Economics 3403: International Economics and Policy

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Introduction

Briefly what the course is about: international trade, capital and labor mobility, macroeconomics, exchange rates (more below).

Some comments on who I am.

And on who you are: go through class list.

Introduce TA: Javier Andres Santiago

Introduction

Go through syllabus and expectations.

- Course structure and prerequisites.
- Three policy discussions based on brief papers I will circulate.
- Four problem sets.
- Two mid-terms.
- Final exam.
- Use of Clickers.

Textbook: Husted and Melvin, *International Economics* 9th edition, Pearson Publishers.

Course objectives and expectations

- Develop an analytical framework for analyzing the basics of international trade and financial linkages among countries: cooperation, competition, gains and losses.
- Get a better appreciation of complicated economic interrelationships among countries.
 - China's entry into world trade in 1990s and its WTO entry in 2001: impacts on world labor markets. China effectively added 20% to the global labor pool.
 - o Do international trade and FDI harm the global environment? Help it?
 - Think about multinational enterprises and global production networks: if they are so harmful, why do countries try hard to attract them? What are their real functions?
 - Why do several EU countries share a currency? What opportunities and problems does that raise?
 - Where do foreign exchange crises come from? How costly are they?
- Become better informed about the world economy (and politics), get used to thinking about facts and evidence.

Introduction to international economics

The subject of international trade essentially studies the movement of goods (and factors) from where they are in excess supply to where they are in excess demand.

- Microeconomics (supply and demand) extended across borders.
- And the policies that encourage or deter such movement.

The subject of international finance essentially studies how national economies interact at the aggregate level

- Macroeconomics (inflation, GDP, interest rates) extended across borders.
- How are goods and assets actually traded in monetary terms?
- What determines exchange rates (currency prices) and why does that matter?
- How do crises in one country affect other countries?

Why a separate field of study?

- 1. Mobility of goods and (especially) factors is generally more limited across national borders than within countries. Why?
- Family ties and customs;
- Costs of moving or investing.

Observation: the mobility of capital and technology is very high now. Labor (migration) is far less mobile internationally.

- 2. National governments use their power to regulate cross-border trade in goods, services, and factors. What kinds of policies?
 - Border taxes (tariffs) and quotas.
 - Domestic regulations that might restrict trade (e.g., patent laws, antitrust regulation, state-owned enterprises, corporate taxation, poor infrastructure, corruption, etc.)
 - Limits on labor migration.
 - Controls on the inward and outward flow of financial capital.

Observation: we think (or hope) these regulations are in the national interest, but maybe not. And they have complex effects we want to study.

Why a separate field of study?

- 3. Existence of national currencies and exchange rates deeply affect international trade and financial flows.
- 4. Welfare calculations are different (national versus international):
- Should policy makers worry about how our trade restrictions affect the welfare of trade partners?
- Should national policy makers care about how our regulatory policies (e.g., environmental protection, capital requirements in banking) change conditions abroad? Should other governments respond?
- Should the US conduct its own monetary and fiscal policy without thinking about how it will affect macroeconomics in other regions?

Primary questions addressed in international trade

- 1. What factors explain the patterns and volumes of international trade?
- 2. What are the gains from trade? Can countries be made worse off by engaging in trade?
- 3. How are the GFT distributed?
- Among countries;
- Within countries;
- 4. Does open trade make things better or worse when there are weak domestic regulations? (e.g., environment, labor).
- 5. What are the effects of trade barriers on different people within economies?
- 6. Why do trade restrictions exist and what explains which industries are protected? The "political economy" of trade policy.
- 7. What are the institutions of global trade? (WTO, FTAs, IMF and World Bank, etc.)
- 8. What explains factor movements (labor, portfolio capital, FDI, technology) and what are their effects?

Primary questions asked in international finance

- 1. What determines a country's balance of payments and balance of trade? Analysis of national income accounts.
- 2. How do foreign exchange markets work?
- 3. How do different kinds of exchange rate systems work?
- 4. What causes movements in exchange rates?
- 5. Why are there exchange-rate and banking crises?
- 6. What are the effects of exchange rates on trade, income, inflation, and employment? And vice versa?
- 7. How do countries undertake macroeconomic policy when they know their economies are interrelated?

