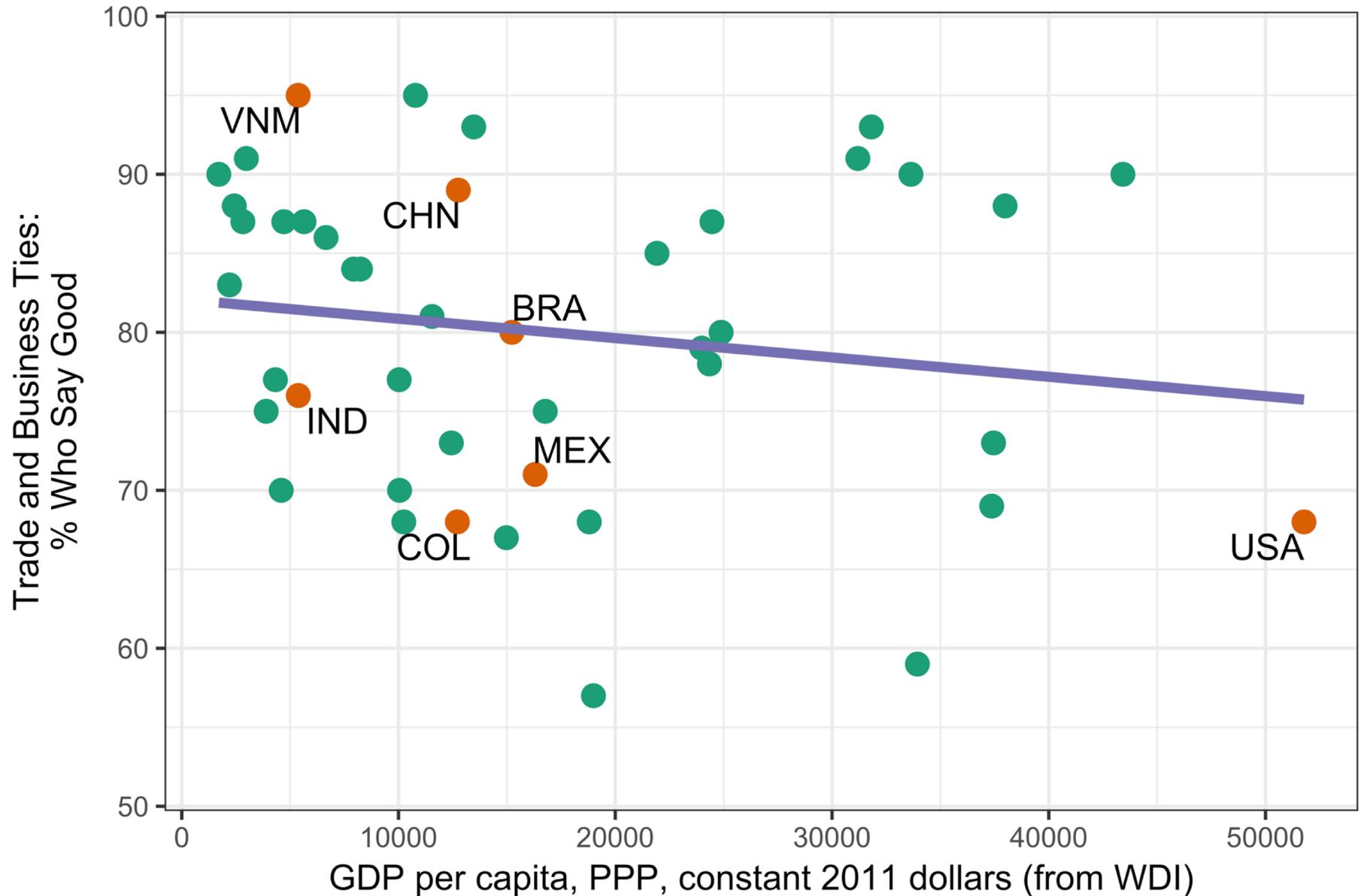


# The Effects of Trade Policy: A Global Perspective

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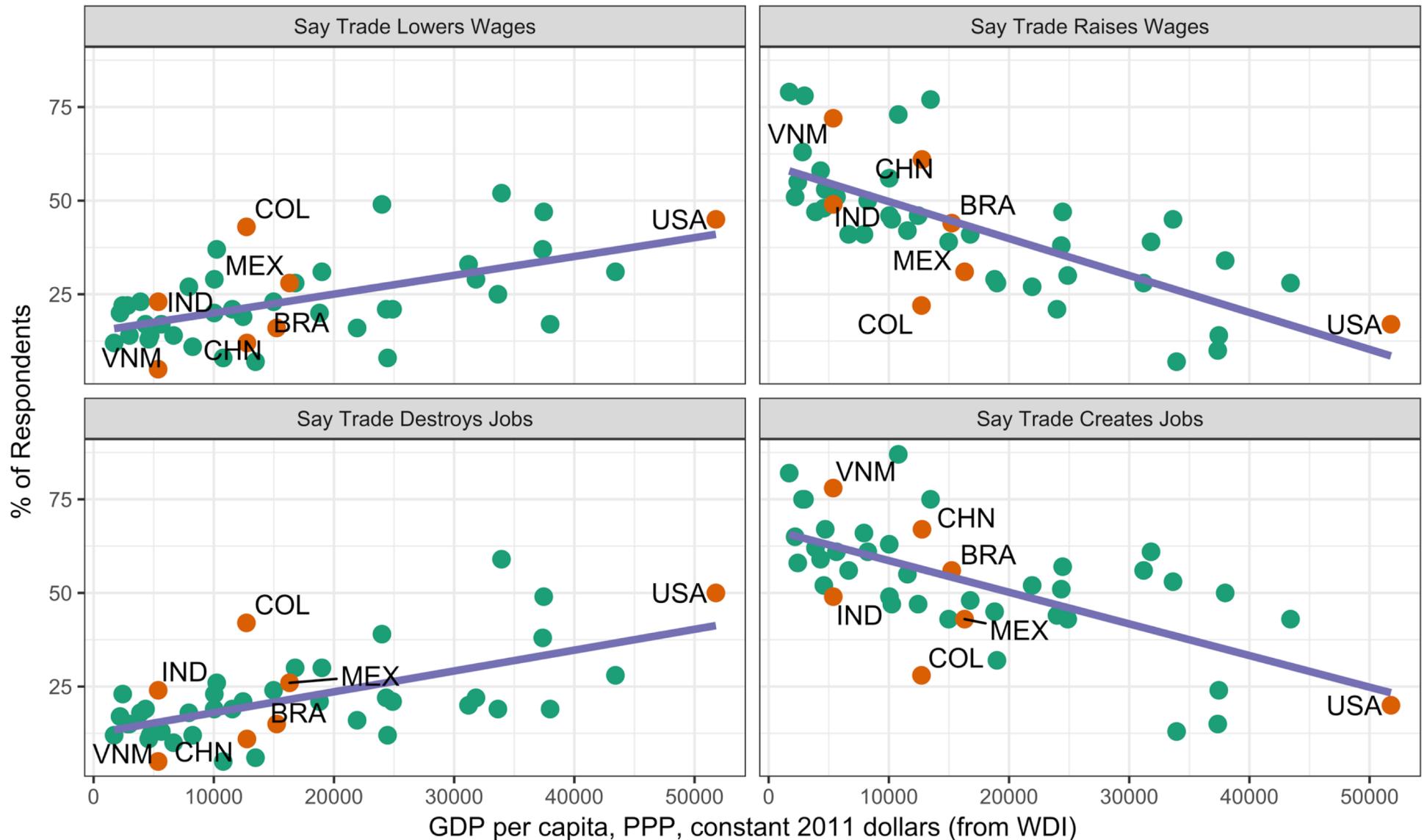
Trade and Labor Markets Conference  
National Press Club  
Washington, DC  
October 4, 2018

# The majority perceives aggregate benefits from trade



Source: Pavcnik (2017), based on 2014 Pew Global Attitudes Survey and WDI.

