



ECON 462/662  
International Trade

## INTRODUCTION TO INTERNATIONAL TRADE

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## Syllabus

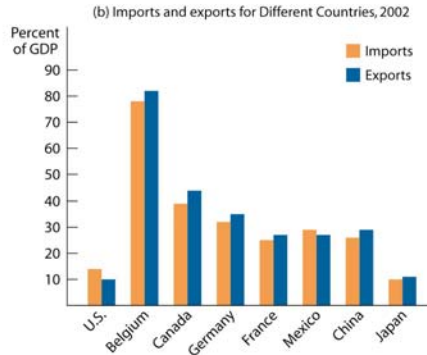
- Online syllabus, with lecture schedule and readings, homework assignments, old tests, links, et cetera.
- Difficult material, and lots of work:
  - Midterm (25%), Final (25%), four to five quizzes (20% total), weekly group homework with peer evaluations (30% total); Different for grad students.
- Group sign-up sheet.
- E-mail and phone list.
- Book: Feenstra & Taylor – paper vs. hard vs. online

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# The Growing Importance of International Trade

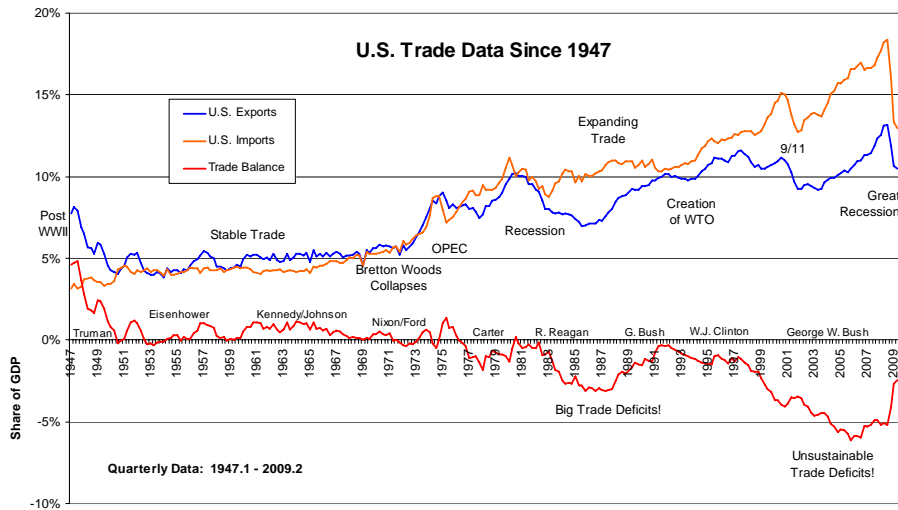


International Trade is increasingly important for the U.S.  
(but we run a trade deficit)



International Trade is much more important for smaller economies  
(but most of them run trade surpluses)

# A Longer Look at U.S. Trade Data



## Facts about Trade

- About a fourth of all goods and services produced in the world are exported to another country.
  - The world's GDP was about 37 Trillion USD (in official exchange rates) in 2005. In PPP, it was closer to \$75 trillion.
  - Total merchandise exports were about \$8.9 Trillion, and export of commercial services totaled \$2.1 Trillion.
  - Of the merchandise, 9% is agricultural, 14% is fuels or mining, and 74% is manufactures.
- The six largest economies, which together account for more than 3/5 of world output, are also the world's leading traders, accounting for over 2/5 of merchandise exports and imports.
  - But this tells us that, on average, smaller economies trade more as a share of their GDP, while larger economies trade more within their own borders.

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## Who Trades? Looking at 2005 Data

- Germany and the U.S. are the largest exporters.
- The U.S. is – by far – the largest single importer.
- The European Union currently accounts for:
  - 42% of all merchandise exports (2/3 of which is intra-EU, and 1/3 is trade with other countries)
  - 41% of all world imports.
- Asia accounts for 27% of merchandise exports, and 23% of imports.
- South America, Africa, the former USSR, and the Middle East combined account for only 13% of exports and 10% of imports.
- In commercial services, the U.S.A. is by far the largest exporter and runs a substantial surplus.

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## Share of World Exports

Origin	North	South & Central	Europe	Russia	Africa	Middle	Asia	World
	America	America		and CIS		East		
North America	<b>8.1</b>	0.9	2.3	0.1	0.2	0.3	2.7	14.5
South & Central America	1.2	0.8	0.7	0.1	0.1	0.1	0.5	3.5
Europe	<b>3.9</b>	0.6	<b>31.5</b>	1.1	1.1	1.2	3.3	43.0
Russia & CIS	0.2	0.1	1.8	0.6	0.0	0.1	0.4	3.3
Africa	0.6	0.1	1.3	0.0	0.3	0.1	0.5	2.9
Middle East	0.7	0.0	0.9	0.0	0.2	0.5	2.8	5.3
Asia	<b>6.0</b>	0.5	<b>4.9</b>	0.4	0.5	0.9	<b>14.0</b>	27.4
World	20.6	3.0	43.3	2.2	2.4	3.2	24.0	100.0