Motivation: history in the making

What are the most significant policy changes in the global economy in your lifetimes? That is, since 1995?

Implementation of WTO (1995) and NAFTA (1994);

Establishment of the euro (1999-2002);

China joining the WTO (2001);

Global great recession (2008-2014).

The current emergence of nationalism and a pushback against globalization.

Globalization: basic comments

What is "globalization"?

Economics definition: the continuing integration of markets across borders through reductions in costs of trading and investing.

What are the major *sources* of globalizing markets?

- Reductions in trade and investment barriers since 1945:
 - International trade agreements (GATT then WTO; free trade agreements (NAFTA, EU, etc.); investment treaties; decisions to open national financial markets.
- Reductions in transportation and trade costs:
 - Containerization in shipping; cheaper air transport.
- Massive improvements in information and communication technologies.

Globalization: basic comments

What are the primary *channels* of globalization:

International trade in goods and services;

Foreign direct investment (FDI) by multinational firms as a conduit for technology and capital;

Offshoring and fragmentation of production stages into global supply chains;

Financial capital flows;

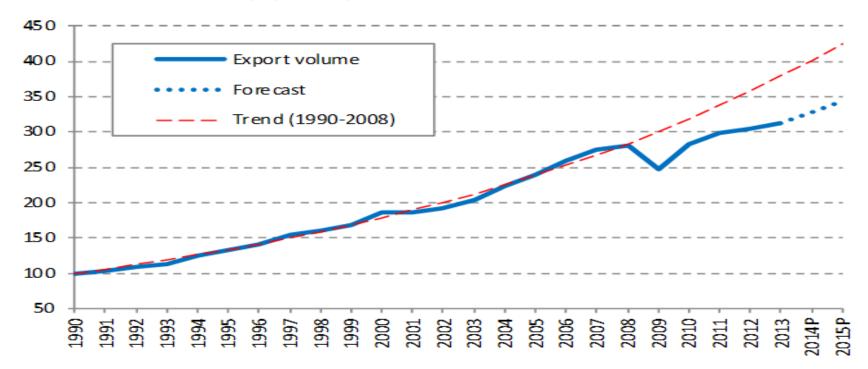
Labor migration and mobility (especially temporary skilled labor);

Trade in technologies (diffusion of the knowledge from R&D and innovation);

Globalization data trends: trade

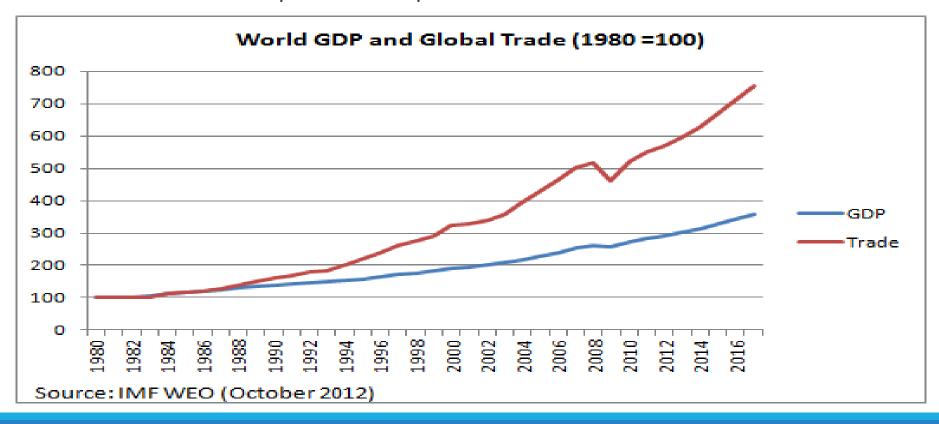
Current world volume of merchandise exports is around \$23 trillion per year.

World trade volume has nearly quadrupled since 1990. (Chart: WTO)



Globalization data trends: trade

Trade in goods (and services) generally grows faster than GDP, meaning that countries have become more reliant on exports and imports over time.