# Less agreement on trade's impact on livelihood of workers

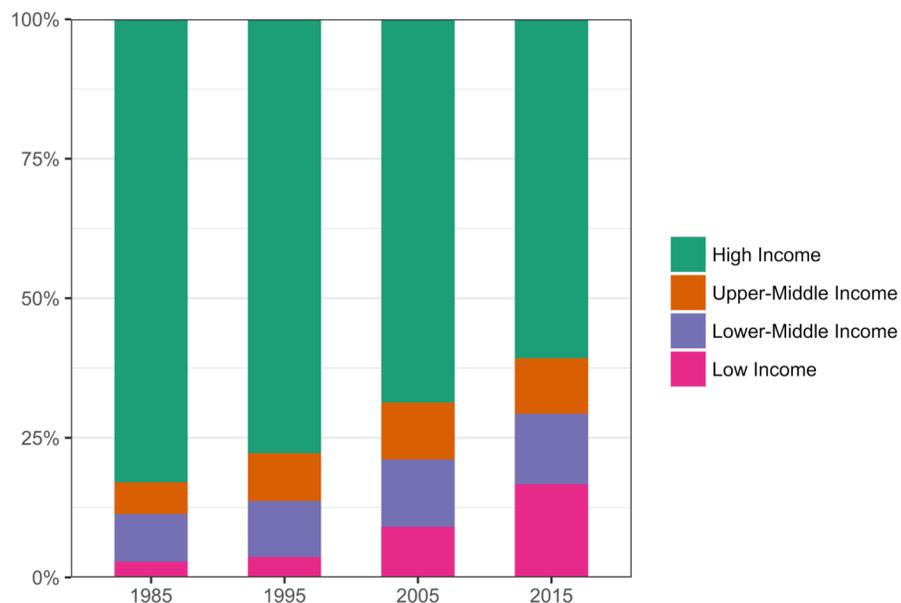


Source: Pavcnik (2017), 2014 Pew Global Attitudes Survey

# Trade and Labor Markets: Old Ideas

- Economists have long predicted that international trade generates winners and losers in developing and developed countries alike
- Most economic models of international trade, even the ones without any frictions in labor or credit markets, such as the Heckscher-Ohlin model (HO), predict changes in the income distribution with trade-induced changes in prices
- In a simple version of the HO model, trade was predicted to benefit the less educated and hurt the more educated in developing countries
  - Generates aggregate gains
  - Simultaneously reduces poverty and inequality
- Cumulative evidence based on 25 years of research on the effects of trade on labor markets in developing countries is more nuanced

# Evidence based on Four Decades of Trade Integration



Percentage of world exports by 1987 WB income group

Source: Pavcnik (2017), based on WDI data

- Many large-scale trade liberalizations implemented by developing countries or by their trading partners since the 1980s and the integration of China
- Policy changes ranged from import liberalization to increased access to export markets
  - settings to study how increased trade --through exporting and importing--has shaped earnings and employment in developing countries
  - Most studies in developed countries focus on importing shocks.

# Trade and Labor Markets: The News is the Evidence

- Increased international trade is not the main reason for increased wage inequality in developing countries (Goldberg and Pavcnik 2007, 2017, Helpman 2016)
- But trade policy matters for worker earnings, employment opportunities, poverty, and inequality
- The answers to the questions “Is trade good for the poor?” and “Does trade increase inequality?” depend on
  - Type of changes in trade policy or trade patterns & economic mechanisms
  - Mobility of workers and capital across firms, industries, and locations
  - Position of affected individuals in the income distribution of a country

