

# **Economics 1: Introduction to Economics**

J. Bradford DeLong <[delong@econ.berkeley.edu](mailto:delong@econ.berkeley.edu)>

# Review

April 25, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# The Review

- The calculations you will need to know how to do—and what the symbols in them mean
- And we are going to go backward in time
  1. Macroeconomics
  2. Economic growth and national income accounting
  3. Political economy
  4. Microeconomics
  5. History and moral philosophy

# Macroeconomics: To Your i>Clickers V

- Consider the equation:
  - $r = i + \tau + \rho - \pi$
- summarizing the relationship between the long-term risky real interest rate that matters for business investment spending ( $r$ ), the short term safe nominal interest rate that the Federal Reserve controls ( $i$ ), the *term premium* financiers demand in order to hold long-term rather than short-term debt ( $\tau$ ), the *risk premium* financiers demand in order to hold risky rather than safe government debt ( $\rho$ ), and the inflation rate ( $\pi$ ).
- In this equation:
  - A. the terms  $i$  and  $\tau$  tend to move in the same direction, with movements in  $i$  dominating
  - B. the terms  $\tau$  and  $\pi$  tend to move in the same direction by the same amount, thus neutralizing each other
  - C. the terms  $i$  and  $\tau$  tend to move in opposite directions, with movements in  $\tau$  dominating
  - D. the terms  $i$  and  $\tau$  tend to move in opposite directions, with the movements in  $i$  dominating.
  - E. the terms  $\tau$  and  $\rho$  tend to move in the same direction, reinforcing each other

# Macroeconomics: To Your i>Clickers V

- Consider the equation:
  - $r = i + \tau + \rho - \pi$
- summarizing the relationship between the long-term risky real interest rate that matters for business investment spending ( $r$ ), the short term safe nominal interest rate that the Federal Reserve controls ( $i$ ), the *term premium* financiers demand in order to hold long-term rather than short-term debt ( $\tau$ ), the *risk premium* financiers demand in order to hold risky rather than safe government debt ( $\rho$ ), and the inflation rate ( $\pi$ ).
- In this equation:
  - A. the terms  $i$  and  $\tau$  tend to move in the same direction, with movements in  $i$  dominating
  - B. the terms  $\tau$  and  $\pi$  tend to move in the same direction by the same amount, thus neutralizing each other
  - C. the terms  $i$  and  $\tau$  tend to move in opposite directions, with movements in  $\tau$  dominating
  - D. the terms  $i$  and  $\tau$  tend to move in opposite directions, with the movements in  $i$  dominating <<**
  - E. the terms  $\tau$  and  $\rho$  tend to move in the same direction, reinforcing each other

# Our Keynesian Income-Expenditure Model

- $Y = \mu[c_0 + I_0 + NX] + \mu G - (\mu I_r)r$ 
  - $\mu$  — multiplier =  $1/(1 - c_y)$
  - $+ \mu[c_0 + I_0 + NX]$  — private sector-driven spending flows
  - $+ \mu G$  — government purchases, fiscal policy
  - $- (\mu I_r)r$  — interest-sensitive investment, monetary policy

# Our Keynesian Income-Expenditure Model II

- $Y = \mu[c_0 + I_0 + NX] + \mu G - (\mu I_r)r$ 
  - $\mu = 1/(1 - c_y)$  — Changes in consumption spending reinforce changes in other kinds of spending
  - $C = c_0 - c_y$  — Why? Because consumption rises (falls) when income rises (falls).
  - $I = I_0 - I_r r$  — Investment spending is high when the interest rate is low
  - $r = i + \tau + \rho - \pi$  — the Federal Reserve influences but does not control the interest rate
  - $Y = E = C + I + G + Y$  — the components of spending and the equality of spending and income

# Our Keynesian Income-Expenditure Model III

- $Y = \mu[c_0 + I_0 + NX] + \mu G - (\mu I_r)r$ 
  - $\mu = 1/(1 - c_y) : C = c_0 - c_y Y : I = I_0 - I_r r : r = i + \tau + \rho - \pi$
- Basic rule-of-thumb parameter values:
  - $\mu = 3$ —a multiplier of 3, corresponding to an mpc  $c_y = 2/3$
  - $Y = \$18T$ —annual GDP, with a full-employment value of  $Y$  of  $\$20T$  (if you are me) and of about  $\$18T$  (if you are Janet Yellen)
  - $I_r = \$0.2T$ —a 1%-point decline in the real interest rate  $r$  should boost annual business investment spending by about  $\$0.2T$

# **Administrivia**

April 25, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# You Still Need to Register Your i>Clickers If Your i>Clicker IDs Are

- 36a97ce3
- 42d370e1
- 4319a7fd
- 45260A69
- 46111047
- 417fa57b
  
- Please do so...
  
- Or if your scores appear wrong:
  - In my 55 years I have learned:  
do not trust databases



# **Objectives of Macroeconomic Policy: The Other Side**

April 20, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# **This “Other Side” Would Be Beside the Point, Save That It Has Managed to Capture...**

- Germany...
- The British Conservative Party...
- The Bank for International Settlements...
- A large part of Wall Street...
- The entire Republican Party
- And (at least some of the time) Barack Obama

# This “Other Side” Would Be Beside the Point, Save That It Has Managed to Capture... II

- (at least some of the time) Barack Obama: 2010 SOTU:
  - Our efforts to prevent a second depression have added another \$1 trillion to our national debt. That, too, is a fact.... So tonight, I'm proposing specific steps to pay for the trillion dollars that it took to rescue the economy last year. Starting in 2011, we are prepared to freeze government spending for three years.... I've called for a bipartisan fiscal commission, modeled on a proposal by Republican Judd Gregg and Democrat Kent Conrad. This can't be one of those Washington gimmicks.... The commission will have to provide a specific set of solutions by a certain deadline.... I refuse to pass this problem on to another generation of Americans...
- In fact, just this morning: Michael Heise of Allianz in Project Syndicate...
- So it is not just a curiosity of the history of economic thought—which is what we used to teach it as...

# What Is the “Other Side”?

- Basically, it is:
  - “The market giveth; the market taketh away. Blessed be the name of the market...”
- It’s the opinion that Jean-Baptiste Say abandoned in 1829—that there were no “general gluts” in which there was too little demand, but only sectors in which there was deficient demand balanced by others in which there was strong excess demand
- It’s the position that the young John Stuart Mill refuted back in 1829, by pointing out that the strong excess demand could be a demand for money—that a *monetary* economy acts very differently...
- It’s a mistake

# The Other Side: Austrian Josef Schumpeter (in the middle of the Great Depression!)

- The chief difficulty... lies in the fact that depressions are not simply evils... but... something which has to be done, namely, adjustment to economic change. Most of what would be effective in remedying a depression would be equally effective in preventing this adjustment. This is especially true of inflation which would if pushed far enough, undoubtedly turn depression into the sham prosperity so familiar from European postwar experience but which, if it be carried to that point, would in the end lead to a collapse worse than the one it was called in to remedy...

# The Other Side: Austrian Josef Schumpeter (in the middle of the Great Depression!) II

- In *all* cases, not only in the two which we have analyzed, recovery came of itself There is certainly this much of truth in the talk about the recuperative powers of our industrial system. But this is not all: our analysis leads us to believe that recovery is sound only if it does come of itself. For any revival which is merely due to artificial stimulus leaves part of the work of depressions undone and adds, to an undigested remnant of maladjustment, new maladjustment of its own which has to be liquidated in turn, thus threatening business with another crisis ahead...

# The Other Side: Austrian Josef Schumpeter (in the middle of the Great Depression!) III

- Particularly, our story provides a *presumption* against remedial measures which work through money and credit. For the trouble is fundamentally *not* with money and credit, and policies of this class are particularly apt to keep up, and add to, maladjustment, and to produce additional trouble in the future.... There is no single and simple remedy. The numerous problems which present themselves must be dealt with individually and patiently. The kind of activity which is clamored for in such situations is likely to make matters worse...

# The Other Side: Andrew Mellon (in the middle of the Great Depression!)

- Herbert Hoover: The “leave it alone liquidationists” headed by [my] Secretary of the Treasury Mellon, who felt that government must keep its hands off and let the slump liquidate itself. Mr. Mellon had only one formula: “Liquidate labor, liquidate stocks, liquidate the farmers, liquidate real estate.” He insisted that, when the people get an inflation brainstorm, the only way to get it out of their blood is to let it collapse. He held that even a panic was not altogether a bad thing. He said: “It will purge the rottenness out of the system. High costs of living and high living will come down. People will work harder, live a more moral life. Values will be adjusted, and enterprising people will pick up the wrecks from less competent people”...

# The Other Side: John Cochrane (in 2009!)

- If the government borrows a dollar from you, that is a dollar that you do not spend, or that you do not lend to a company to spend on new investment. Every dollar of increased government spending must correspond to one less dollar of private spending. Jobs created by stimulus spending are offset by jobs lost from the decline in private spending. We can build roads instead of factories, but fiscal stimulus can't help us to build more of both. This is just accounting, and does not need a complex argument about "crowding out"...

# The Other Side: John Cochrane (in 2008!) II

- "We should have a recession," Cochrane said [in his keynote address to the 2008 CRSP Forum] in November, speaking to students and investors in a conference room that looks out on Lake Michigan. "People who spend their lives pounding nails in Nevada need something else to do..."
- The baseline of an economy working well will include... some fluctuations in unemployment. When we discover we made too many houses in Nevada some people are going to have to move to different jobs, and it is going to take them a while of looking to find the right job for them. There will be some unemployment. Not as much as we have, surely, but some.... Some component of unemployment is people searching for better fits after shifts that have to happen.... That is a big and enduring contribution... [that] does come out of a perfectly functioning economy.... Is ten per cent the right number? Now we are talking opinions.... But what we need is models, data, predictions... not my opinion versus your opinion...

