

# Econ 1115: Principles of Macroeconomics

## Lecture 22: Financial crisis and International Trade

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- Credit cards
- Credit scores - Vantage or Fico (range from 300 - 850)
- Good credit history is vital - when you buy a car this can mean savings of over several thousand dollars in lower interest payments.

# Outline

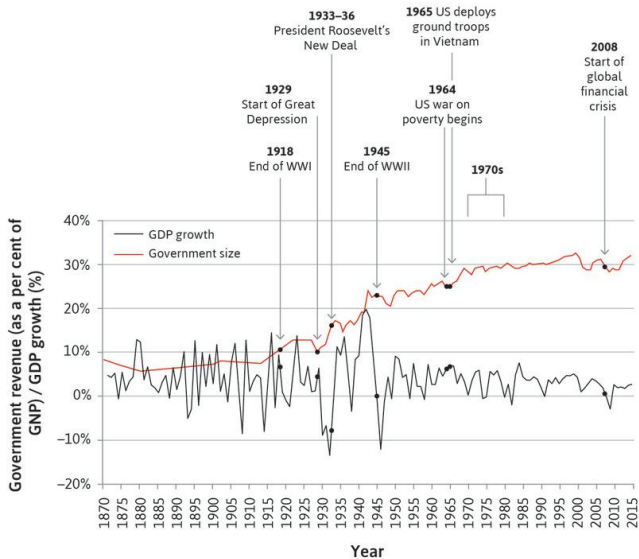
- 1 The Great Recession
- 2 International Trade
- 3 Barriers to Trade

## A brief history of US recessions

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- However, the Keynesian view revolutionized government's role in stabilizing the economy and reducing the frequency and the effects of a recession.



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- But what causes these shifts?
- Keynes called it "animal spirits", but that just means it is due to a loss in confidence - pessimism among households and firms
- Occasionally, they are the result of shifts in SRAS (the oil shocks of the 70s and 80s)

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Conditions were far worse during the Great Depression.

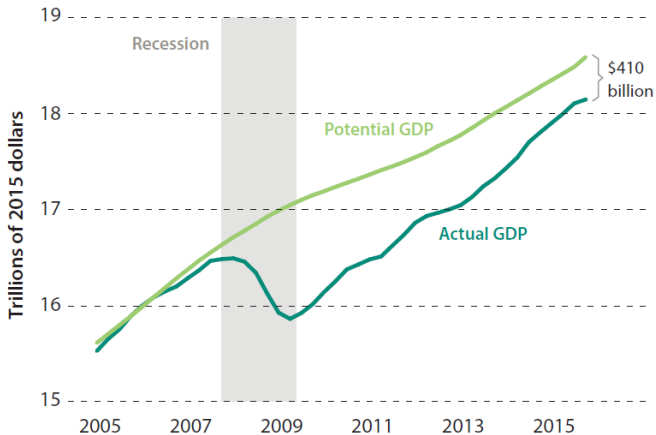
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Employment fell 27 percent from 1929 to 1933 (compared with 6.7 percent), output fell 36 percent (7.2 percent) and consumption fell 23 percent (5.4 percent).



source: Brookings Institute

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- The bubble in the housing market burst
- Lax financial regulations resulted in banks holding very risky mortgage-backed securities
- Investment banks, shadow banking, off-balance sheet activities, and the mortgage-backed assets

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- The ratio of household debt to disposable personal income rose from 77% in 1990 to 134% by the end of 2008
- US home ownership increased from 64% to 69%

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\$ 450K 2005  
( \$400K )  
\$ 390K 2006

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- These sub-prime mortgages started defaulting, foreclosure rates increased, and house prices started to go down
- This resulted in even more defaults
- Commercial and investment banks who owned mortgage-backed securities were left holding assets which were significantly riskier than they had estimated

## What happened next

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- Household wealth collapsed, consumption and investment fell significantly

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- CBO estimates that it helped increase output

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## Could anything have prevented it?

