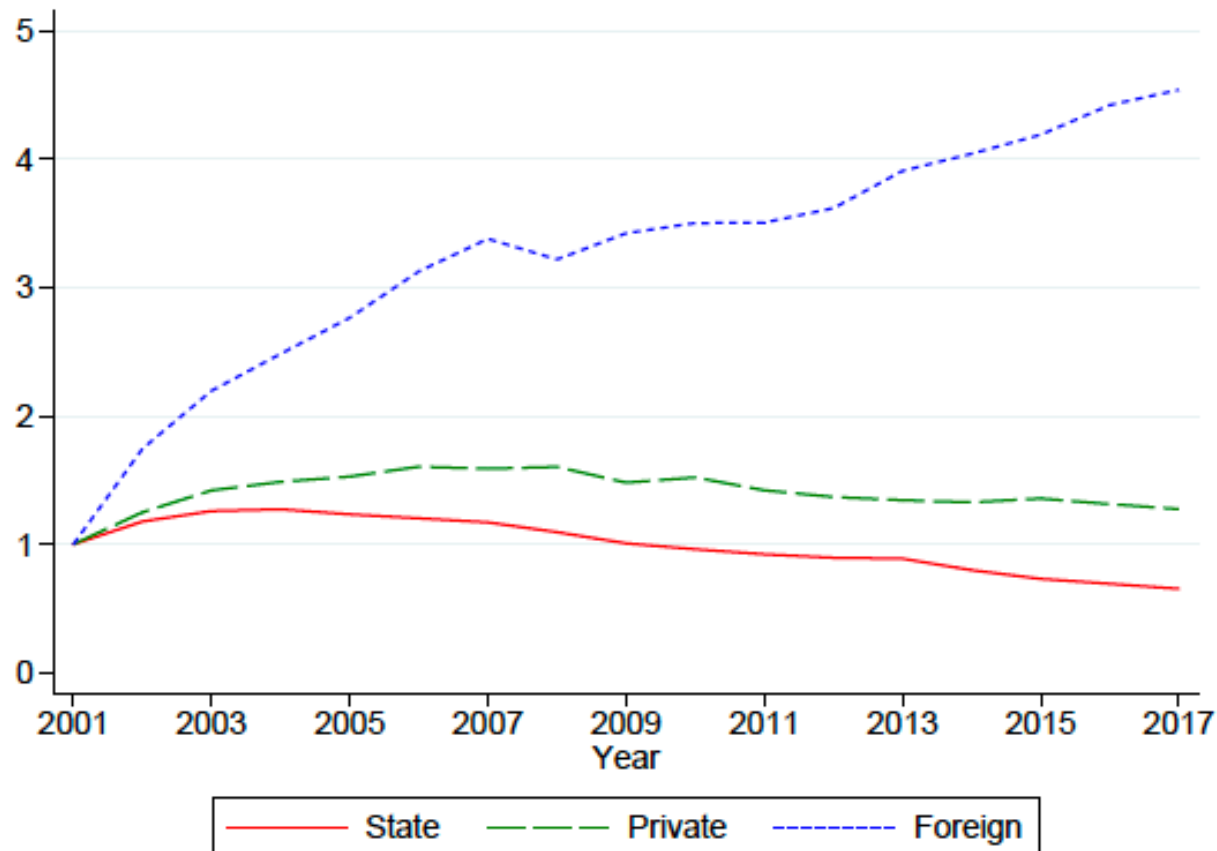
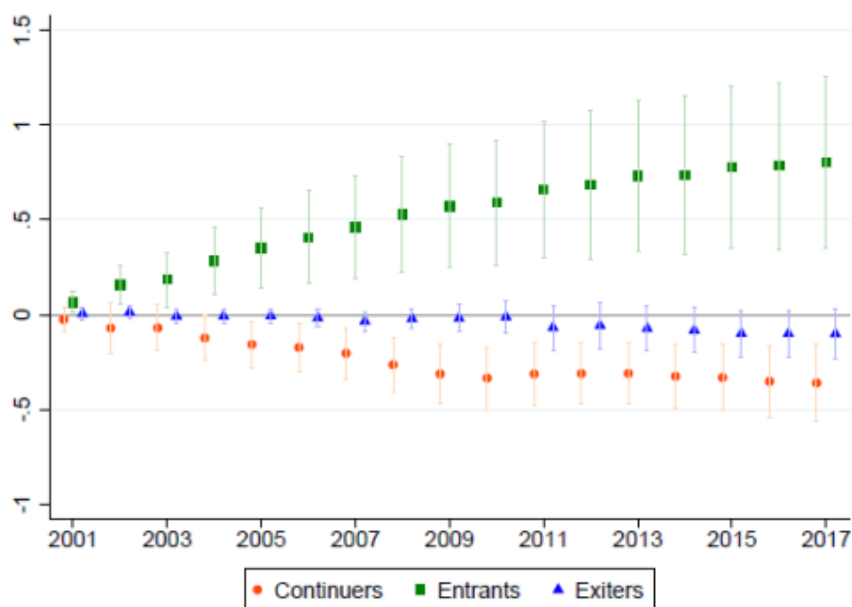