# 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

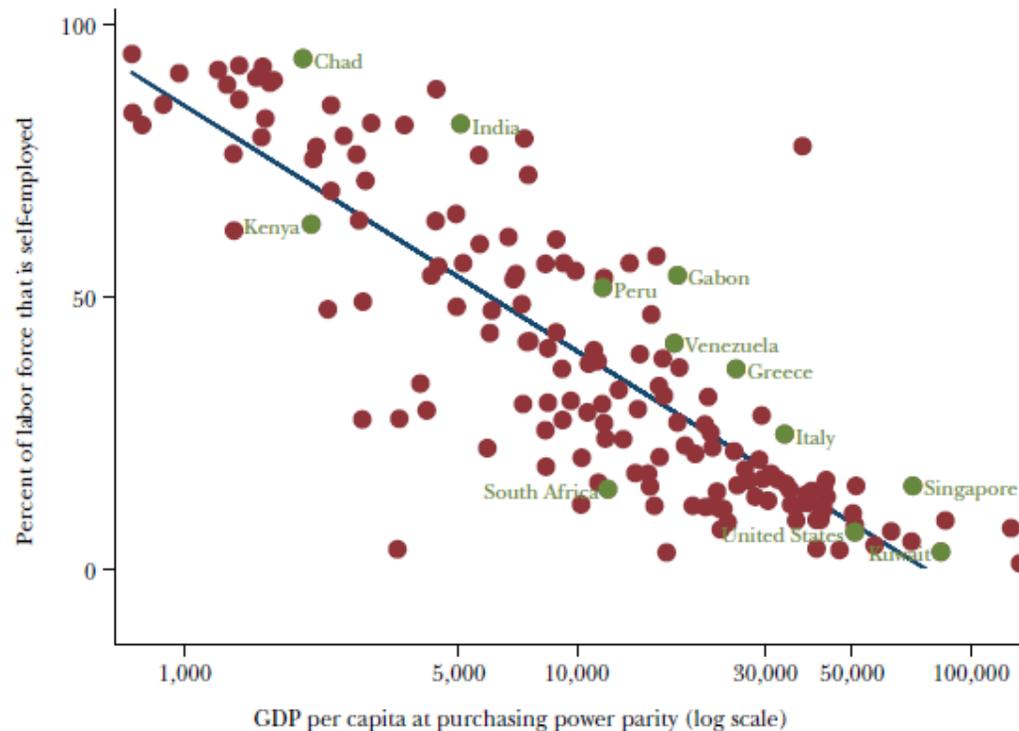
- Declines in industry employment from import competition are concentrated in less-productive firms (Menezes-Filho and Muendler 2011)
- Exporting increases wage inequality between firms in an industry
  - Better-performing firms tend to pay more
  - Exporting further increases the relative wages of workers 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)

# Workers in formal registered manufacturing firms

- Benefit: Simultaneously show how firms are adjusting production and how this affects workers.
- But workers that lose employment in this process are not observed after the loss of employment.
- Data representative of formal registered firms in manufacturing (or medium and large publicly listed firms)
  - 70 percent of manuf. workers in Brazil (Dix-Carneiro and Kovak 2017)
  - 20 percent of manufacturing workers in India (Nataraj 2011)
  - 42 percent in Vietnam (McCaig and Pavcnik 2015)
- more educated workers are more likely to select into formal sector (Goldberg and Pavcnik 2003, McCaig and Pavcnik 2015)

