Applied Economics Analysis - Final Project
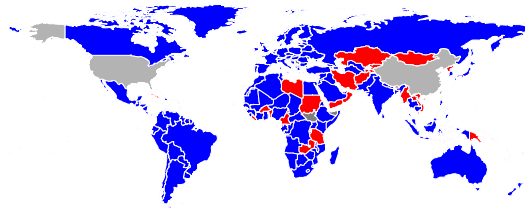# Exporting Autocracy

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Chinese Trade Expansion

- Over the past three decades, China has emerged as a global trade superpower

- Overtook the United States as the world's largest trading nation in 2013

- Steadily ranked first and second in global shares of exports and imports, respectively, since 2009

- Economic advancement and trade openness have not led to substantial changes in the structure of the domestic political regime
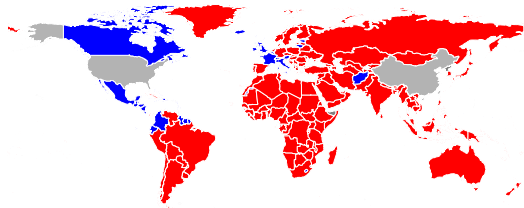
Chinese Trade Expansion

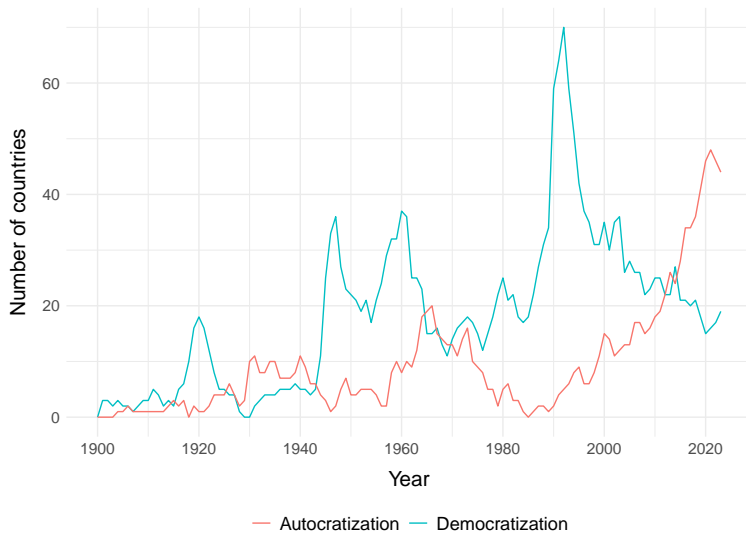Countries trading more with the United States vs. China:
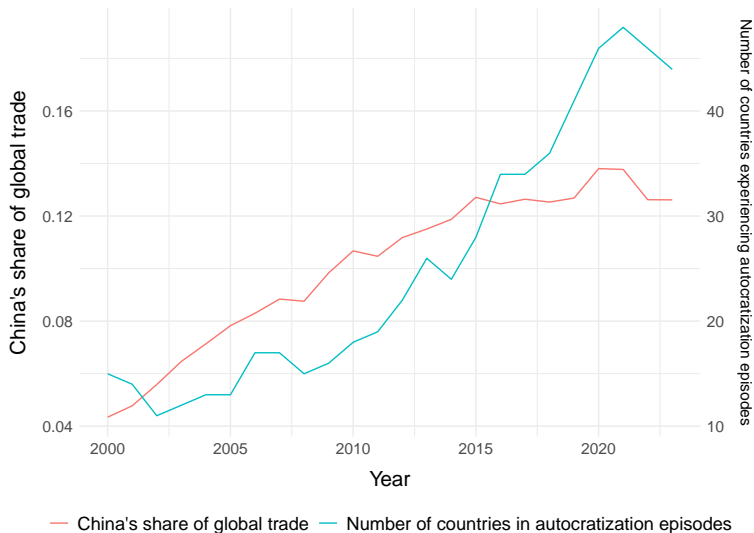

2000

2020

Democratic Retreat

- During the same period of time, slow down of the democratization process and democratic erosion

- Widespread and relatively new trend in recent history

- In the past decade, for the first time since WWII, countries experiencing episodes of autocratization have persistently outnumbered those that were democratizing

Democratic Retreat

The two trends together

China's share of global trade — Number of countries in autocratization episodes

Chinese Trade and Expansion and Democratic Retreat

Main question:

- Can China's rise as a commercial superpower and autocratic outpost explain part of the ongoing democratic recession?

What I would like to do:

- Build a Shift-Share instrumental variable for exposure to Chinese trade

- Estimate the effect of Chinese trade on democracy and attitudes toward democracy

Data

- Trade: Bilateral trade flows at the commodity level from UN Comtrade. Following the literature (Baldwin and Taglioni, 2007), the main measure of trade is the yearly average of imports and exports of goods reported by both members of each country pair

- Democracy: Aggregate measures of democracy and authority characteristics from Polity2 project, Freedom House report and V-Dem project

- Attitudes toward Democracy: selected questions from Integrated Value Survey (IVS), Afrobarometer, Eurobarometer, and Latinobarómetro

Trade with China and Democracy

- To examine the effects of trade with China on a country's level of democracy, I would estimate the following model:

$$\Delta D_{i\tau} = \alpha + \beta log(\Delta T_{i\tau}^c) + \gamma X_i' + \epsilon_{i\tau} \tag{1}$$

  - $\Delta D_{i\tau}$: change in democracy score in country i between the start and the end of period τ
  - $\Delta T_{i\tau}^c$: change in Chinese trade exposure in country i between the start and the end of period τ
  - X_i': country-level controls measured at baseline e.g. domestic and foreign democratic capital

Empirical Strategy

- Empirically identifying the causal impact of Chinese trade expansion on democracy is a challenging task for at least two reasons:

    - Omitted variable bias: unobserved confounding factors may influence both institutional dynamics and Chinese trade growth
    - Reverse causation: the deterioration of a country's democracy might be the cause rather than the consequence of its increased exposure to Chinese trade

$\rightarrow$ Shift-Share instrumental variable (SSIV): weighted average of a set of observed shocks, with weights given by shares that reflect heterogeneous exposure of units to shocks

Shift-Share Design

- Approach similar to Autor et al. (2013)
    - Assign each country a fraction of the variation in China's global trade in a given industry equal to its share of global trade in that industry
    - Aggregate across industries to obtain the following measure of Chinese trade exposure:

$$\Delta T_{it}^c = \sum_j \frac{T_{ijt}}{T_{jt}} \frac{\Delta \sum_p T_{pjt}^c}{T_{it}} \tag{2}$$

    - To account for the above mentioned endogenity concerns, Chinese trade exposure in expression (2) is instrumented with the following variable:

$$\Delta \widehat{T^c}_{it} = \sum_j \frac{T_{ijt-10}}{T_{jt-10}} \frac{\Delta \sum_{p \neq i} T_{pjt}^c}{T_{it-10}} \tag{3}$$