Figure focuses on employment growth in firms that entered in 2001. Employment at entry normalized to 1.

Employment in new affiliates of MNCs expanded over time in response to lower U.S. tariffs on exports from Vietnam.



- Lower tariffs in a key export market give MNCs sufficient profit to cover fixed cost of opening new affiliates in Vietnam
- MNCs have access to “special assets” and financing relative to private domestic firms (Chor and Antras (2023))
- Country context matters:
 - Proximity to existing GVCs in East Asia
 - Educated and young workforce in Vietnam

The figure shows the estimated cumulative effect of U.S. industry tariff cuts on industry employment shares in foreign entrants, foreign incumbents, and foreign firms that exit.

The reported number for each year is the cumulative effect relative to 2001.

Source: McCaig, Pavcnik, and Wong 2023

Other considerations with informal/small firms and GVCs

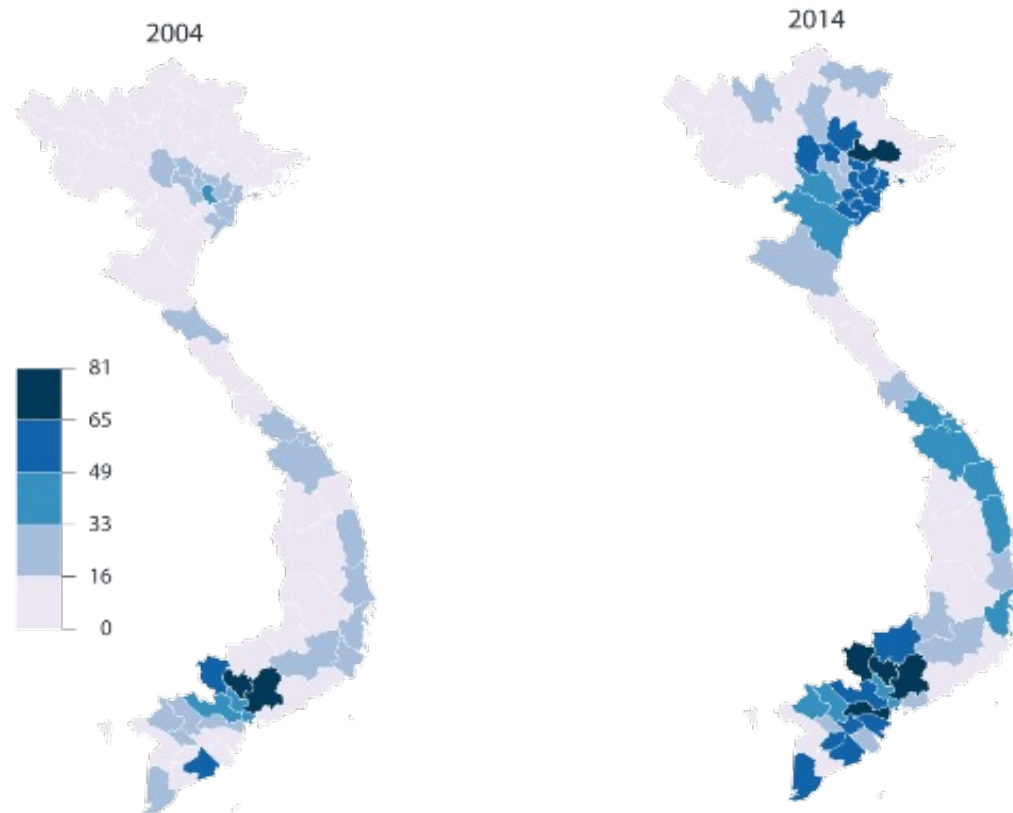
- Market power of international buyers can lead to inefficiently low wages, prices, quality standards, and poor working conditions (Boudreau, Cajal-Grossi, Macchiavello (2023))
- At the same time, some degree of market power might be needed to sustain long-term supply relationships that are beneficial in a world with incomplete contracts (Boudreau, Cajal-Grossi, Macchiavello (2023))
 - International buyers provide relational financing and know-how to firms in lower-income countries
- Constraints to domestic firm upgrading (Verhoogen 2023)
- Important to consider industry- and country-specific context