# Looking beyond formal registered firms in manufacturing

Self-Employment and GDP per Capita in 2013

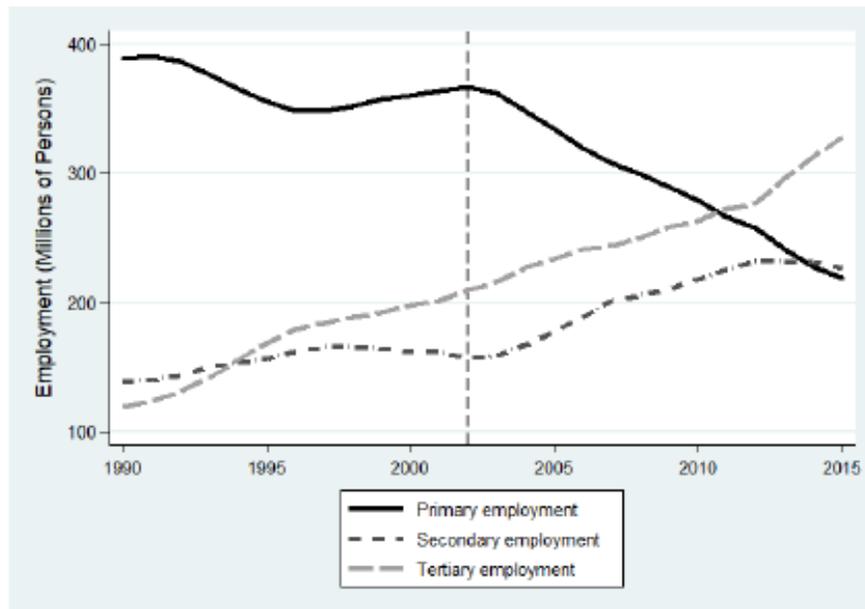


Source: World Development Indicators. See online Appendix for countries.

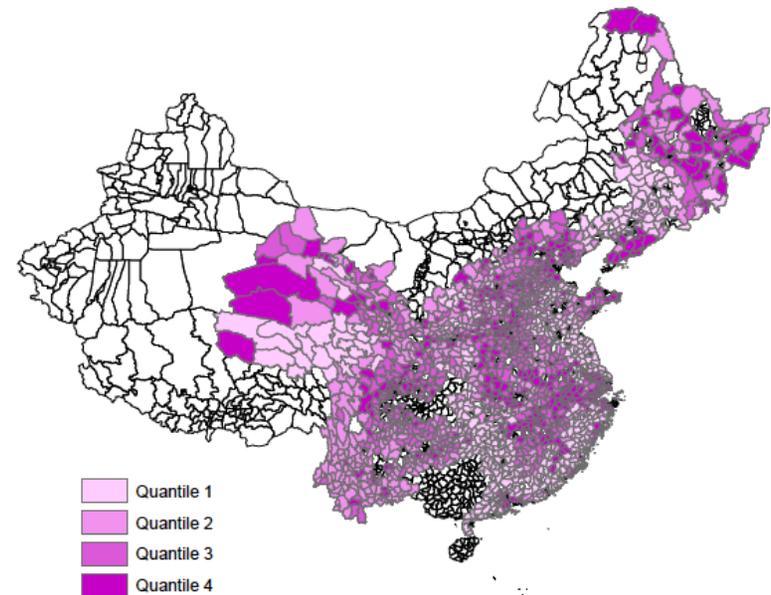
- Informal sector accounts for a large share of employment in developing countries
- International trade can contribute to economic development and poverty reduction if it promotes reallocation of workers out of agriculture and out of microenterprises to formal firms

# China's WTO Accession and Structural Transformation

## Composition of Employment



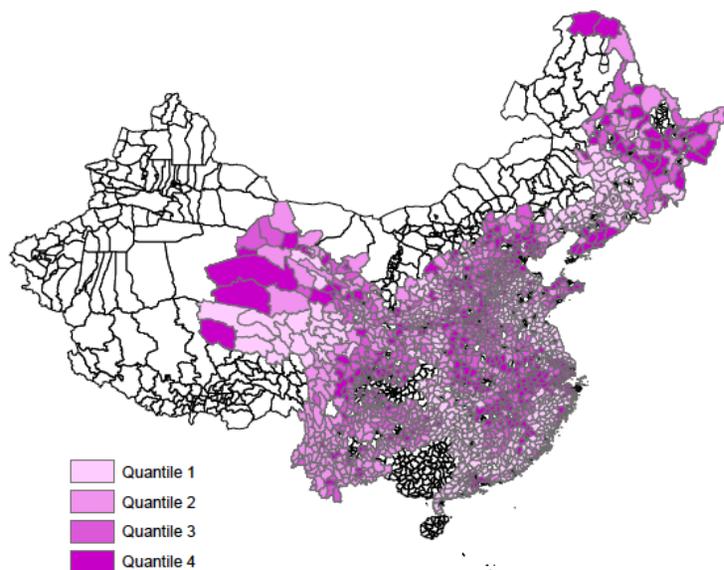
WTO accession reduces uncertainty about U.S. trade policy