Globalization data trends: FDI

Table 1 also shows the massive increase in the importance of FDI in GDP just about everywhere.

Since 1990 FDI has grown much faster than trade.

Global affiliate sales are estimated to be twice global merchandise trade. Currently global affiliate sales are around \$48 trillion (compare to world GDP of \$88 trillion).

Note the extreme integration of the NAFTA countries through FDI. (Primarily in automobiles.)

Automobile industry in NAFTA is a top example of a major reason for the growth in FDI: the huge increase in international production networks, or "supply chains".

Table 1. Measures of globalization for individual countries

| | Total Merchandise (se | ource:WDI) | FDI stocks (source: | UNCTAD) | FDI Stocks Outward (% of GDP) | | |
|-------------|-----------------------|------------|---------------------|---------|-------------------------------|------|--|
| | Trade (% of G | DP) | Inward (% of | GDP) | | | |
| Country | 1990 | 2017 | 1990 | 2017 | 1990 | 2017 | |
| USA | 20 | 28 | 9.0 | 40 | 12 | 40 | |
| Canada | 50 | 64 | 19 | 66 | 14 | 42 | |
| Mexico | 38 | 78 | 7.6 | 42 | 0.9 | 16 | |
| UK | 47 | 62 | 19 | 60 | 21 | 58 | |
| Germany | 46 | 87 | 13 | 25 | 17 | 44 | |
| Australia | 32 | 42 | 25 | 47 | 12 | 32 | |
| Japan | 20 | 31 | 0.3 | 4.3 | 6.4 | 31 | |
| Korea, Rep. | 51 | 81 | 1.9 | 15 | 0.8 | 23 | |
| Singapore | 344 | 322 | 78 | 414 | 20 | 271 | |
| China | 24 | 38 | 5.2 | 12 | 1.1 | 12 | |
| India | 16 | 41 | 0.5 | 15 | 0 | 6 | |
| Brazil | 15 | 24 | 9.1 | 38 | 10 | 17 | |
| Ghana | 43 | 91 | 3.2 | 71 | 0.0 | 0.8 | |
| World | 39 | 56 | 10 | 39 | 10 | 39 | |

Globalization data trends: international labor migration

Generally, labor flows are far less globalized than capital and trade.

But we have seen notable increases in certain measures since 1990.

Table 2. Foreign-born as a percentage of population (source: WDI)

| Country | 1990 | 2000 | 2010 | 2015 |
|-----------|------|------|------|------|
| USA | 7.9 | 10.7 | 12.9 | 13.5 |
| Canada | 15.6 | 17.7 | 19.9 | 20.5 |
| Australia | 22.8 | 23.0 | 26.7 | 28.2 |
| UK | 8.8 | 10.2 | 11.2 | 13.0 |
| Italy | 2.5 | 3.7 | 9.7 | 9.7 |
| Mexico | 0.4 | 0.5 | 0.8 | 0.8 |
| Japan | 0.9 | 1.3 | 1.7 | 1.6 |
| World | 2.9 | 2.8 | 3.2 | 3.3 |

Question 1

Major channels of globalization include:

- A. Trade in high-technology goods and services.
- B. Foreign direct investment.
- C. Migration of skilled labor.
- D. Technology licensing.
- E. All of the above.

A bit of economic globalization history

Economists often write about 3 "waves" of globalization, roughly:

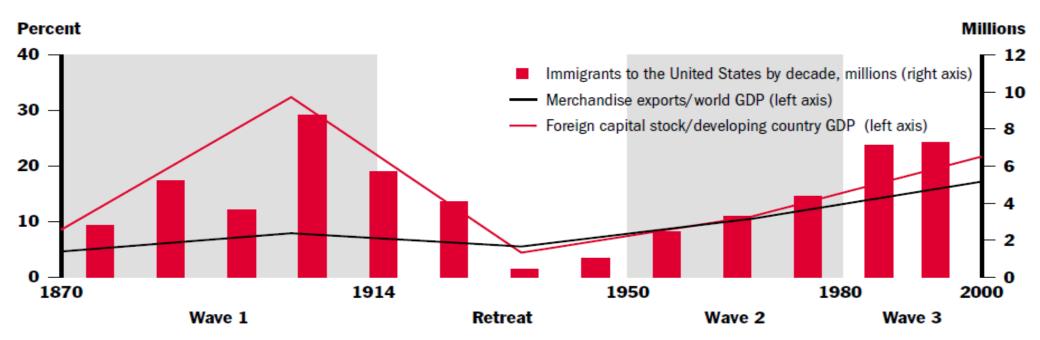
- Wave 1: 1870-1910 was the era of industrialization and mass migration to the "New World".
- Retreat: 1910-1945 saw a major retreat associated mostly with wars and the Great Depression.
- Wave 2: 1945-1980 trade and FDI grew rapidly among developed countries, mainly due to tariff cuts.
- Wave 3: 1980-now integration massively increased with more emerging countries linked to global financial markets and complex regional production networks.