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## Major World Exporters and Importers

SHARE of Leading exporters and importers in world merchandise trade (excluding intra-EU (25) trade), 2005

Exporters	Share	Importers	Share
1 Extra-EU (25) exports	17.1	1 <b>United States</b>	21.4
2 <b>United States</b>	11.7	2 Extra-EU (25) imports	18.0
3 China	9.8	3 China	8.1
4 Japan	7.7	4 Japan	6.3
5 Canada	4.6	5 Canada	3.9
6 Hong Kong, China	3.8	6 Hong Kong, China	3.7
7 South Korea	3.7	7 South Korea	3.2
8 Russian Federation	3.1	8 Mexico	2.9
9 Singapore	3.0	9 Singapore	2.5
10 Mexico	2.8	10 Taiwan	2.3
11 Taiwan	2.5	11 India	1.7
12 Saudi Arabia	2.3	12 Switzerland	1.6

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- The U.S.A. trades most with NAFTA, Asia as a region.
- The U.S.A.'s largest export markets are, in order, Canada, the EU, Mexico, Japan, South Korea, Taipei, Singapore, and Hong Kong.
- We import most from, in order, the EU, Canada, China, Mexico, Japan, Korea, Taipei, Malaysia, and Saudi Arabia.

U.S. Merchandise Trade		
Region: Destination / Origin	Share Of U.S. Exports	Share of U.S. Imports
<b>Canada &amp; Mexico</b>	37%	31%
<b>Asia:</b>	28%	34%
Japan	7%	9%
China	4%	11%
Other Asia	17%	14%
<b>Europe</b>	23%	22%
<b>Rest of World:</b>	12%	14%
Middle East	3%	4%
Latin America	7%	6%
Africa	2%	3%
<u>CIS (former USSR)</u>	<u>1%</u>	<u>2%</u>
<b>Total</b>	<b>100%</b>	<b>100%</b>

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World Trade has had two periods of growth:

- The first was in the late 1800s, and this expansion ended with two world wars.
- The second began after World War II, and accelerated after the fall of the USSR.

From 1950 to 2003, world exports rose 117 times, an average annual growth rate of 9.4%.

Is there a connection between international trade and world growth?

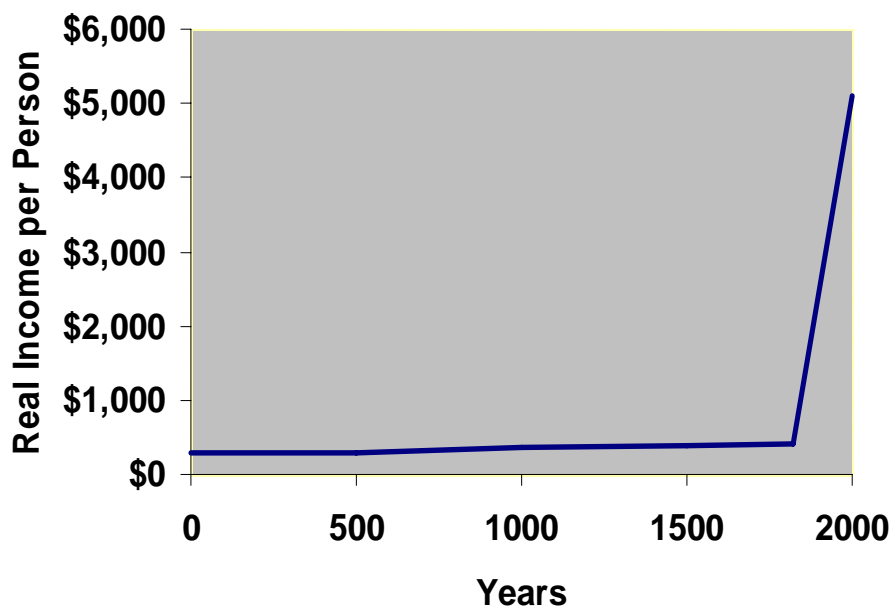
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## World Growth:

Economic growth of the past fifty years is unprecedented.

- For millennia, per-capita income barely grew, and population grew very slowly.
- After 1750, beginning in the Netherlands and then the United Kingdom, sustained growth began, at rates of about 1% per-capita, and 2% overall.
- After 1950, average per capita growth rates doubled, as did population growth rates.
  - Since 1950, world GDP has risen by a factor of 7, at an average annual rate of 3.8%.
  - This is historically fast, though not as fast as international trade.

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## **The connection between growth and trade:**

- There are many examples of once-poor countries that have adopted policies promoting international trade, and have subsequently grown at much faster rates. Many of these are in Asia: Japan, South Korea, Taipei (Taiwan), Singapore were first, then Malaysia and Thailand, and now China, Brazil, India, Poland, et cetera.
- As Kofi Annan and other have noted, the problem for most poor third-world countries is not that the international trading system is making them poorer. It is that they are not part of the system that is making other countries richer.

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## **The Literature**

- It is one thing to have correlation between trade and income, both historically and by country, but still another to demonstrate causality.
- According to Rodriguez & Rodrik (2001), trade and openness are correlated with geography and other policies that affect growth, such as government interference (taxes, regulation, corruption), viable property rights, education, and investment.