# The Other Side: Gene Fama (in 2011)

- Sorry, but I'm not familiar with [Hyman] Minsky's work...
- Haven't seen it [Paul Krugman's article]. I pay no attention to him...
- Government bailouts and stimulus plans seem attractive when there are idle resources—unemployment. Unfortunately, bailouts and stimulus plans are not a cure. The problem is simple: bailouts and stimulus plans are funded by issuing more government debt. (The money must come from somewhere!) The added debt absorbs savings that would otherwise go to private investment. In the end, despite the existence of idle resources, bailouts and stimulus plans do not add to current resources in use. They just move resources from one use to another...

# The Other Side: Robert Lucas (in 2009!)

- Christina Romer--here's what I think happened. It's her first day on the job and somebody says, you've got to come up with a solution to this--in defense of this fiscal stimulus, which no one told her what it was going to be, and have it by Monday morning.... [I]t's a very naked rationalization for policies that were already, you know, decided on for other reasons.... If we do build the bridge by taking tax money away from somebody else, and using that to pay the bridge builder--the guys who work on the bridge -- then it's just a wash... there's nothing to apply a multiplier to. (Laughs.) You apply a multiplier to the bridge builders, then you've got to apply the same multiplier with a minus sign to the people you taxed to build the bridge. And then taxing them later isn't going to help, we know that...

# The Other Side: Friedrich von Hayek (in the middle of the Great Depression!)

- And, if we pass from the moment of actual crisis to the situation in the following depression, it is still more difficult to see what lasting good effects can come from credit expansion. The thing which is needed to secure healthy conditions is the most speedy and complete adaptation possible of the structure of production to the proportion between the demand for consumers' goods and the demand for producers' goods as determined by voluntary saving and spending. If the proportion as determined by the voluntary decisions of individuals is distorted by the creation of artificial demand, it must mean that part of the available resources is again led into a wrong direction and a definite and lasting adjustment is again postponed. And, even if the absorption of the unemployed resources were to be quickened in this way, it would only mean that the seed would already be sown for new disturbances and new crises. The only way permanently to "mobilize" all available resources is, therefore, not to use artificial stimulants—whether during a crisis or thereafter—but to leave it to time to effect a permanent cure by the slow process of adapting the structure of production to the means available for capital purposes. (10) And so, at the end of our analysis, we arrive at results which only confirm the old truth that we may perhaps prevent a crisis by checking expansion in time, but that we can do nothing to get out of it before its natural end, once it has come...

# Scary Thing Is That the Last Three All Got the Nobel Prize...

- Argument that they got the Nobel Prize for other things than their underwhelming views on business cycles...
  - Hayek for truly extraordinary insightful work on the market system as an information aggregation and dissemination mechanism (Uncle Milton: “Hayek was a great economist... but his contributions were not in business-cycle analysis)
  - Fama for leading-edge contributions to modern finance theory (but I have never been convinced that Fama understands the difference between a statistical test that fails to reject a hypothesis because the test has no power and one that fails to reject because the hypothesis tested is a good approximation to reality)
  - Lucas for contributions to how to solve models in which expectations are self-consistent—i.e., fit the model (but if you need Robert Lucas to tell you what the equilibrium in the model is, and you need to know what the equilibrium is in order to have expectations consistent with the model, how are the people out there in the economy supposed to learn what Robert Lucas thinks their expectations are?)
- Nevertheless: we have a serious problem as a discipline...
- And not just in macroeconomics

# Milton Friedman on the “Austrians”

- Paul Krugman: “[Milton] Friedman described the ‘London School (really Austrian) view’:
- ““that the depression was an inevitable result of the prior boom, that it was deepened by the attempts to prevent prices and wages from falling and firms from going bankrupt, that the monetary authorities had brought on the depression by inflationary policies before the crash and had prolonged it by ‘easy money’ policies thereafter; that the only sound policy was to let the depression run its course, bring down money costs, and eliminate weak and unsound firms...
- “and dubbed this view an ‘atrophied and rigid caricature’ of the quantity theory. [His version of the] Chicago School, he claimed, never believed in such nonsense...”

# **Introduction to International Economics**

April 25, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# U.S. International Trade

- Covered in FBAH ch 26
- But I find the FBAH discussion confusing
- I say: focus on four major patterns:
  - Globalization
  - Trade deficit
  - Manufacturing imports from the Global South
  - The value of the dollar
- I say: focus on five key processes:
  - Redistributing global employment in depressions
  - Buying risk insurance from the U.S.
  - The U.S. consumption/investment/lend abroad decision
  - Specialization and the division of labor with the Global North
  - Trading resource- and tech-intensive products for the raw resources and low-wage manufacturers of the Global South

## CHAPTER 26

### Exchange Rates, International Trade, and Capital Flows



#### WHAT DETERMINES EXCHANGE RATES IN THE SHORT RUN AND LONG RUN?

**T**wo Americans visiting London were contemplating over their problem understanding English currency. "Pounds, shillings, pence, threepence, bob, and quid, it's driving me crazy," said the first American. "This morning it took me 20 minutes to figure out how much to pay the taxi driver!"

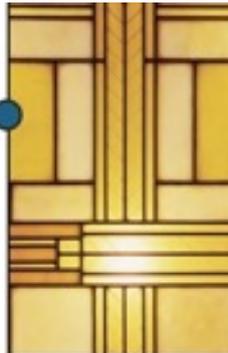
The second American was more upbeat. "Actually," he said, "since I adopted my new system, I haven't had any problems at all."

The first American looked interested. "What's your new system?"

"Well," replied the second, "now, whenever I take a taxi, I just give the driver all the English money I have. And would you believe it, I have got the fare exactly right every time!"

Dealing with unfamiliar currencies—and translating the value of foreign money into dollars—is a problem every international traveler faces.<sup>1</sup> The traveler's problem is

However, British money today is less complicated to understand than suggested by the introductory story. In 1971 the British switched to a decimal monetary system, under which each pound is worth 100 pence. At that time, the traditional British system, under which a pound equaled 20 shillings and each shilling equaled 12 pence, was abandoned.



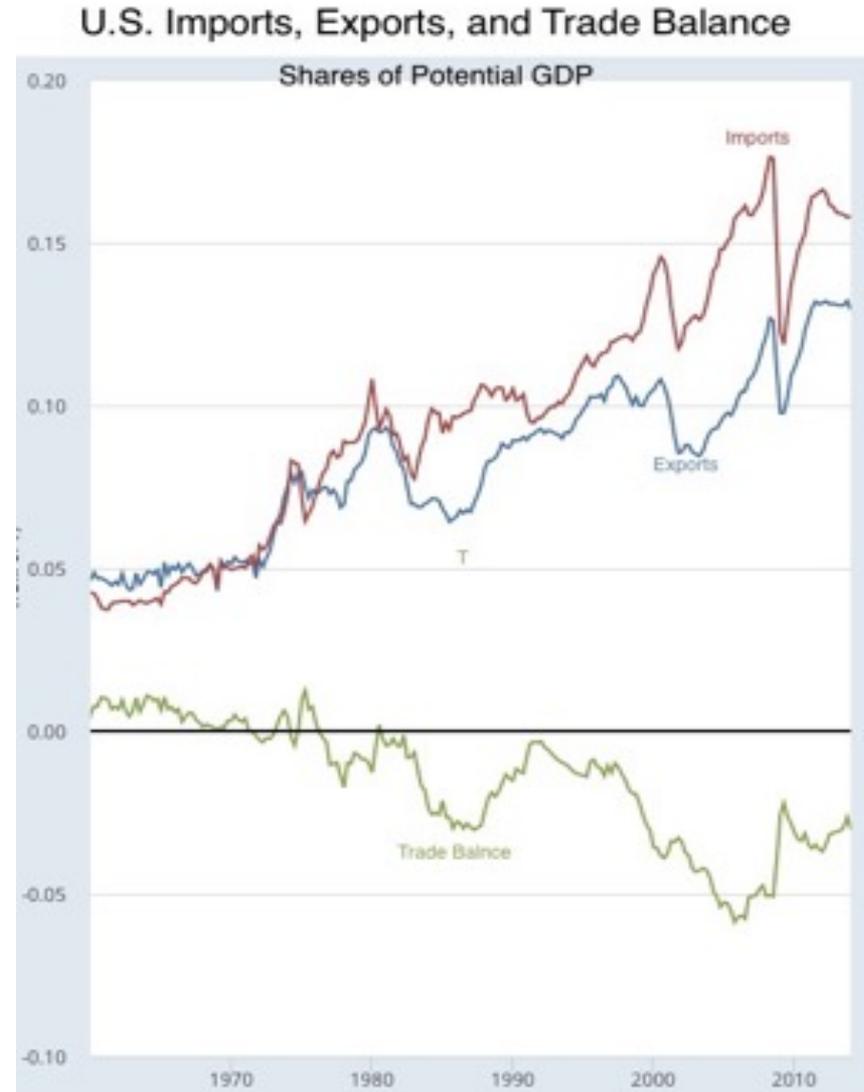
#### LEARNING OBJECTIVES

After reading this chapter, you should be able to:

- LO1 Define the nominal exchange rate and discuss the advantages and disadvantages of flexible versus fixed exchange rates.
- LO2 Use supply and demand to analyze how the nominal exchange rate is determined in the short run.
- LO3 Define the real exchange rate, summarize the law of one price, and understand how purchasing power parity determines the long-run real exchange rate.
- LO4 Analyze the factors that determine international capital flows to understand how domestic saving, the trade balance, and net capital inflows are related.