Let's try to see some of these changes graphically.

Next slide: measures of globalization, 1870-2000. (Source: World Bank, *Globalization, Growth and Poverty*, 2002).

Following slide: estimates of total trade over GDP for the world, 1500-2011.

Figure 1.1 Three waves of globalization



Source: Foreign capital stock/developing country GDP: Maddison (2001), table 3.3; Merchandise exports/world GDP: Maddison (2001), table F-5; Migration: Immigration and Naturalization Service (1998).

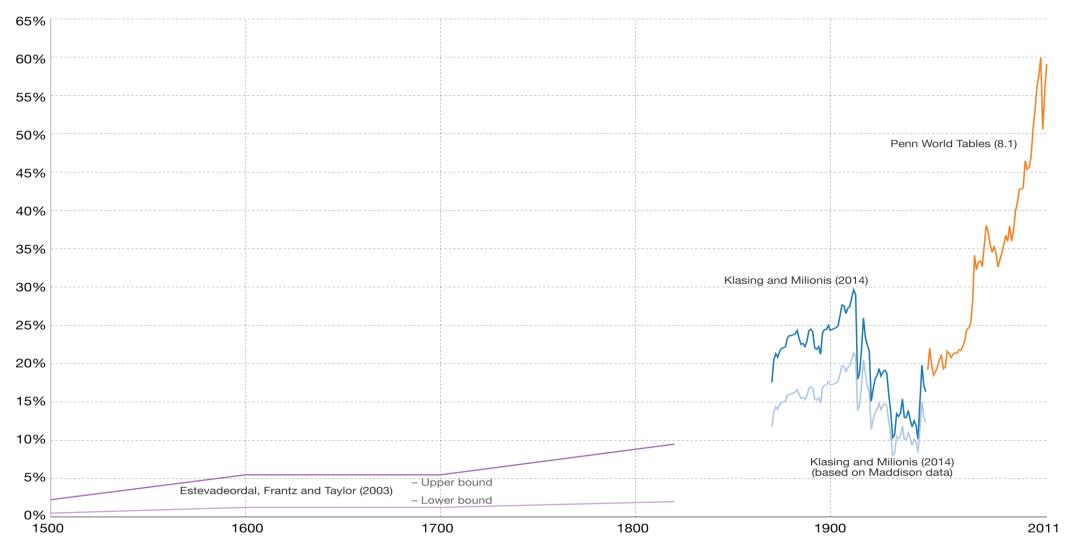
Table 3: Updated data: persons gaining US permanent residence (millions) Source: Homeland Security

| | 1870-79 | 1880-89 | 1890-99 | 1900-09 | 1910-19 | 1920-29 | 1930-39 | 1940-49 | 1950-59 | 1960-69 | 1970-79 | 1980-89 | 1990-99 | 2000-09 |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Perm Res | 2.742 | 5.249 | 3.694 | 8.202 | 6.347 | 4.295 | 0.699 | 0.857 | 2.499 | 3.214 | 4.248 | 6.244 | 9.775 | 9.24 |

Globalization over 5 centuries (1500-2011)



Shown is the sum of world exports and imports as a share of world GDP (%) The individual series are labeled with the source of the data



Data sources: Klasing and Milionis (2014), Estavadeordal, Frantz and Taylor (2003) and the Penn World Tables Version 8.1 The interactive data visualization is available at OurWorldinData.org. There you find the raw data and more visualizations on this topic.