## Three Possibilities for the Positive Correlation between Income and Trade

1. Causality: trade causes income to be higher, and/or growth to be faster.
2. Reverse Causality: higher income causes trade to be higher.
3. Other Causal Factors: other factors cause both more trade and higher income growth.

## Which causes which?

Frankel & Romer (1999) argue that there are four observable links for the third possibility – that other factors cause both:

- a) Countries that adopt free trade policies are more likely to adopt other policies that raise income;
- b) Countries that are wealthy for other reasons than trade are more likely to have better infrastructure and transportation networks;
- c) Countries that are poor for other reasons tend to have more difficulty collecting taxes, and must rely more on tariffs for government revenue; and
- d) Countries that are wealthy for other reasons tend to demand lighter weight processed products that are more economic to ship (i.e., the value/weight ratio is higher, so shipping costs are relatively less).

## Which causes which?

- Frankel & Romer try to control for these effects, and estimate the remaining effect.
- They find that a 1% increase in the international trade ratio  $[(\text{Exports} + \text{Imports}) / \text{GDP}]$  causes an increase in income per capita by 0.5%.
- *Internal* trade also raises income.
- Trade leads to more accumulation of physical and human capital, and more productive use of capital.

## More on the Literature

Rodriguez & Rodrik (2001) cast doubt on the Frankel & Romer results, along with those of several other studies.

Though they take pains not to say that protectionism is good for growth, they argue that it has yet to be proved conclusively that more international trade significantly causes higher income.

There are just too many other things going on to be sure.

## More on the Trade Literature

Lewer & Van den Berg (2003) take a different approach, a “meta-analysis” examining hundreds of estimations from many dozens of other studies. Instead of focusing on how trade affects income, they look at the dynamic effects of how trade growth affects economic growth.

- The theory is that trade improves the incentive to increase productivity, to invest, and to improve your skills, all of which take time but have long-term effects. They find that the many different studies have predominantly positive and statistically significant results.
- The average estimated effect is that 1% higher growth in trade leads to a 0.25% increase in economic growth.
- Thus, a typical East Asian country with exports and imports growing at 12% per year will grow 2.5% more per year than a typical country in Sub-Saharan Africa where trade grows by 2% per year.
- A growth rate of 2.5% means a doubling in less than 30 years.

## There is Currently Much Opposition to Free Trade

- Imports are seen as a spending “leakage,” so if we spend a dollar on foreign goods, it means fewer jobs for American workers.
- In a recession, there is great pressure to make it harder to trade.
- People forget about the linkage to exports, which create jobs for Americans.
- People sometimes correctly link trade deficits to foreign borrowing, but get the causality reversed.
- Most people really do not understand why economists think international trade is more efficient.

## Why do people oppose trade?

### Here is some Theory:

- 1) Under perfect market conditions (perfect competition, perfect information, and complete markets, unfettered markets would be most efficient.
- 2) However, markets aren't perfect. Market failures (lack of perfect competition, externalities) may lead to circumstances in which trade reduces efficiency.
- 3) Even under perfect conditions, any change (like opening up of international markets) has distributional effects, making some worse off even as it makes others better off.  
=> Sometimes these effects can improve income equality, but some times it worsens inequality.

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## Why do people oppose trade?

- 4) Even if international trade makes us economically better off, there may be political reasons to be concerned.  
=> Large multinationals may be able to affect government policies in their favor, and large countries may pressure other countries to accept trade deals that are not in their best interests.
- 5) A more integrated world economy can lead to reduced economic security, especially for those in wealthier countries.
- 6) Some oppose international trade when it is really the current stage of capitalism in general that they oppose.  
=> For example, large and powerful corporations that are able to influence government policy (e.g., through campaign contributions) would be a problem even if all international trade were banned.

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## Why else?

- 6) Many people don't understand the basic idea of comparative advantage, in which both sides benefit from trade even if one side is better at doing everything. It makes more sense to many people that if one country is getting rich and another is poor, then the rich country must be getting rich at the poor country's expense. Because of exchange rates and other factors, the interconnections of international trade are much harder to understand than those of domestic trade. Thus, most people find the arguments of international economists hard to understand.
- 7) Finally, many support trade in principle but oppose specific trade agreements in particular, because they realize that there is a great deal of hypocrisy and self-dealing in them. => Trade agreements can sometimes be a "Trojan Horse" to force unpopular policies on governments.

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## What comes next?

### **International Trade Theory - 7 weeks**

- A. The Ricardian Model
- B. The Neoclassical Models:
  1. The Heckscher-Ohlin Model
  2. The Specific Factors Model
  3. The Leontief Paradox, and Other Trade Theories
  4. The General Trade Model
- C. Imperfect Competition Models

### **Trade and International Investment - 2 weeks**

- A. International Factor Movements
- B. Exchange Rates, Investment, and the Balance of Payments

### **Commercial Policy, and the Political Economy of Trade Policy - 5 weeks**

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