#3: Trade has Geographically Concentrated Effects

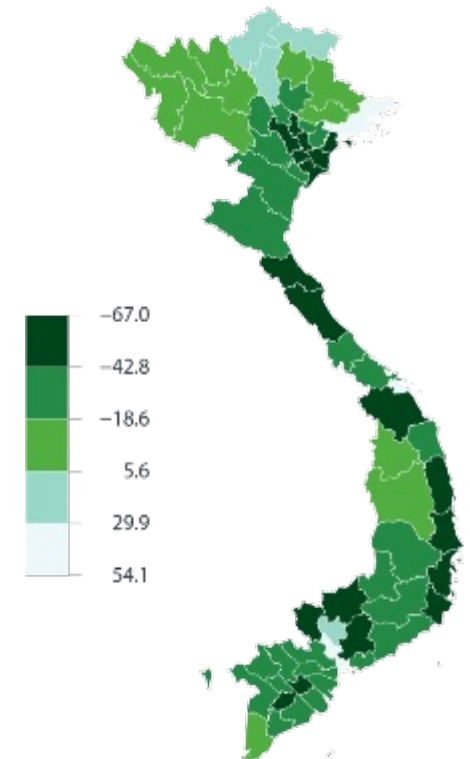
- Effects of trade on earnings and employment are geographically concentrated and unequal within a country, depending on the region's exposure to import and export shocks
 - Individuals in regions with a high concentration of industries benefiting from lower export costs fare better than individuals in less exposed regions
 - Individuals in regions with high concentration of industries subject to import competition fare worse than individuals in less exposed regions
- In part driven by imperfect inter-regional worker mobility, especially lack of outmigration even 5-9 years after large adverse trade shocks.
- Supported by evidence from several developing countries, including India, Brazil, Mexico, Vietnam, China, South Africa (Topalova 2007, 2010, Kovak 2013, DC & Kovak 2017, Costa, Garred and Pessoa 2016, Chiquiar 2008, McCaig 2011, Erten and Leight 2017, Erten, Leight, and Tregenna 2018)

In Vietnam, poverty reduction is greater in regions where firms with global supply chain linkages are present