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What explains these waves?

Hint 1: there weren't any major "waves" of globalization before about 1870.

Hint 2: globalization involves expanding trade, meaning that goods are produced in different places from where they are consumed.

Answers

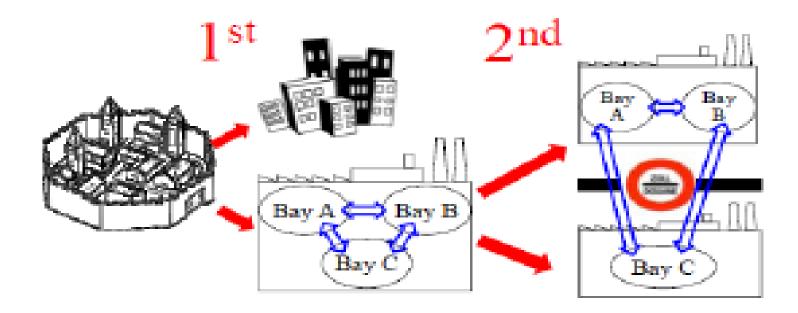
- Massive technological changes that make it efficient to produce goods at high volumes in specific places and ship them to others.
- Reduced costs of transporting goods (lower tariffs, better shipping infrastructure).
- (Regarding FDI): lower costs of managing production across borders and lower investment barriers.
 Lower costs arise mainly from great improvements in information and communication technologies (ICT).

So what happened? Two great technological "unbundlings" and one long period of cuts in trade and investment barriers.

Pre-1870

1870-1980: steamships, railroads, ports, containerization, air freight

1980-now: ICT revolution and outsourcing through supply chains



1915-1945: retreat from globalization: Wars, Great Depression, higher tariffs, limits on immigration

1950-now: tariff cuts, free trade areas, developing countries choose more open markets, China

Primary economic effects of globalization

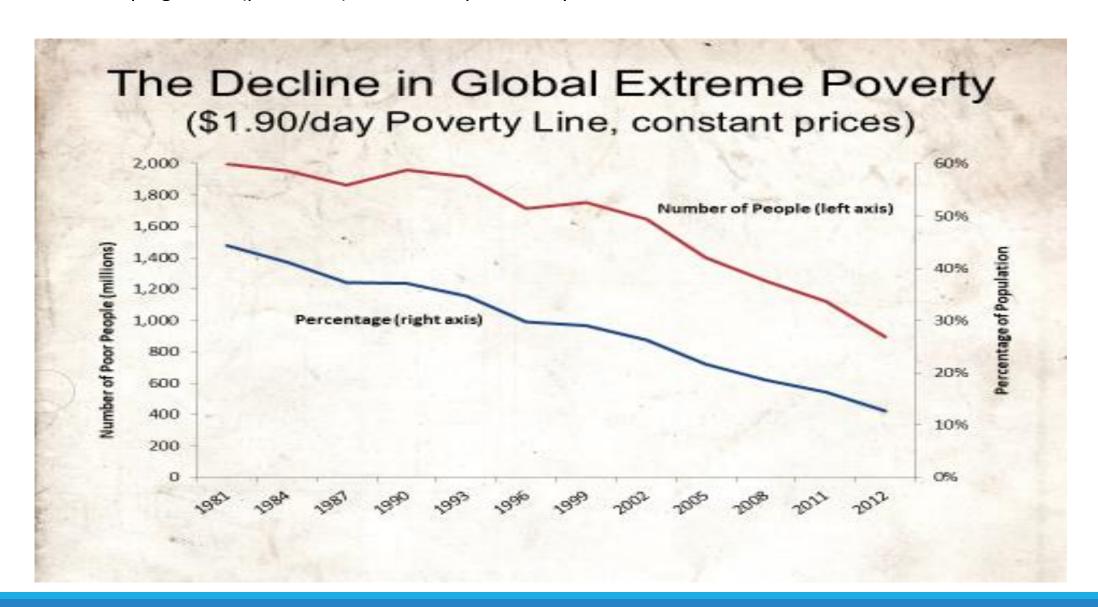
If globalization is the integration of markets, it must change prices. So there are gainers and losers.