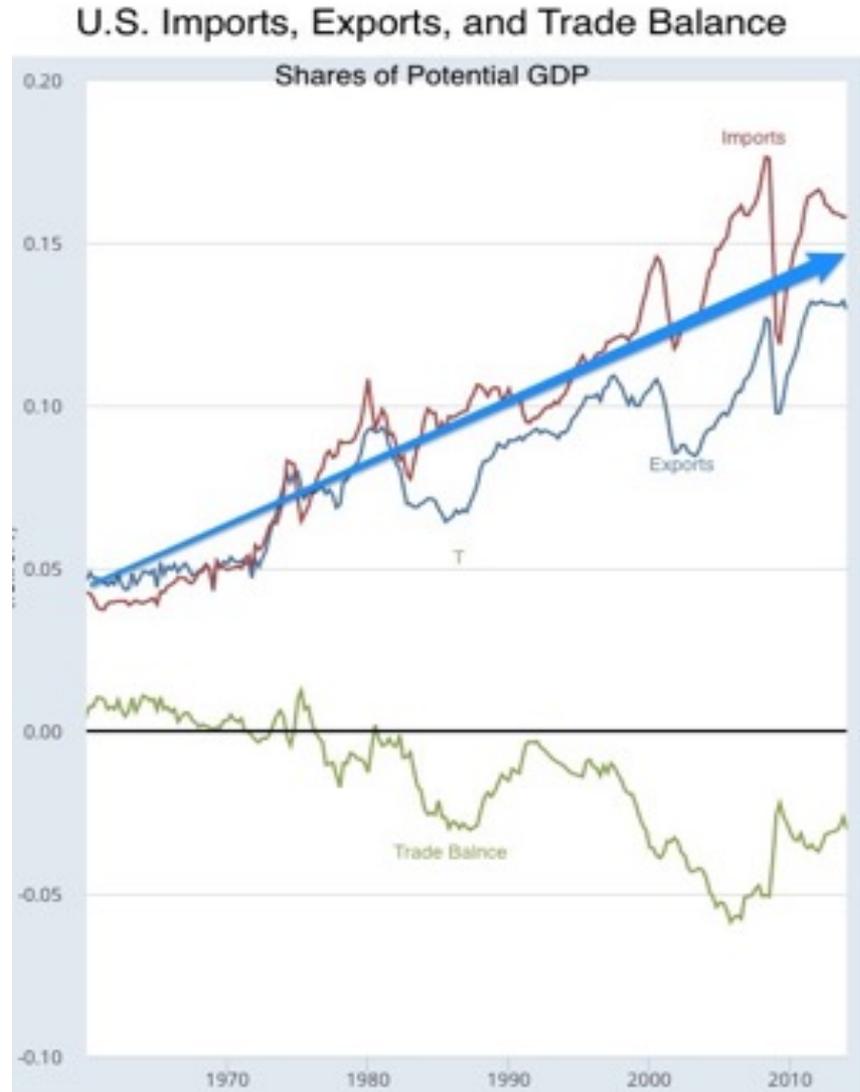
# The Patterns since 1960

- Four major patterns
  - Globalization—the rise in trade with containerization, computerization, and other processes
  - The emergence of the trade deficit
  - The growth of Global South manufacturing exports
  - The cycles in the value of the dollar



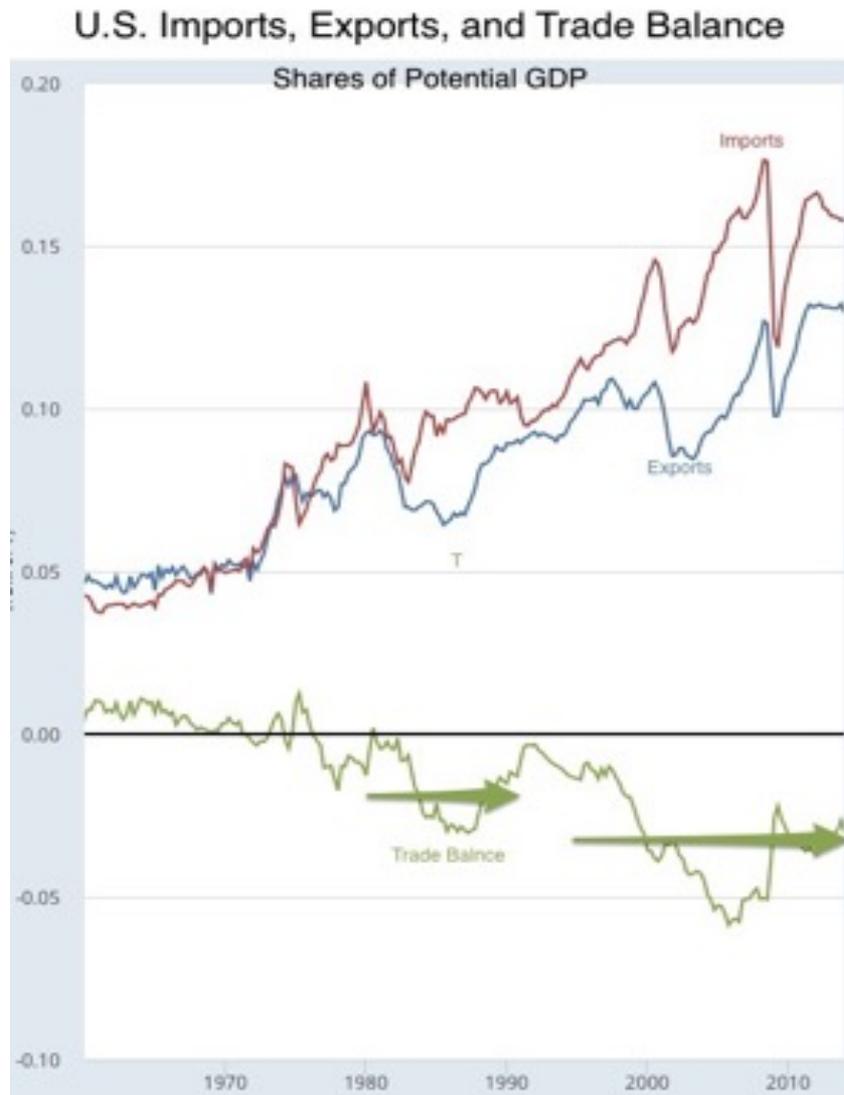
# Globalization

- Trade from 10% to 30% of GDP
- In 1960 5% of what we produced was exported, 4.5% of what we use was imported
- Today 13% of what we produce is exported, 17% of what we use is imported



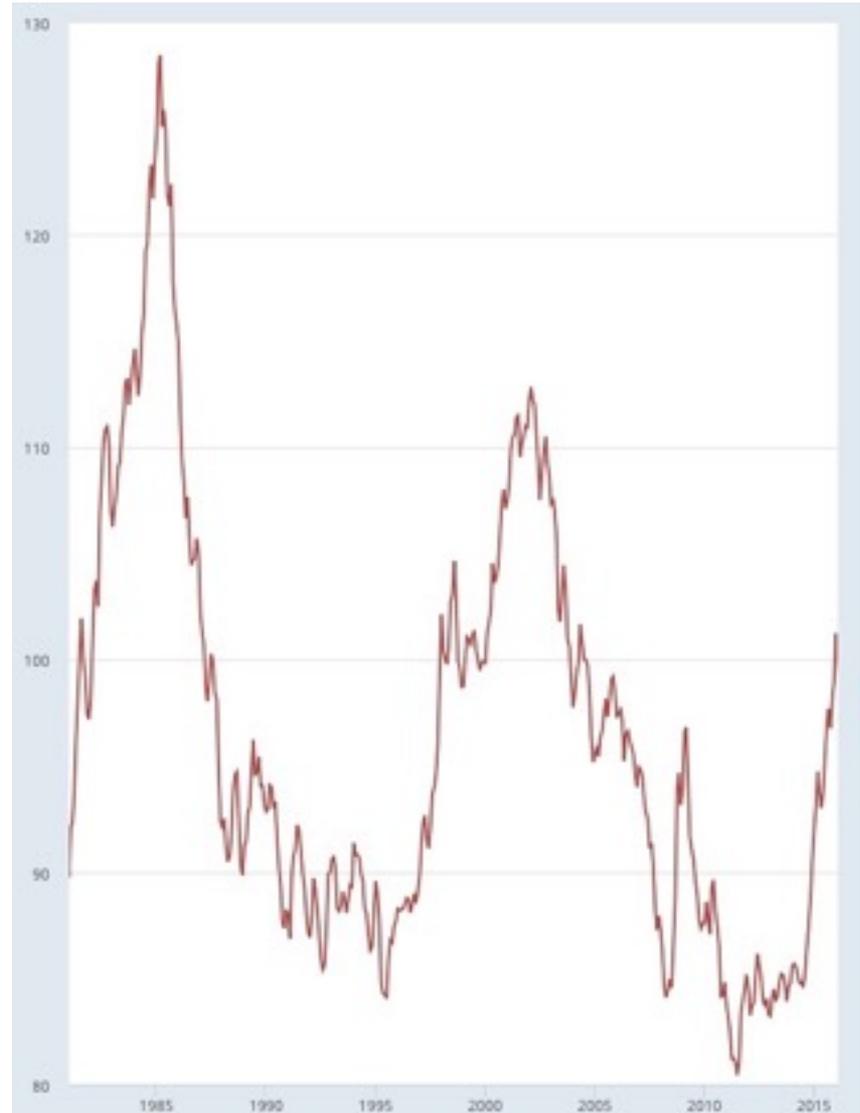
# The Trade Deficit

- In the 60s and 70s trade balanced
- In the 80s we ran a measured trade deficit averaging 2% of GDP
- Starting in the mid-90s we ran a deficit averaging 3.5% of GDP
  - But measurement: U.S. net asset position has shrunk not by 90% but by only 30%-points.
    - Cf. Gourinchas and Rey (2007) <http://tinyurl.com/dl20160421>
  - 2%-points per year of “hidden” net exports