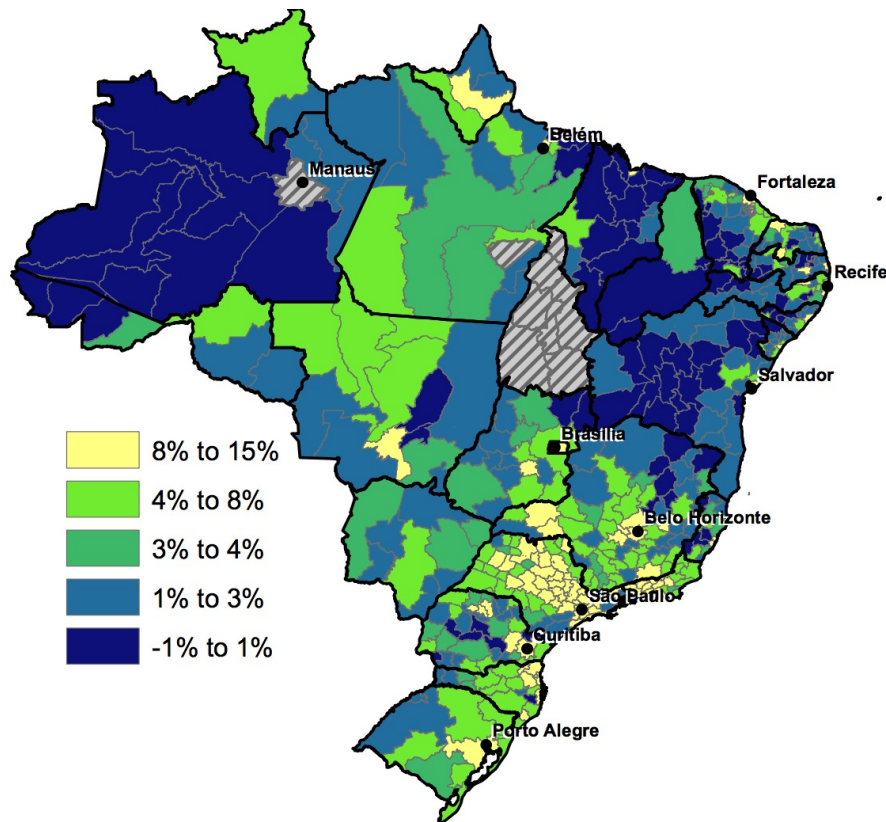
GVC firms in total employment (%)



Change in expenditure poverty rate, 2004-14 (%)



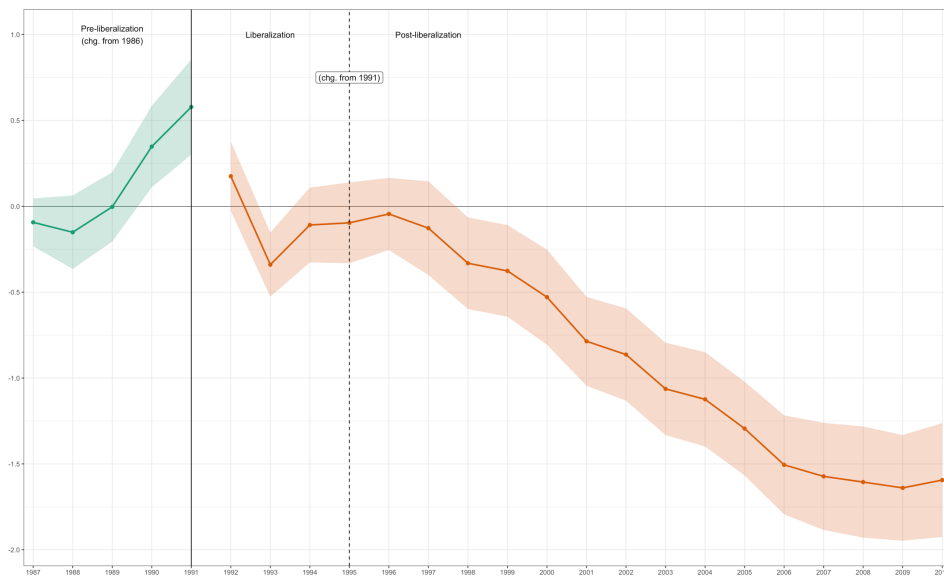
#4: The adverse effects of import competition are persistent and can amplify with time