Gains from greater trade and investment:

- Specialization efficiently allocates resources, raises productivity, and raises aggregate incomes and living standards.
- Greater variety of goods available and lower prices.
- More access to global technologies improves productivity.
- Larger market size and opportunities for exporters. Two examples:
- Vietnamese rice;
- Bangladeshi garment factories;

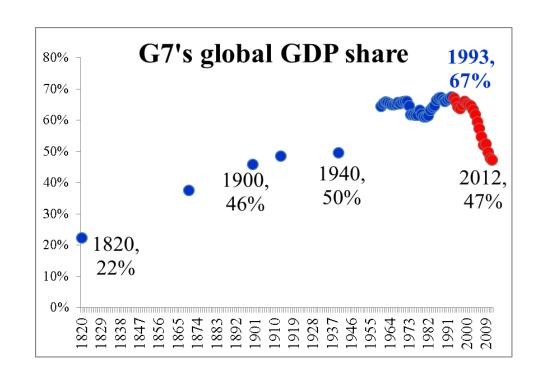
There are other gains we will study. But for now look at what the last 30+ years of globalization have achieved, at what cost.

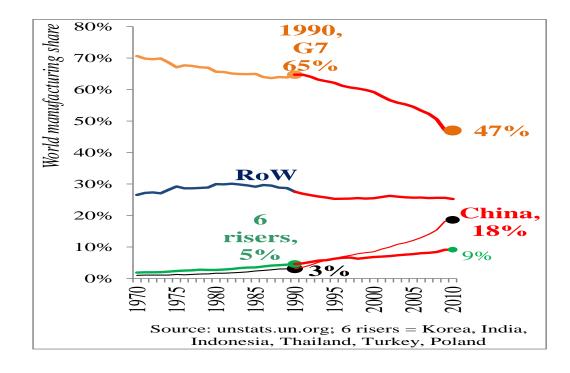
The developing world (parts of it) are far less poor today.



How?

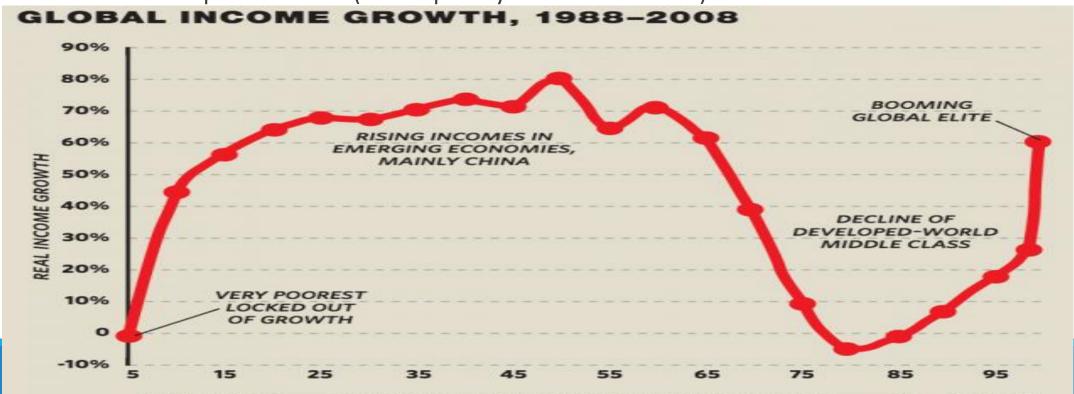
Major shifts in the distribution of global income and manufacturing production shares:





But this has generated real problems

- Income distribution effects and income inequality: in general, if the prices of the factors or goods you supply go down you lose.
- Who has lost? Low and middle-income workers and rural regions in developed countries. Consider the Elephant Curve" (developed by Branko Milanovic):



Other problems from globalization

- Expansion of trade (same for output growth) may put stresses on resource use and environment.
- Globalization can dilute local cultural preferences.
- Competition and global rules can pressure governments to change policies in ways that may be controversial. "Race to the bottom?"

Can this wave of globalization be reversed? What do you think?