### The benefits of hindsight

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### The benefits of hindsight

- Better oversight and regulation of shadow banking and other financial institutions might have stopped the housing bubble affecting the financial sector.
- Better calculation of risk and better lending practices
- Govt. policies that supported risky low-income households from buying houses when the economy was strong also fueled the boom in house prices

## Timeline of the Financial Crisis

- Early 2007: Freddie Mac faces difficulties, Moody and S&P downgrade numerous bonds and securities
- Late 2007: Bank run on Northern Rock (UK), Several large commercial and investment banks in the US face capital and liquidity issues
- Late 2007: FFR at 4.25% now, and term auctions introduced
- Early 2008: FFR set at 3.5% now. \$50 term auctions and another \$200 billion QE
- Mid 2008: JPMorgan Chase buy out Bear Sterns, BoA purchases CFC, both Freddie Mac and Fannie Mae receive lending from the Fed, before the government takes over soon.

## Timeline of the Financial Crisis

- Sept 2008: BoA buys out Merrill Lynch, Lehman Brothers declare bankruptcy. AIG barely survives after securing a large \$85 billion loan from the Fed. SEC bans short selling of financial stocks. Fed increases term auctions to \$150 billion.
- Oct 2008: Congress rejects first attempt by the Treasury department to bail out banks. Fed announces it will pay interest on bank reserves. President Bush sign a \$700 billion TARP program of which \$250 billion is reserved for banks.
- FDIC increases depositor insurance to \$250,000. PNC buys out National City and forms 5th largest bank in the US.
- Nov 2008: AMEX becomes a bank. Government converts loan to equity in AIG.

## Timeline of the Financial Crisis

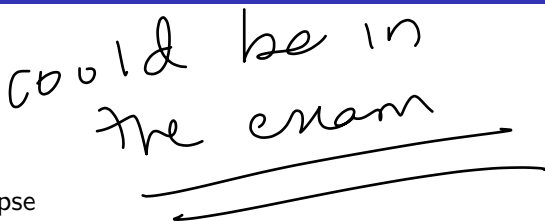
- Dec 2008: GM, Chrysler and other insurance companies request TARP funding. Other smaller banks receive federal government loans and equity injections.
- Jan 2009: Fed starts buying mortgage backed securities with QE.
- Mid 2009: Over \$200 billion in more TARP funds. Half of the largest 19 banks fail stress tests.
- Early 2010: Banks start buying back equity from the Treasury department signaling the end of TARP. Government makes profits.

## Financial regulations and Dodd-Frank Act

- Financial Stability Oversight Council established to monitor major financial firms who are "too big to fail". Ability to dismantle, breakup, restructure and impose more reserve and capital requirements.
- The Consumer Financial Protection Bureau (CFPB) was established to ensure that bad lending practices were stopped (basically neutered under the current administration)
- Volcker rule: The separation of commercial and investment banking a return to old Glass-Steagall norms
- Other regulations on derivatives, credit swaps, off balance sheet items; whistleblower protection; annual stress tests

## Review of the Financial Crisis

could be in  
the exam

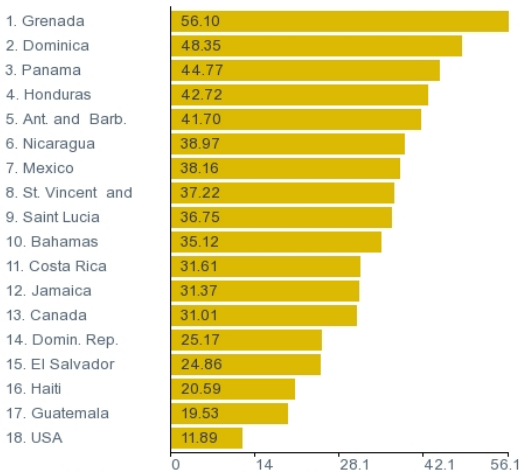


- 1 Housing bubble bursts
- 2 Investment banks collapse
- 3 Pessimism about financial institutions
- 4 Borrowers become stingy with credit, consumers also pessimistic
- 5 Sharp decline in aggregate spending and recession