NTR Gap by county: local exposure to tariff uncertainty prior to 2001

Source: Erten and Leight (2017)

# China's WTO Accession and Structural Transformation



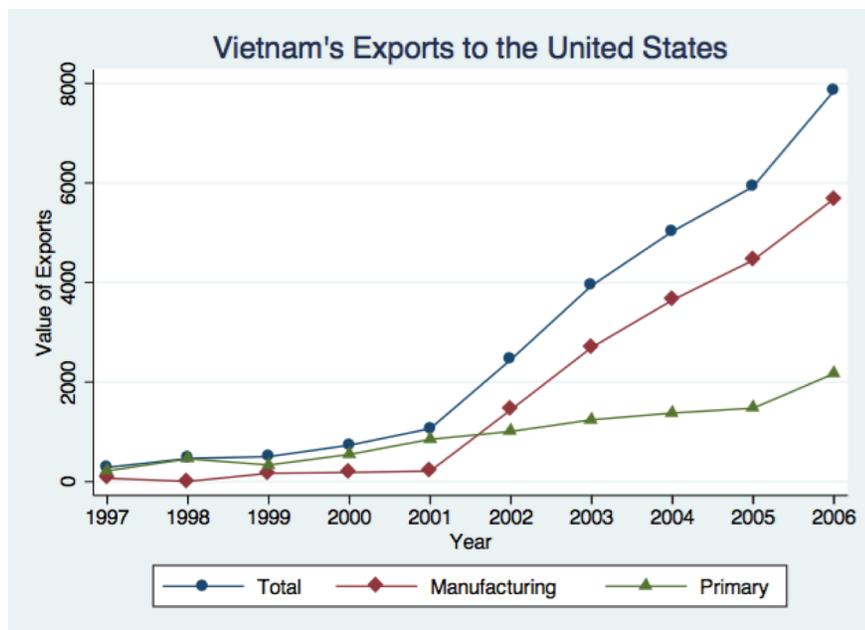
County exposure to tariff uncertainty

- 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

Source: Erten and Leight (2017)

# Informal sector plays a role in the adjustment to trade

- The 2001 U.S. Vietnam Bilateral Trade Agreement reduced import taxes on Vietnamese exports to the U.S.



Growth in exports to the US as a share of total VN exports

- Overall: 5.1% in 2000 to 20.2% in 2004
- Manufacturing: <5% to 25%

- U.S. import tariffs are more binding for better performing firms in Vietnam
- Reductions in these tariffs provide an impetus for job expansion in the formal sector

# Informal sector plays a role in the adjustment to trade

- General equilibrium effects of trade at work
  - Exporting influences labor market outcomes of workers beyond formal manufacturing
  - Export opportunities promote the reallocation of workers out of microenterprises to the formal sector in Vietnam
- Shift to formal sector changes how a worker is attached to the labor force
  - 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)

# 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)

# Concentrated benefits: Vietnam's Export Liberalization

- The 2001 U.S.–Vietnam Bilateral Trade Agreement: Exporting to the U.S. becomes cheaper
- Aggregate poverty declining in Vietnam during this time period
- Individuals in provinces with a high concentration of exporting industries experience relatively larger
  - Increases in wages (especially for less educated workers)
  - Reallocation out of informal microenterprises to the formal sector
  - Declines in household poverty
  - In-migration from other provinces
- Young population and higher education might have aided the reallocation
  - Younger and more educated face lower adjustment costs (Dix-Carneiro 2014)