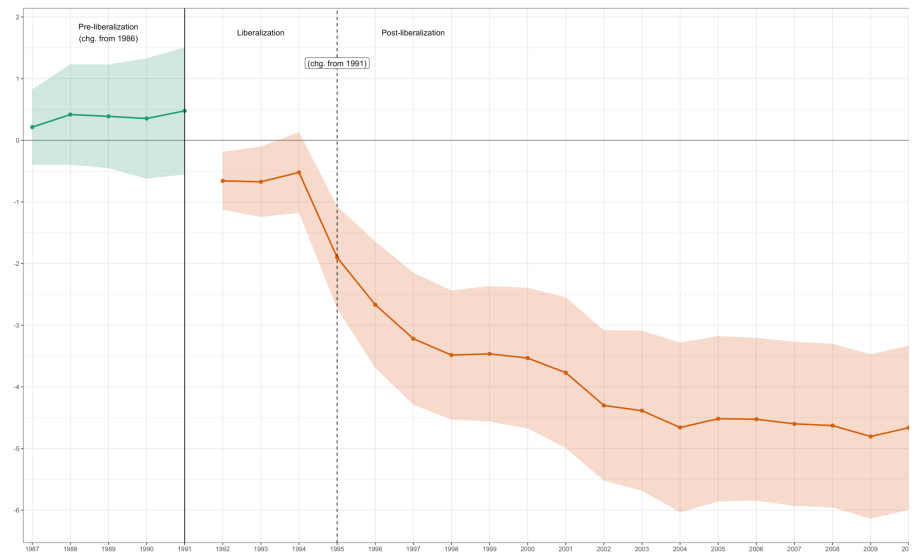
- Brazil's domestic import liberalization in early 1990s
- Can follow individual workers 20 years after trade liberalization, Using matched employee-employer data that covers formal sector (and Census of Population that includes informal workers)
- Adverse effects on relative earnings and employment are magnified over time in the formal sector

Source: Dix-Carneiro and Kovak (2017)

Import Liberalization Lowers Relative Regional Formal Earnings/Employment and Effects Amplify over Time