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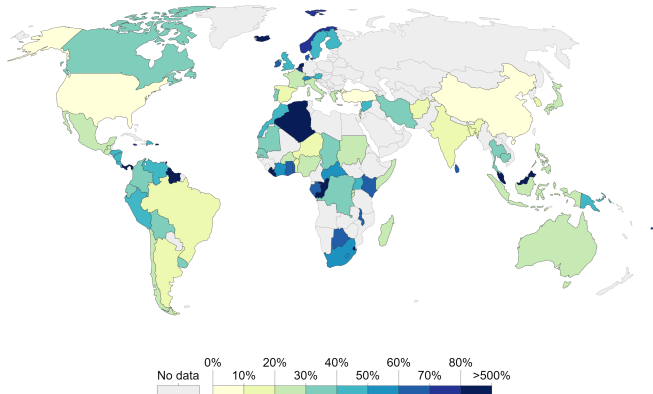
Exports of goods and services as percent of GDP, 2016  
(percent, Source: The World Bank)



Source: TheGlobalEconomy.com, The World Bank

## Trade as share of GDP, 1960

The map shows trade openness – the sum of exports and imports of goods and services measured as a share of gross domestic product.

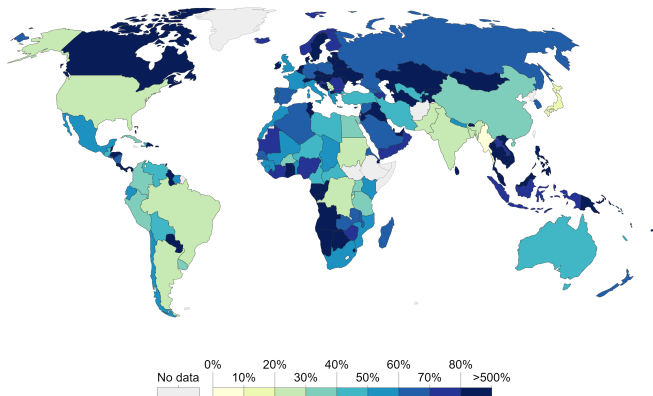


Source: World Bank – WDI

[OurWorldInData.org/international-trade](http://OurWorldInData.org/international-trade) • CC BY-SA

## Trade as share of GDP, 2000

The map shows trade openness – the sum of exports and imports of goods and services measured as a share of gross domestic product.

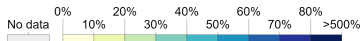
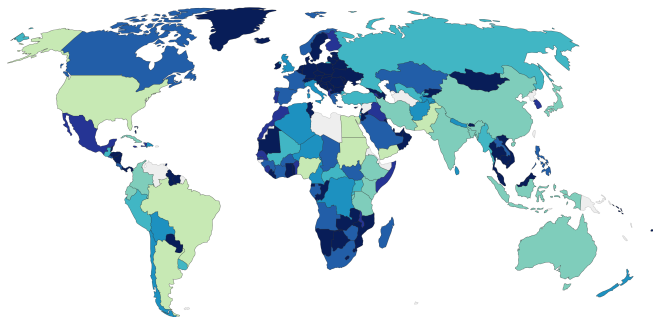


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## Review: Ricardian Model of Comparative Advantage

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- They then trade and both benefit

## Ricardian model

- 2 countries and 2 goods
- Assume constant opportunity cost PPC
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- Trade is beneficial across a range of prices

## Ricardian model

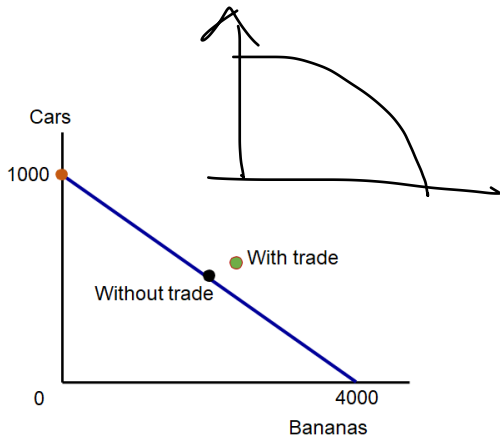
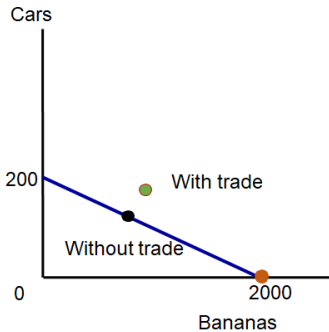
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1000 cars, 2000 bananas