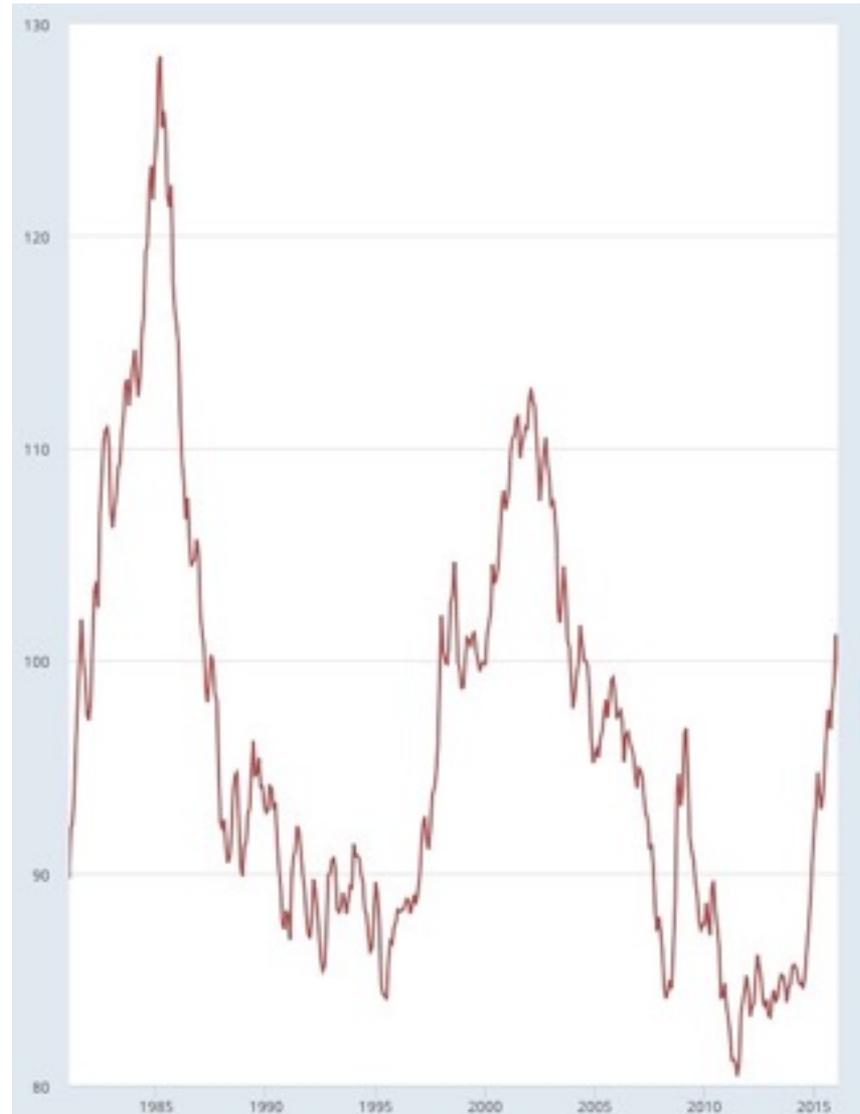
# The Value of the Dollar

- Three huge cycles
- The Reagan deficits cycle, 1981-1990
  - $Y = \mu[c_o + I_o + NX] + \mu G - \mu I_r r$
  - Mistakes in fiscal policy: fiscal policy too loose and thus monetary policy too tight
  - And a high  $r$  raises the value of the dollar
- The dot-com boom cycle, 1996-2003
  - Dollar rises as everyone tries to invest in Silicon Valley
- The taper tantrum cycle, 2015-?
  - U.S. starts to raise its  $r$  as other countries continue to try to lower theirs
  - A failure of international policy coordination



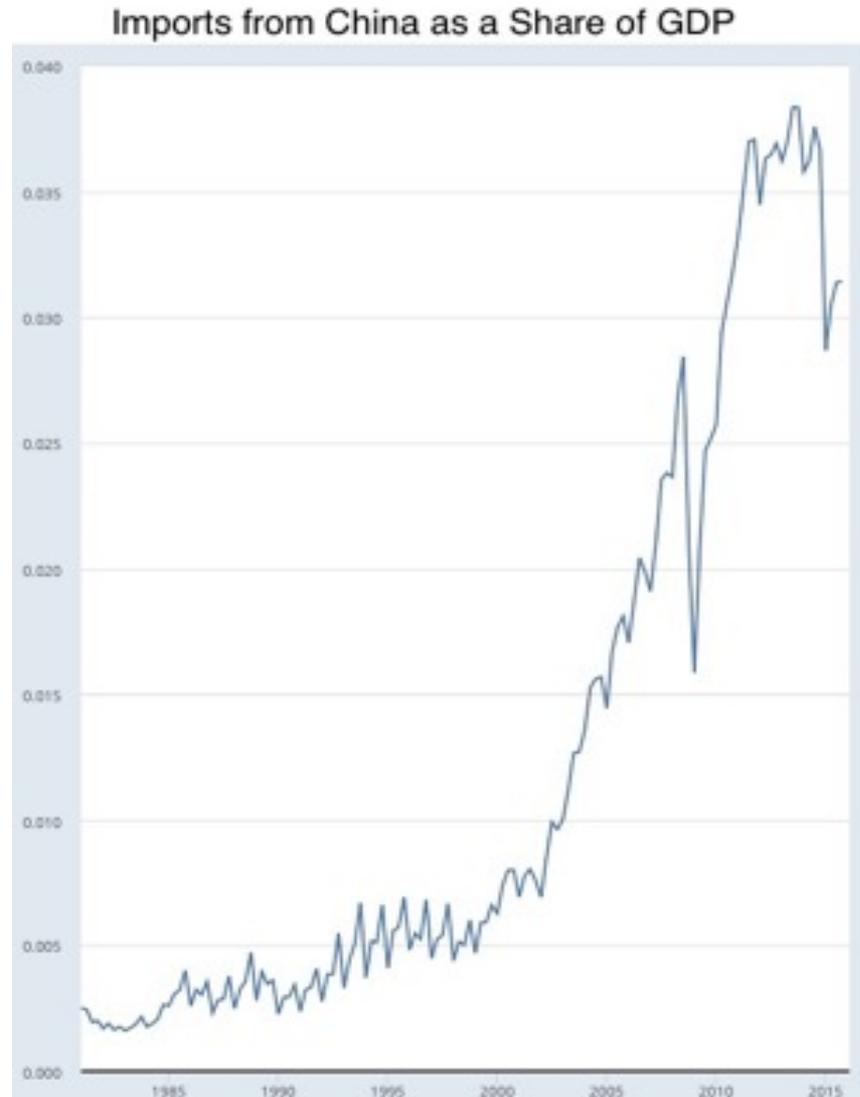
# The Value of the Dollar II

- These cycles are bad things
- The value of the dollar is a price that tells businesses where to build factories
- It should random-walk itself, slowly, as technological development and resources slowly change
- It should not cycle
- It should, especially, not have large and rapid cycles
- Such cycles are the price system sending the wrong and irrationally volatile signals about where society should locate industry...



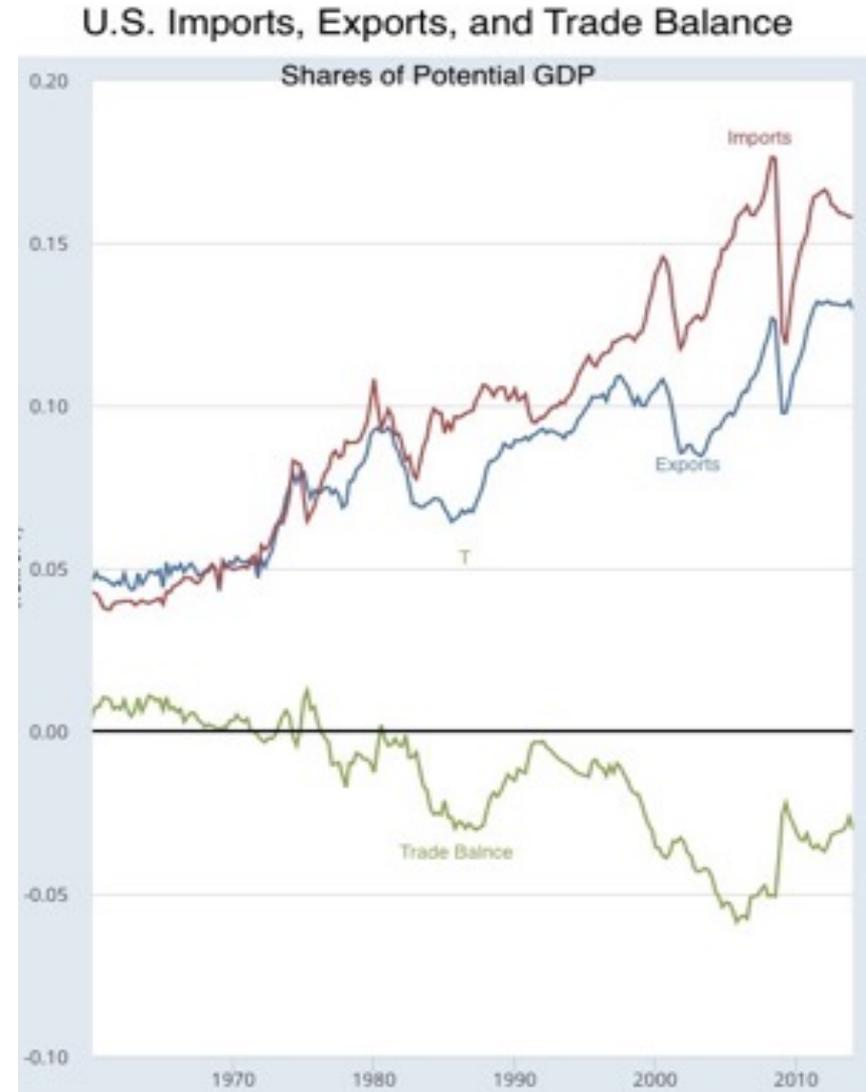
# Manufacturing Imports from Global South