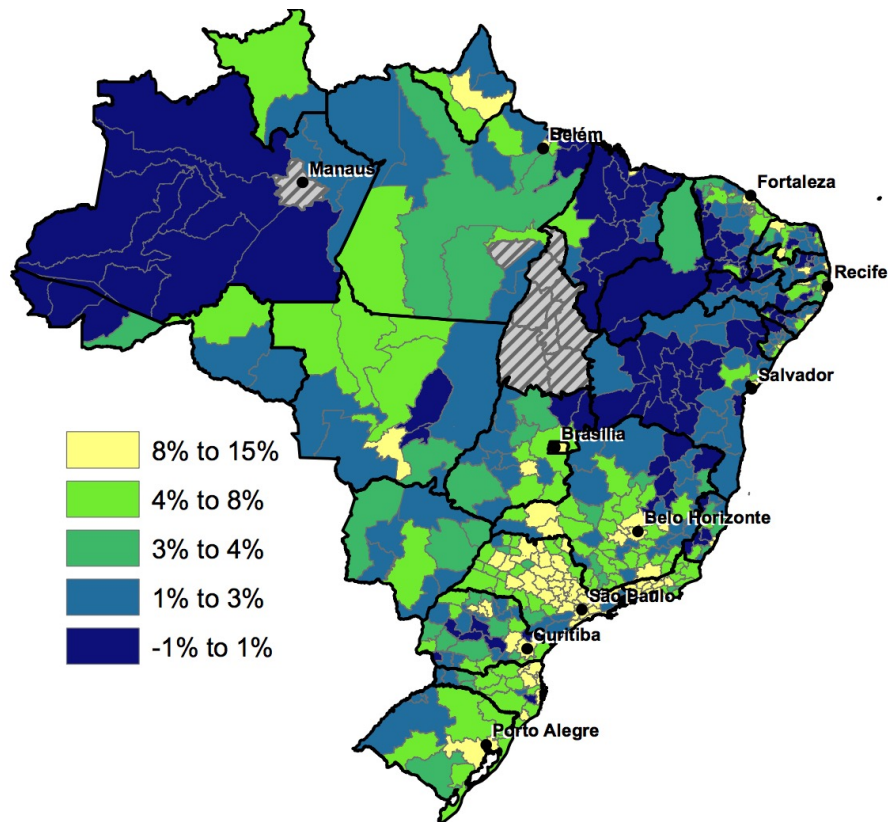


Earnings



Employment

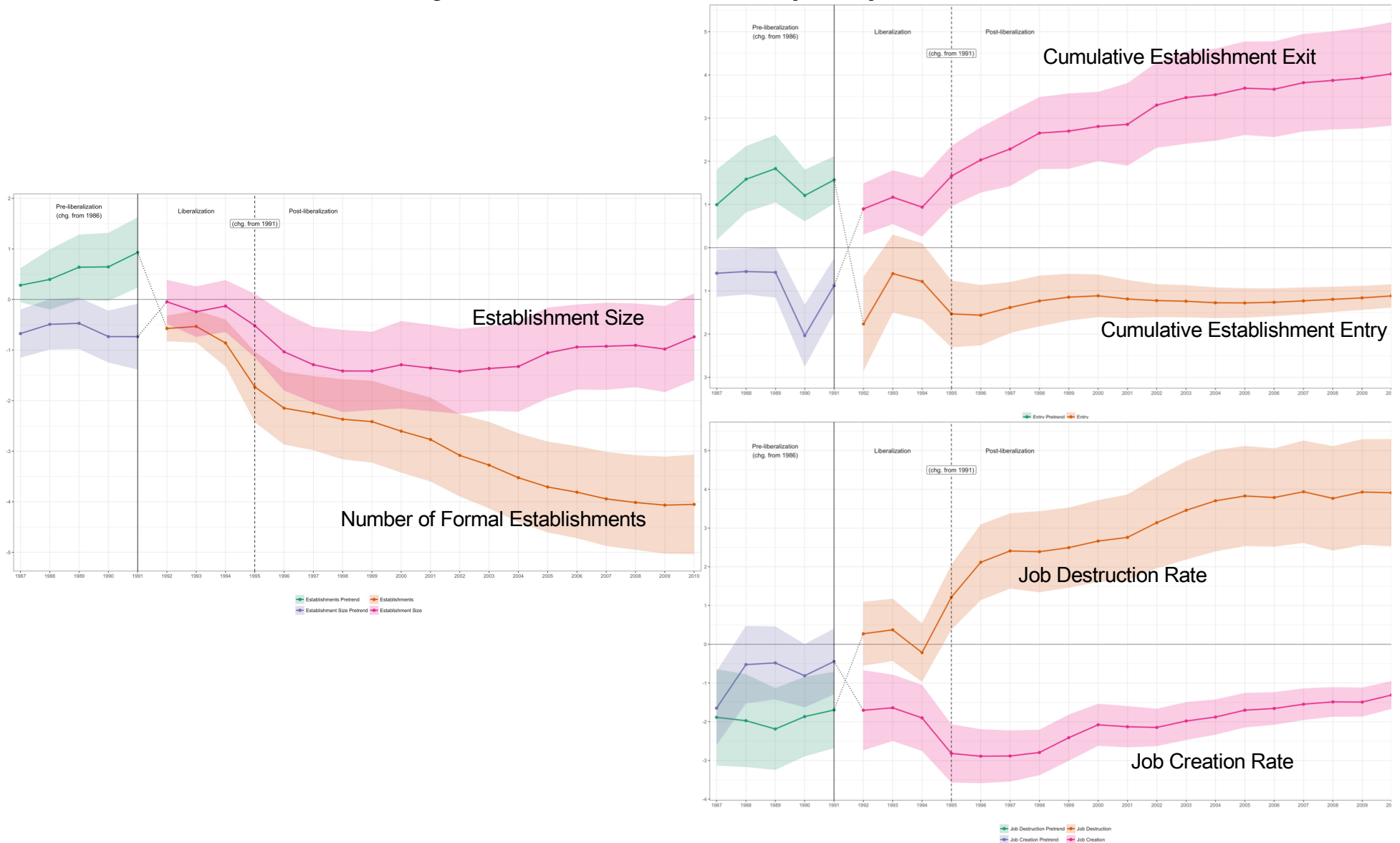
Why are the adverse effects of import competition persistent and can amplify with time?



- Low mobility of workers across regions in response to adverse effects
- Negative agglomeration economies
- Slow adjustment of capital