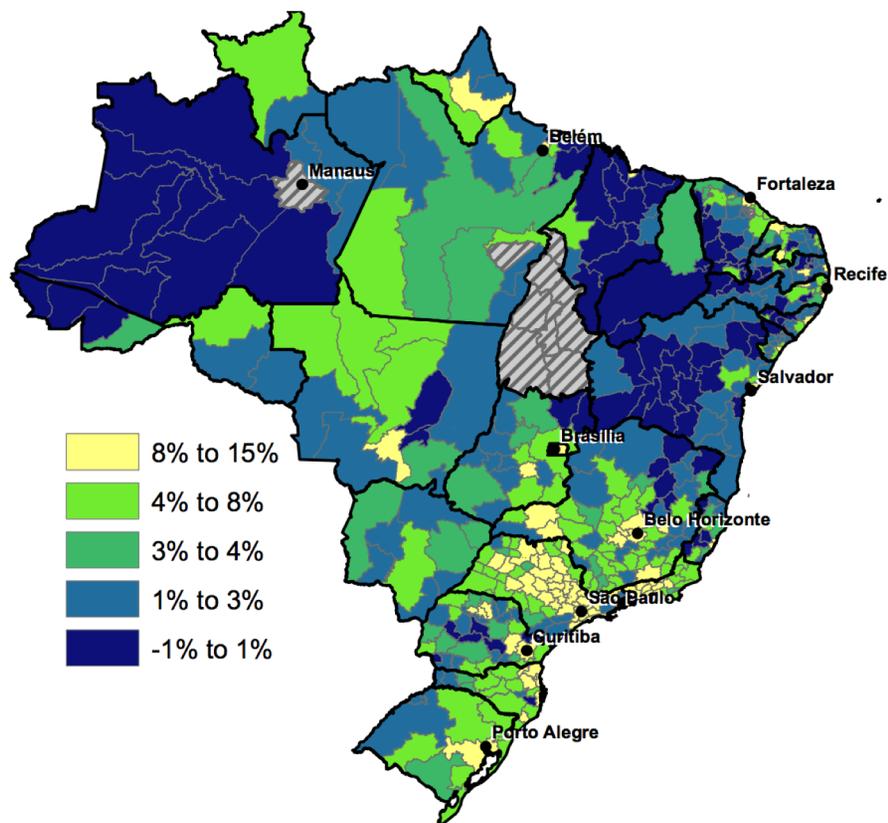
# Concentrated losses: India's 1991 Import Liberalization

- India's 1991 reform reduced import barriers
- Aggregate poverty in India declining during this time period
- Families living in harder-hit districts experience relative
  - Declines in industry wages, declines in agricultural wages
  - Increases in poverty
- Low inter-district mobility for employment 9 years after onset of reform
  - Less than 1% of rural individuals move within 10 years (less than 5% urban)
  - People do not out-migrate from hard-hit regions
  - Mobility particularly low for the poor
  - Rigid labor market regulation (Topalova 2010) and reliance on informal social networks within castes generates a disincentive to move away (Munshi and Rosenzweig 2016)

# Trade has long-lasting inter-generational consequences

- Trade's adverse impact on local labor markets can have longer-lasting effects through children's schooling/child labor
- Trade affects schooling/child labor through family income (Edmonds and Pavcnik 2005; Edmonds, Pavcnik, Topalova (2009, 2010))
- Indian families in hard-hit regions experienced a relative negative income shock after 1991 import liberalization (Edmonds, Pavcnik, Topalova (2009, 2010))
- School-age children, especially girls, in families living in harder-hit districts experience relative
  - Declines in school attendance
  - Declines in school completion rates and literacy
  - Declines in life-long income
- Families at subsistence are saving on schooling costs

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



Source: Dix-Carneiro and Kovak (2017)

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

# Slow adjustment of capital



Source: Dix-Carneiro and Kovak, 2017

# Conclusion

- Trade generates aggregate gains, but these gains are unequally distributed in developed and developing countries
- Employment losses from import competition are concerning
- Even more striking findings from recent literature from the U.S. and developing countries
  - Geographically concentrated losses that are persistent over time
  - Lack of adjustment of displaced workers, even 10-20 years following the initial trade policy change
  - Labor market consequences have spillovers to other community outcomes, including education of next generation