- China is about 2/3 of the process—and it's easy to get data for China...
- It used to be that imports of manufactured goods from the Global South were trivial
- In 1994 at the Treasury I calculated that the average manufactured good import came from a country with a higher manufacturing wage than the U.S.—Germany, Japan
- Things became very different in the 2000s...



# The Processes since 1960

- Five key processes
  - Redistributing global employment in depressions
  - Buying risk insurance from the U.S.
  - The U.S. consumption/investment/lend abroad decision
  - Specialization and the division of labor with the Global North
  - Trading resource- and tech-intensive products for the raw resources and low-wage manufacturers of the Global South



# Redistributing Global Employment in Recessions

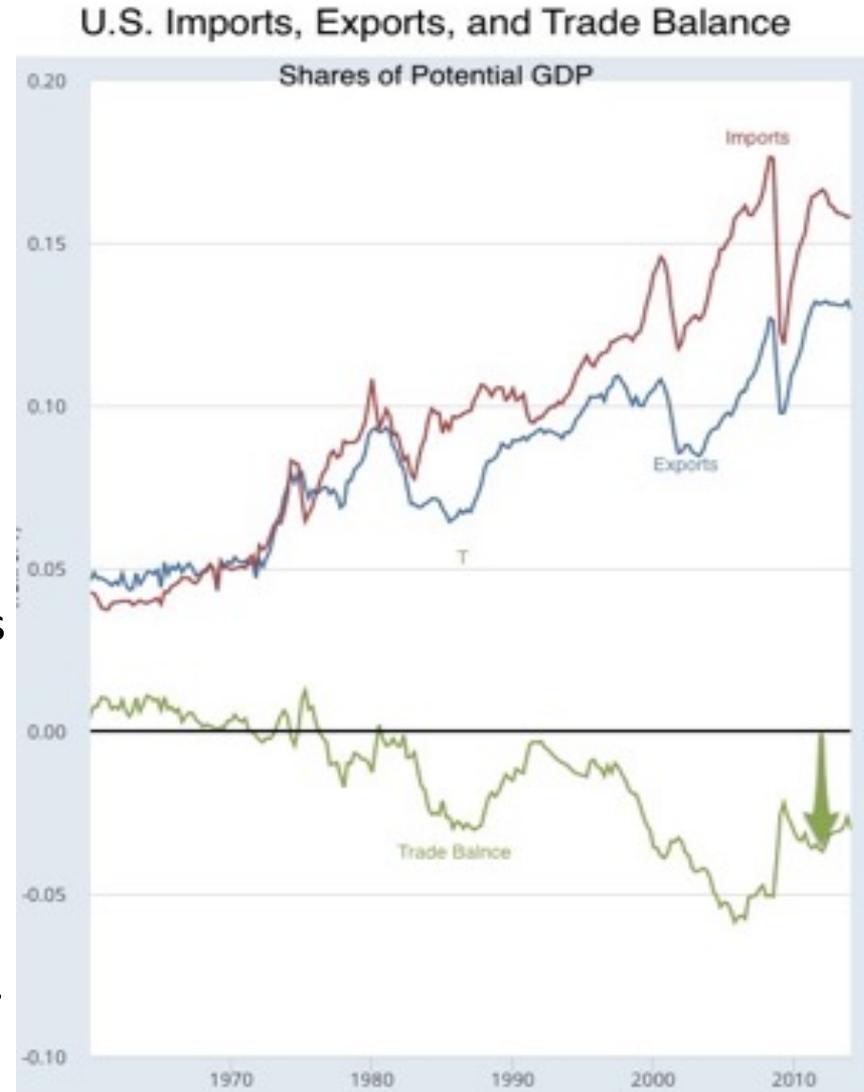
- Recall our income-expenditure equation for the level of GDP:
- $Y = \mu[c_o + I_o + NX] + \mu G - \mu I_r r$ , with:
  - $\mu$  the multiplier,
  - $c_o$  consumer confidence,
  - $I_o$  bank-business “animal spirits”,
  - $NX$  foreigners’ decisions about net exports
  - $G$  government purchases,
  - $I_r$  the interest sensitivity of investment, and
  - $r$  the long-term risky real interest rate influenced but not controlled by the central bank

# Redistributing Global Employment in Recessions II

- Normally as foreigners' decisions about NX change, the central bank shifts  $r$  in order to maintain full employment and low inflation
- But if the interest rate the central bank controls  $i$  is already at zero, and if  $G$  is fixed, then:
- $\Delta Y = \Delta NX$
- And adding up NX for all countries of the world has to get you a zero.
- So in a depression, at the zero lower bound on interest rates, net export policy is employment policy: zero-sum employment policy
  - “Currency war”
  - Employment-generating tariffs and quotas

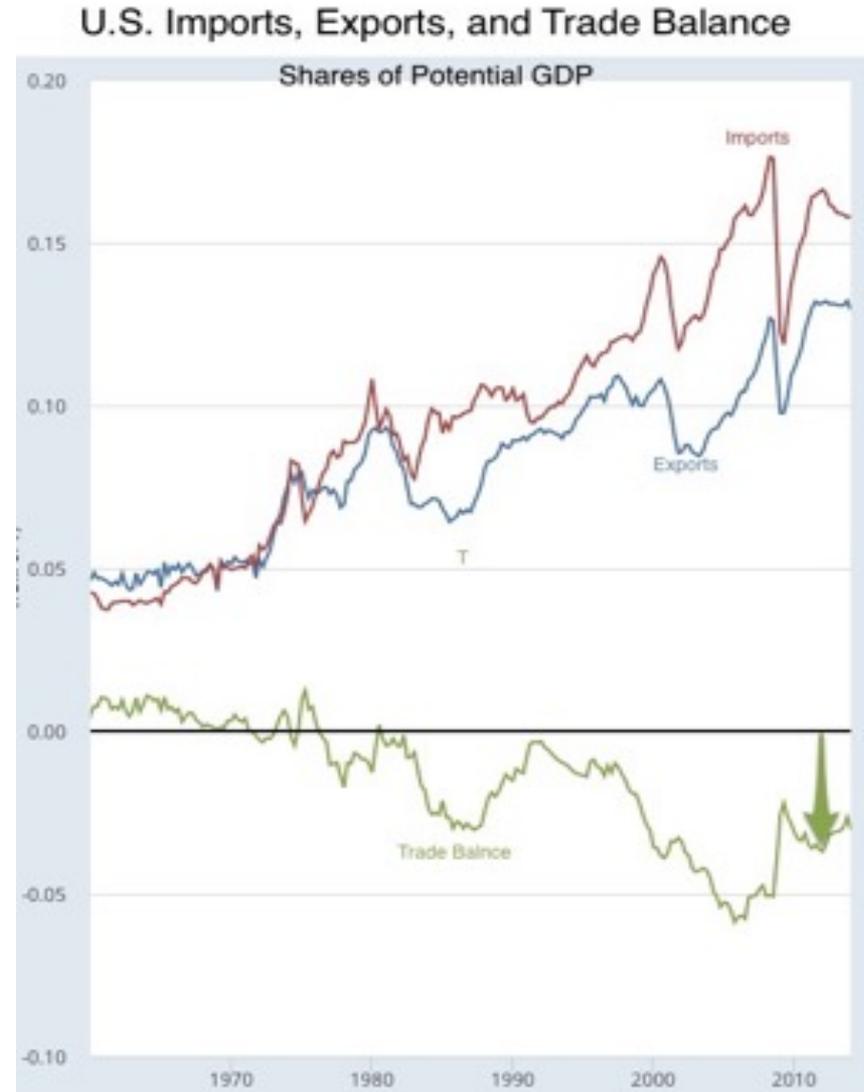
# Redistributing Global Employment in Recessions III

- Since 2008:
  - Since the interest rate the central bank controls  $i$  is already at zero, and since  $G$  is fixed, then:
    - $\Delta Y = \Delta NX$
    - And adding up  $NX$  for all countries of the world has to get you a zero.
    - So since 2006 net export policy is employment policy: zero-sum employment policy
- From the mid-1980s through 2007, by contrast, the import-export trade-deficit pattern had no aggregate-demand effect on U.S. overall GDP or employment