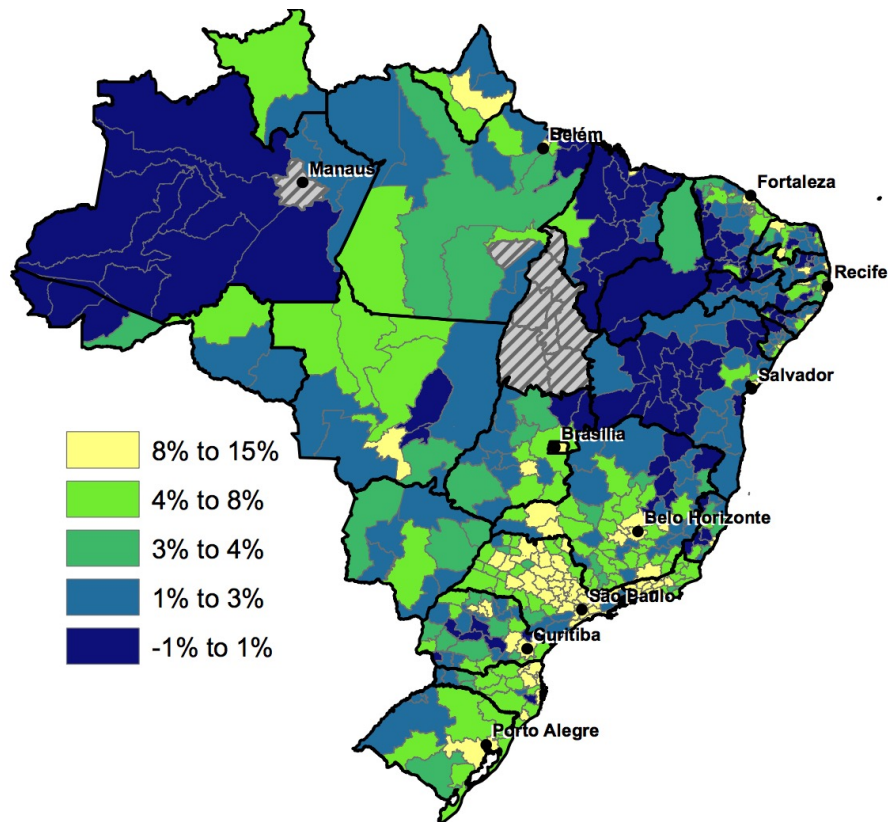
Source: Dix-Carneiro and Kovak (2017)

Slow adjustment of capital in companies leads to delays in adjustment of employment



Source: Dix-Carneiro and Kovak, 2017

Informal sector matters in adjustment to import competition in Brazil



- Trade-displaced workers spend time unemployed or out of the labor force, but eventually find re-employment in the informal sector.
- The informal sector seems to partly smooth the labor market outcomes of trade displaced workers.
- Without this fall-back sector, trade-displaced workers would likely have experienced even longer non-employment spells.

Takeaways on Trade, GVC, and Inclusive Growth

- Increased international trade is not the main reason for increased wage inequality in lower income countries (Helpman 2016, Pavcnik 2017)
- Worker firm affiliation matters, as does education
 - Workers in better performing firms (especially more educated ones) fare better in response to exporting opportunities or to import competition
- Much of the consequences of trade policy on workers would be missed if one focuses only on workers in registered manufacturing firms in isolation
- Most individuals in low-income countries employed in small, informal firms
 - Important to consider the effects of international trade/GVCs on small firms/informality/reallocation to formal sector

Takeaways on Trade, GVC, and Inclusive Growth

- Trade has geographically concentrated effects on individuals within a country
 - Geographically-concentrated employment losses from import competition are concerning
- Particularly striking findings from recent research: Slow adjustment of displaced workers, even 10-20 years following the initial trade policy change
 - Geographically concentrated losses that are persistent over time
 - Labor market consequences have spillovers to other community outcomes, including education of next generation

Recent articles that review this literature

- The Impact of Trade on Inequality in Developing Countries Proceedings of Jackson Hole Economic Symposium, Fostering a Dynamic Global Economy 2017 by Nina Pavcnik
- Journal of Economic Perspectives Symposium, Summer 2023
 - **Global Value Chains in Developing Countries: A Relational Perspective from Coffee and Garments**, Journal of Economic Perspectives June 2023, by Laura Boudreau, Julia Cajal-Grossi, and Rocco Macchiavello
 - **How Far Goods Travel: Global Transport and Supply Chains from 1965–2020** by Sharat Ganapati and Woan Foong Wong
 - **The Changing Firm and Country Boundaries of US Manufacturers in Global Value Chains**, by Teresa C. Fort
- "Firm-Level Upgrading in Developing Countries." Journal of Economic Literature 2023 (Eric Verhoogen)
- Multinationals and Development (with S. Garetto and N. Ramondo), VoxLit forthcoming this summer.