	Cars (thousands)	Bananas (tons)
Mexico	1000/4000	4000/4000 = 0.25/banana
Jamaica	200/2000	2000/2000

0.1 car for banana

Trade allows countries to be on a point beyond their own PPC



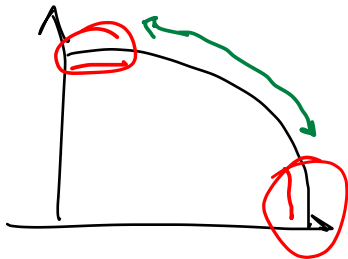
## Terms of trade

Terms of trade: Ratio of export prices to import prices

A range of prices between the two opportunity costs in which both countries benefit.

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- High world prices

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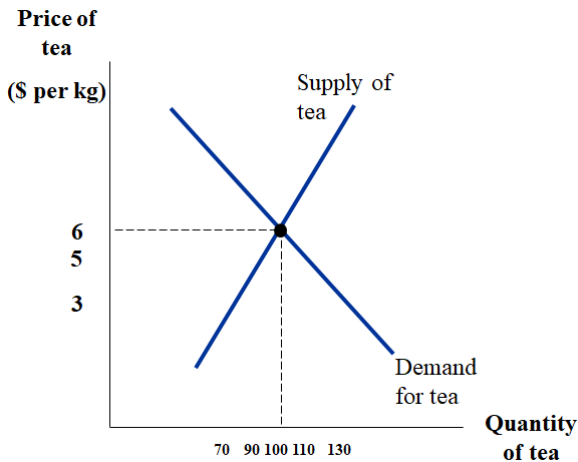
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Let's first consider the market for tea in a country that does not participate in any international trade.



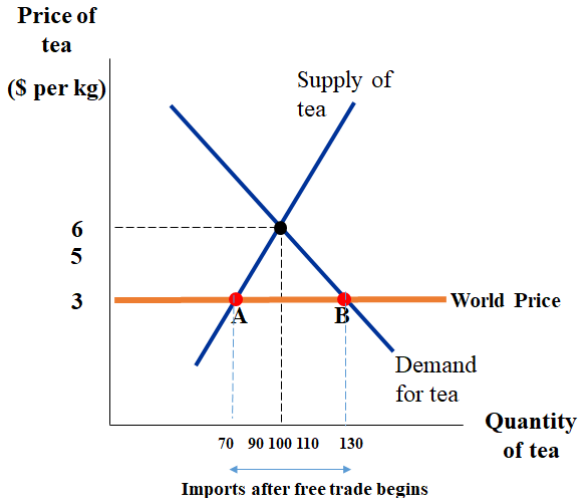
## What are the functions of the WTO?

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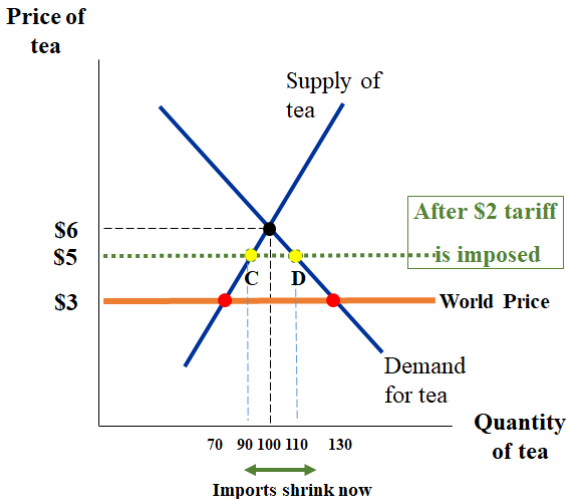
- 1 To set and enforce rules for international trade
- 2 To provide a forum for negotiating and monitoring further trade liberalization
- 3 To resolve trade disputes
- 4 To increase the transparency of decision-making processes
- 5 To cooperate with other major international economic institutions involved in global economic management
- 6 To help developing countries benefit fully from the global trading system.

Now, the country starts trading with the outside world.

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Assumption: Small country, free trade.



To protect the domestic tea industry, the country imposes a tariff of \$2 on the tea.



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- Government policies including barriers to trade