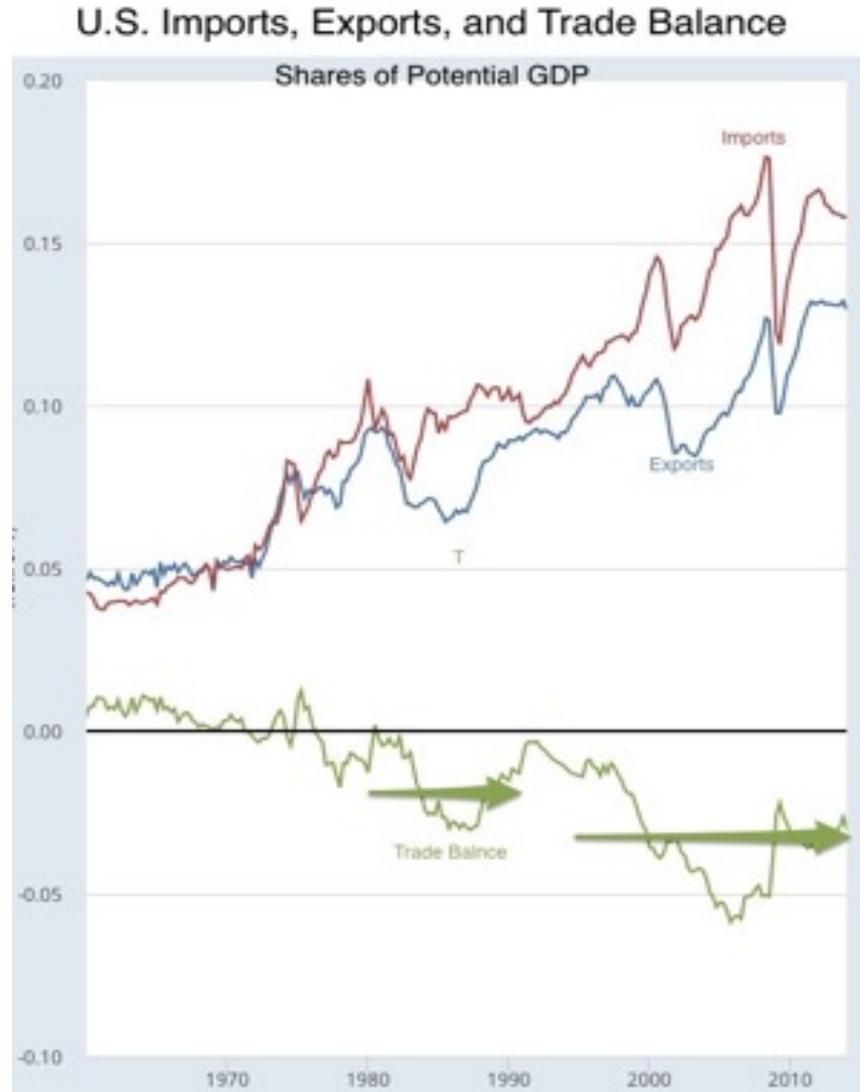
# Redistributing Global Employment in Recessions IV

- Since 2008: how much?
- Trade deficit of 2.5% of GDP...
- Multiplier  $\mu$  of 3...
- This factor is a very big deal: our trade deficit has been transferring roughly 4 million jobs abroad (relative to the balanced-trade equilibrium)



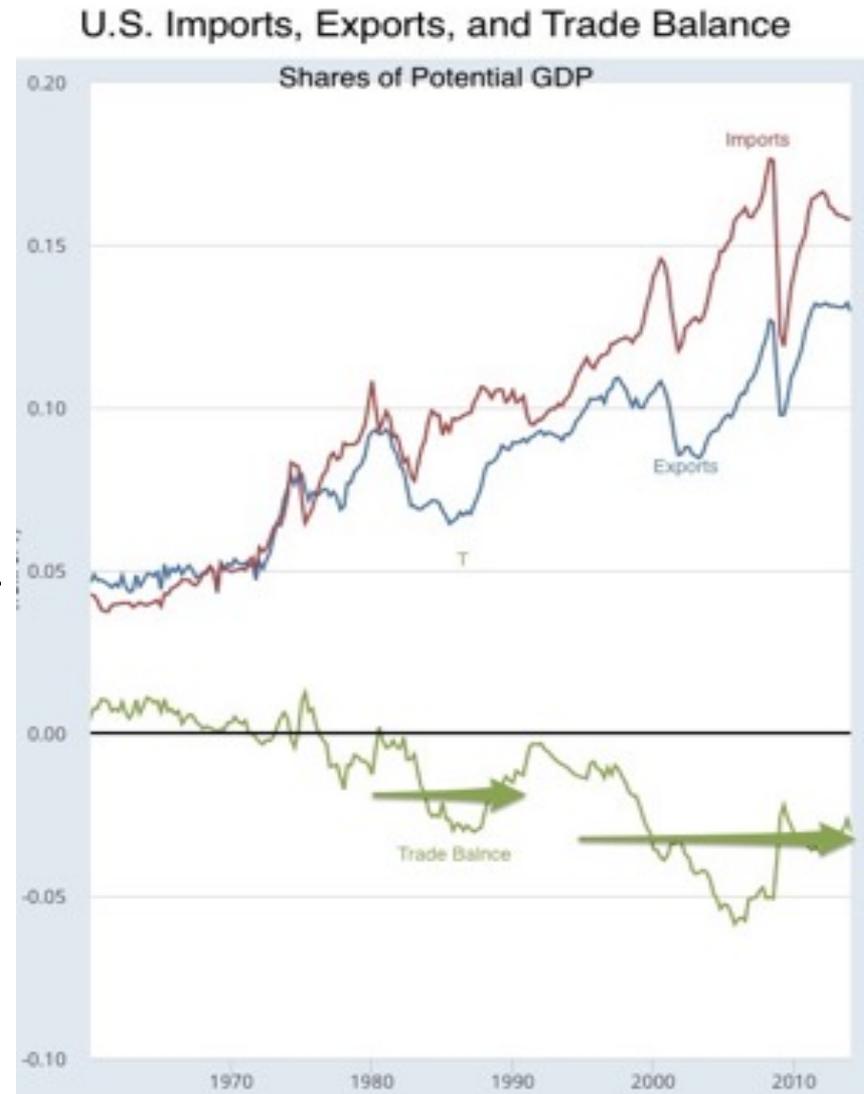
# Buying Risk Insurance from the U.S.

- The dollar as the lynchpin of the global financial system
- Governments want dollar-denominated reserves to deal with crises
- Rich individuals want dollar assets for safety's sake
- The U.S. earns a very healthy income from selling such forms of political and economic risk insurance to foreign governments and foreign elites



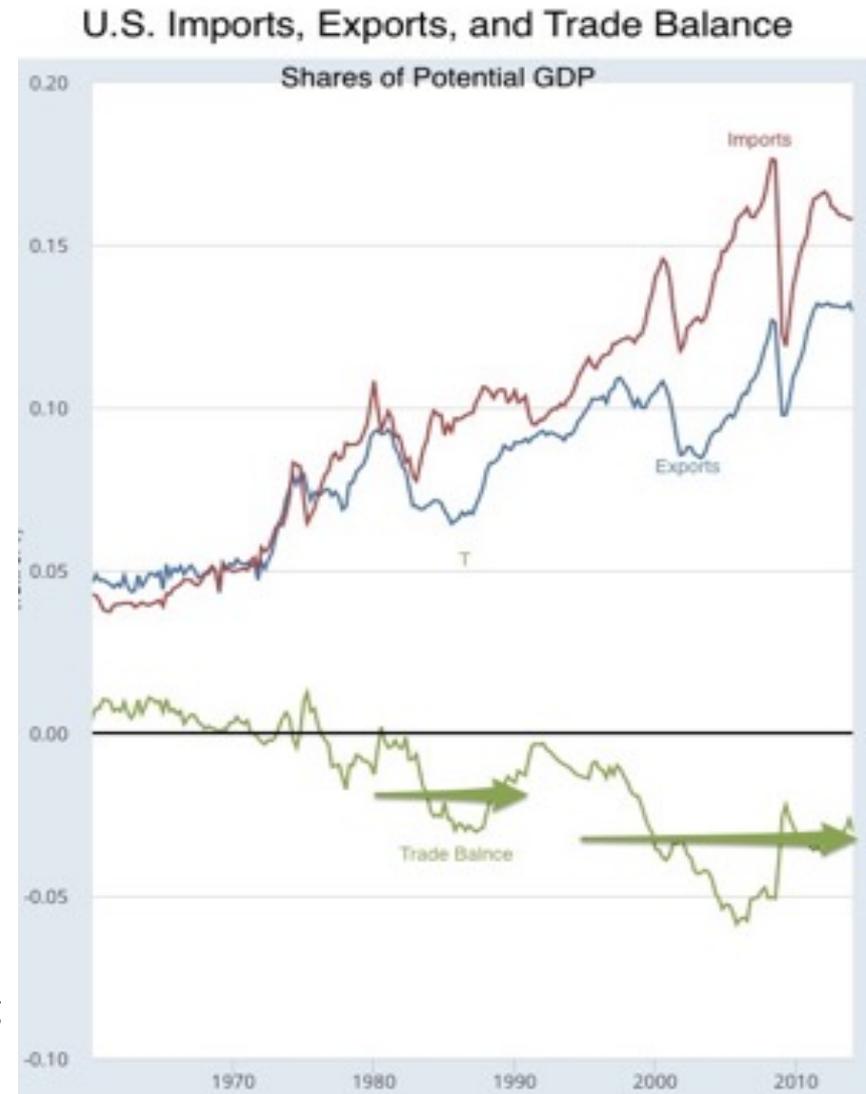
# Buying Risk Insurance from the U.S. II

- How much?
- Inflow into the United States from the “global savings glut” of 5% of GDP every year
- The fees our finance collects from managing this money plus the price pressure when they buy high is about 40% of that
- “Selling risk insurance” worth about 2% of U.S. GDP per year—\$360B/year
- But...



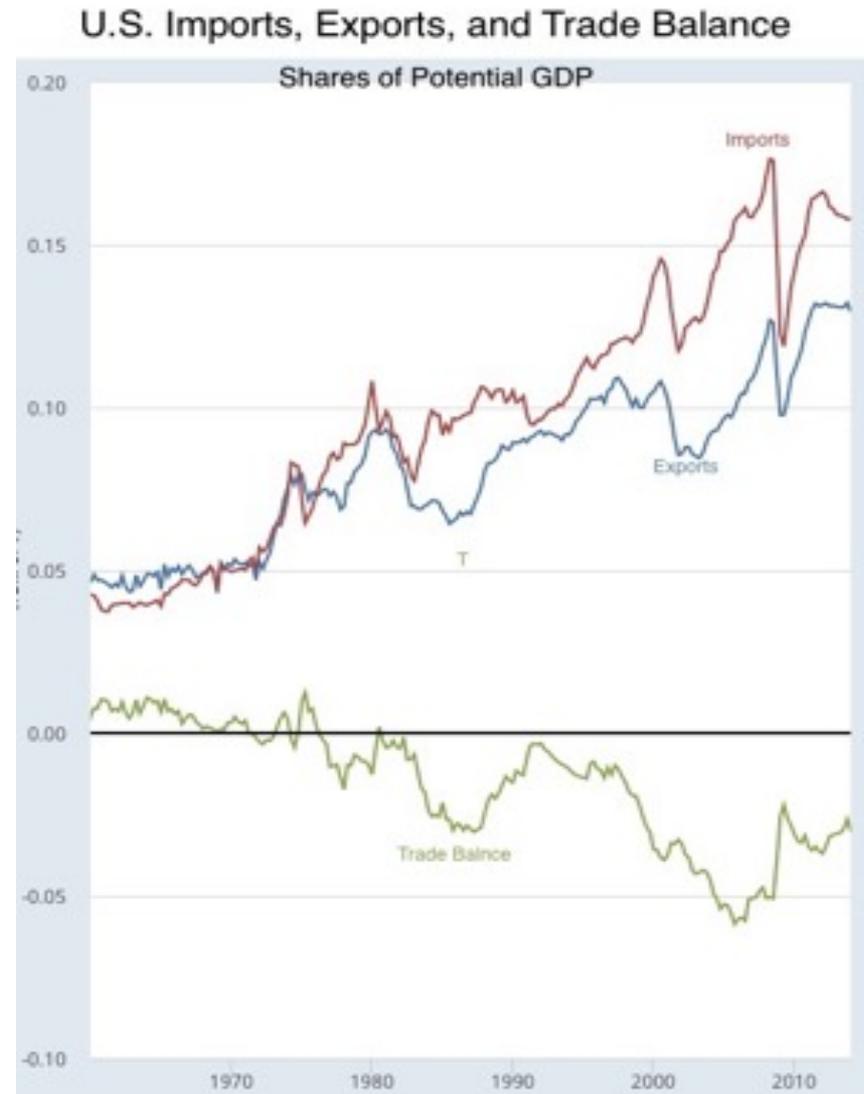
# The U.S. Global Balance Decision

- What do we do with the money we earn as a result of the global desire for safe dollar-denominated assets located in the United States?
- We could invest it (we did in the late 1990s)
- We could spend it boosting our consumption (that's what we are doing)
- We could do with it what Norway does with its oil earnings—lend it out
- We ought to be lending it out:
  - A rich country in a capital-scarce world should be running a trade surplus, not a trade deficit
- “A strong dollar is in America’s interest”: actually, it isn’t...
  - Consuming the trade deficit shifts employment from tradables to non-tradables
  - And has a strong adverse externality: disrupting our communities of engineering practice



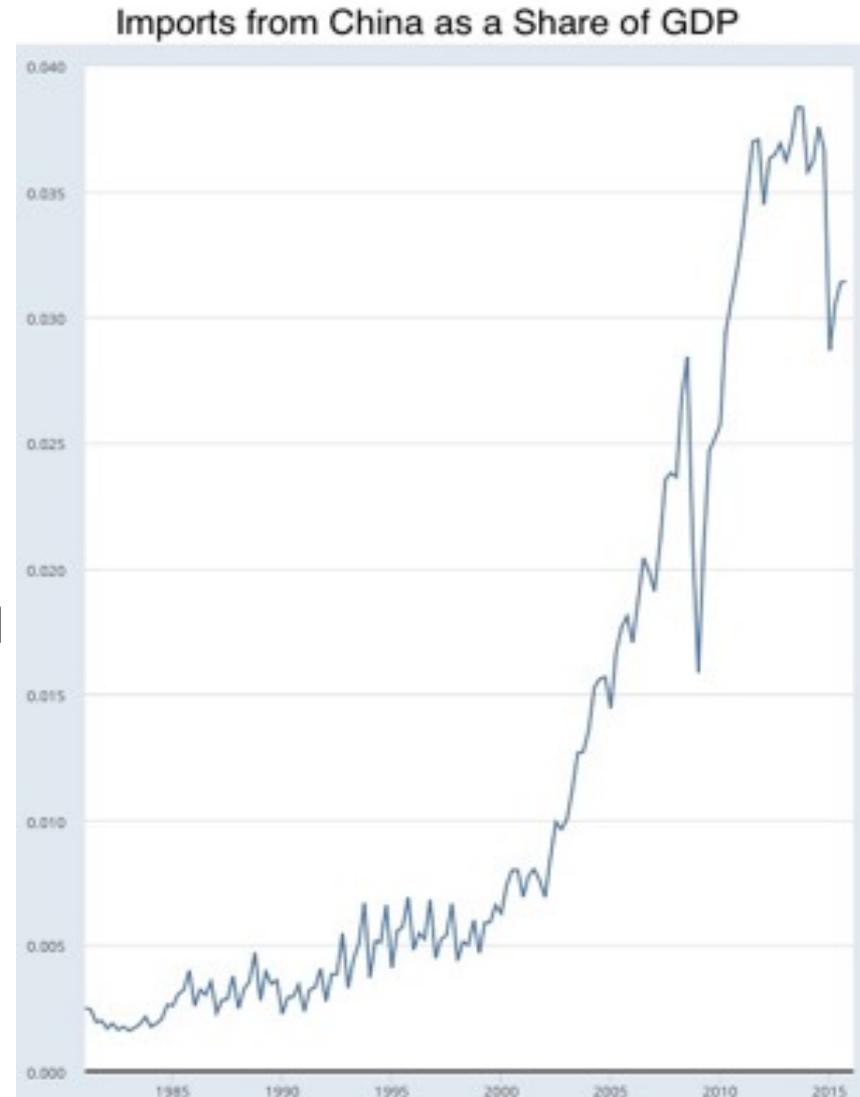
# Trading with the Global North

- Specialization and the division of labor with the Global North
- Japan sends us Toyota Priuses
- Germany sends us washing machines
- Trade is win-win
- Leveraging best-in-world intellectual and organizational capital over a global market in a balanced way



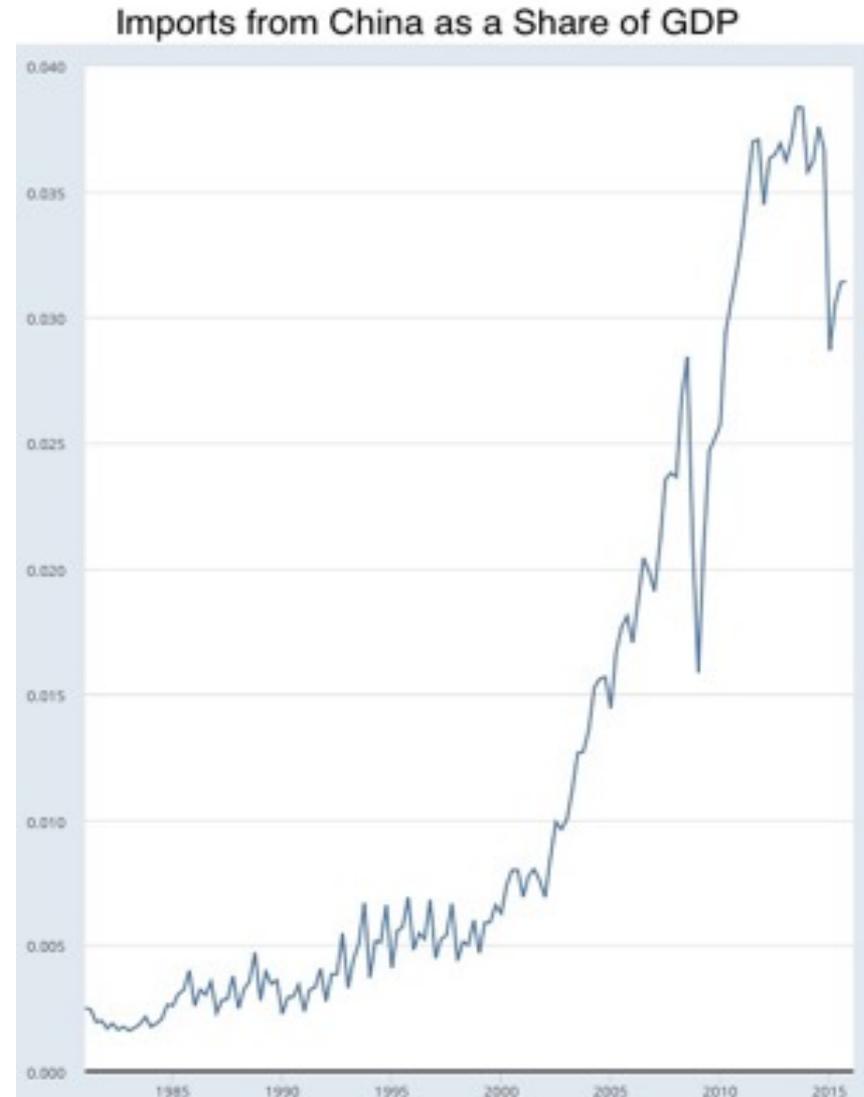
# Trading with the Global South

- Trading resource- and tech-intensive products for the raw resources and low-wage manufacturers of the Global South  
We send iPhones and Apple software to Germany and Japan
- Imports of manufactured goods from the Global South used to be trivial
- In 1994 at the Treasury I calculated that the average manufactured good import came from a country with a higher manufacturing wage than the U.S.—Germany, Japan
- Things became very different in the 2000s...



# Trading with the Global South II

- Relative to the Clinton administration, we are now:
- Selling an extra 5% of GDP—2% in risk insurance, 1% in software, 2% in capital goods—to the Global South
- Buying an extra 5% of GDP in Global South manufactures.
- Big benefit to those in the U.S. who work in finance, software, other IP (i.e., Hollywood), capital goods
- Big benefit in the U.S. to those who consume cheaper Global South-made manufactures
- Big loss to those in the U.S..



# International Economics: Summary

- International trade is win-win between countries
- International trade is win-lose within a country
  - Those who compete with imports lose
  - And they have a legitimate beef if the net benefits are not distributed
- Pay attention to the effects of trade on other externalities—especially on the positive externality of nurturing communities of engineering practice
- In U.S. trade, four patterns: globalization, deficit, rise of the Global South, and dollar cycles
- In u.S. trade, five processes: depression employment reallocation, purchasing risk insurance, the consumption/investment/lend abroad decision, the Global-North division of specialization, and wage-depressing exchange with the Global South

# Orientation

April 20, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# “The Market” as an Institution

- We start from what look like to us deep truths of human psychology
  - People are *acquisitive*
  - People engage in *reciprocity*—i.e., want to enter into reciprocal gift-exchange relationships in which they are neither cheaters nor saps
  - With those they *trust*...

# “The Market” as an Institution II

- We devised property as a way of constructing expectations of trust...
- We devised money as a substitute for trust...
- And so, on the back of these human propensities for acquisition and for trusted gift-exchange, we have constructed a largely-peaceful global 7.4B-strong highly-productive societal division of labor:
  - Built on assigning things to *owners*—who thus have responsibility for stewardship and the incentive to be good stewards...
  - And on very large-scale webs of *win-win exchange*...
  - Regulated by *market prices*...
- This is a very valuable and important societal institution...
- Economics is the study of how it—what we usually call “the market”—works...

# “The Market” as an Institution III

- In analyzing the market as an institution, we need to cover:
  - The success of the market
  - The failures of the market
  - The political-economic-sociological-historical context of the market
  - The impact of a market economy on the other institutions and practices of society
- Plus there is the peculiar domain of “macroeconomics”

# The Market Balance Sheet: Pro

- The market failure-free competitive market in equilibrium, from the perspective of a utilitarian seeking to achieve the greatest-good-of-the-greatest-number, accomplishes these goals:
  1. It produces at a scale that exhausts all possible *win-win exchanges*—and is “efficient” in that sense.
  2. It allocates the roles of producers and sellers to those who can make and sell them in a way least costly to society’s overall resources—to those with the lowest *opportunity cost*.
  3. It rations the commodities produced to those with the greatest *willingness-to-pay*—to those who, by the money standard, need and want them the most.

# The Market Balance Sheet: Con

- Markets can go wrong. They can:
  1. not fail but be failed by governments that fail to properly structure and support them—or that break them via quotas, price floors/ceilings, etc.
  2. be out-of-equilibrium
  3. see actors have market power
  4. be afflicted—if that is the word—by non-rivalry (increasing returns to scale; natural monopolies)
  5. suffer externalities (in production and in consumption, positive and negative; closely related to non-excludability)
  6. suffer from non-excludability (public goods, etc.)
  7. suffer from information lack or asymmetry
  8. suffer from maldistributions—for the market will only see you if you have a willingness to pay, which is predicated on an ability to pay...
  9. suffer from miscalculations and behavioral biases
  10. suffer from failures of *aggregate demand*

# Market Failure 1 and 2: When Exchange Does Not Take Place at Appropriate Scale

- Errors of omission:
  - When government does not define property rights
  - When government does not enforce contracts
- Errors of commission: when government imposes
  - price ceilings,
  - price floors,
  - quota restrictions,
  - or quantitative mandates *without good reason*
- Errors of information dissemination:
  - When markets fail to reach equilibrium

# Market Failure 3 and 4: Market Power and Non-Rivalry

- Prices serve as signals of societal needs and also of societal scarce-resource costs
  - They balance supply and demand
  - They provide incentives to undertake societally-desirable behaviors, and they also provide resources to keep activities sustainable
- With market power, people turn to manipulating prices
  - Thus sending signals that do not correspond to any rational assessment of societal needs or scarce resource-costs
- With non-rivalry, the price system cannot both
  - Provide the proper incentives to undertake societally-desirable activities
  - Provide the resources to keep those activities sustainable

# Market Failures 5 and 6: Externalities and Non-Excludability

- With externalities, people who are directly affected by activities cannot signal their willingness-to-pay, and so their utility cannot enter into the market calculus
  - This is so no matter what the sign of the externality
  - Thus the market will produce too much of an activity that has a negative externality
  - And too little of an activity that has a positive externality
- Non-excludability creates situations in which individuals who benefit have a strong incentive to free-ride
- Hence getting them to reveal their true willingness-to-pay and to provide resources to sustain activities that are societal win-wins is very fraught

# Market Failure 7: Information Asymmetry and Information Absence

- What happens when one party to a transaction knows much much more about the value/cost of what is being provided than the other?
- Then we have the American question: if this is such a good deal for me, how can it also be a good deal for you?
- Markets subject to adverse selection and moral hazard break down
- Markets in which quality is unknown create enormous incentives for middlemen to serve as sources of information about quality—and also enormous incentives for such middlemen to cash in their reputational capital by misleading their clients and customers

# Market Failure 8: Maldistribution of Income and Wealth

- The market values commodities based on their purchasers' willingness-to-pay
- Willingness-to-pay predisposes ability—which predisposes income
- If you have no income, the market does not care whether you live or die
- Literally: the market mechanism *does not care*.
- Only if the distribution of income and wealth corresponds to desert and utility is there a case for the market as an optimal societal calculation, allocation, and distribution mechanism

# Market Failure 9: Miscalculations and Behavioral Biases

- Been to Las Vegas?
- Ever wonder why we here in America spend 8% of GDP on the services of financial intermediaries rather than the 3% we spent back in the 1950s?
  - Wall Street in 2008-9 did not cover itself with glory as far as societal usefulness is concerned, did it?
- What George Akerlof and Robert Shiller call “phishing for phools”—making money off of the behavioral biases of others
- There are some deep questions of human autonomy and psychology in behavioral economics
- But mostly it is about presenting people with information in the right way so that they can make decisions they can look back in without great regret...
- The study of these kinds of market failures is still in its infancy

# Market Failure 10: Aggregate Demand

- General gluts—an excess demand for money, and an excess supply of pretty much everything else
- Their counterpart: a great inflation—too much money chasing too few goods
- There is a demand for money, and:
  - The private sector cannot create supply money when it is “in request”, for when it is in request is when the credit-worthiness of private-sector agents is in doubt...
  - The private sector cannot extinguish money save through inflation
    - Inflation as disease and as cure

# Market Failure 10: Aggregate Demand II

- General gluts and great inflations
- $Y = \mu[c_0 + I_0 + NX] + \mu G + \mu l_r r$
- $r = i + \rho + \tau - \pi$
- Shocks:
  - Shocks to spending: consumer confidence, animal spirits, foreign demand for exports
  - Shocks to interest rates—to the *risk premium* and to the *term premium*
  - Shocks to the inflation rate from supply disturbances
- Fill in the troughs: match  $Y$  to potential output  $Y^*$

# **Administrivia II**

April 20, 2016 8-9 AM  
Wheeler Auditorium, U.C. Berkeley

# Meta-Announcement

- We are moving announcements and administrivia out of lecture time and onto the “announcements” bCourses page...
- That is all...

# For the Rest of the Course...

- Yet More Issues:
  - 2016-04-25 We Lecture: The International Economy (Read Frank et al. ch 26)
- The Wrap-Up
  - 2016-04-27 FINAL REVIEW
    - 2016-04-27 We/-28 Th Assignment: Problem Set 8 (international and other issues)
  - 2016-05-04 We/-05 Th Section Review Meetings
    - 2016-05-04 We/-05 Th Assignment: Problem Set 9 (final review) due
  - 2016-05-09 Mo: FINAL EXAM