# **Lecture 18: International Monetary Relations**

### International monetary relations

- Introduction: money, exchange rates, and the international monetary system
- Exchange rate "regimes": flexible (floating) vs. fixed
- Exchange rate levels: appreciation vs. depreciation

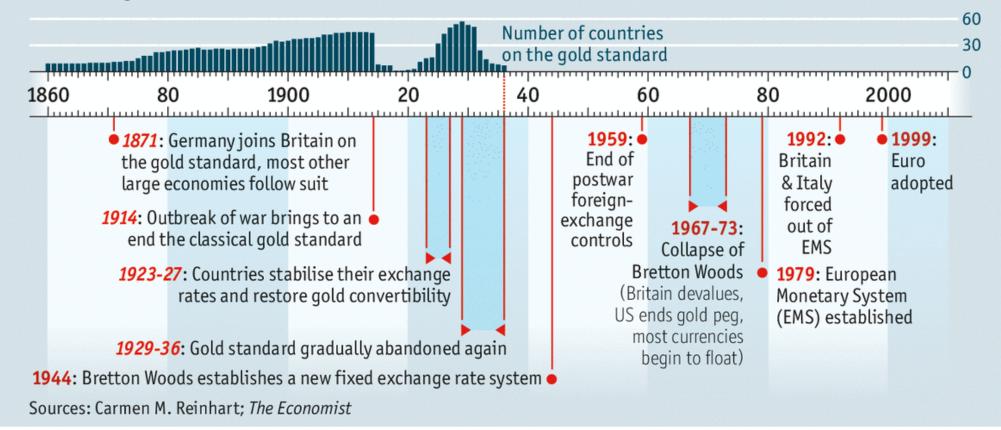
### The politics of exchange rates

- Domestic interests and institutions
- European monetary union and the Euro crisis, 1999-2020



Source: Classical Numismatic Group, Inc., http://www.engcoms.com.

#### **Monetary milestones**

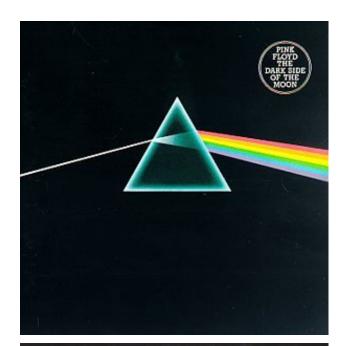


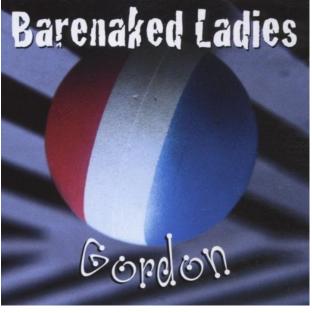
# The Definitive (?) IR Playlist, Volume 18

• "Money"

- Pink Floyd, Dark Side of the Moon (1973)

- "If I Had A \$1,000,000"
  - Barenaked Ladies, Gordon (1992)

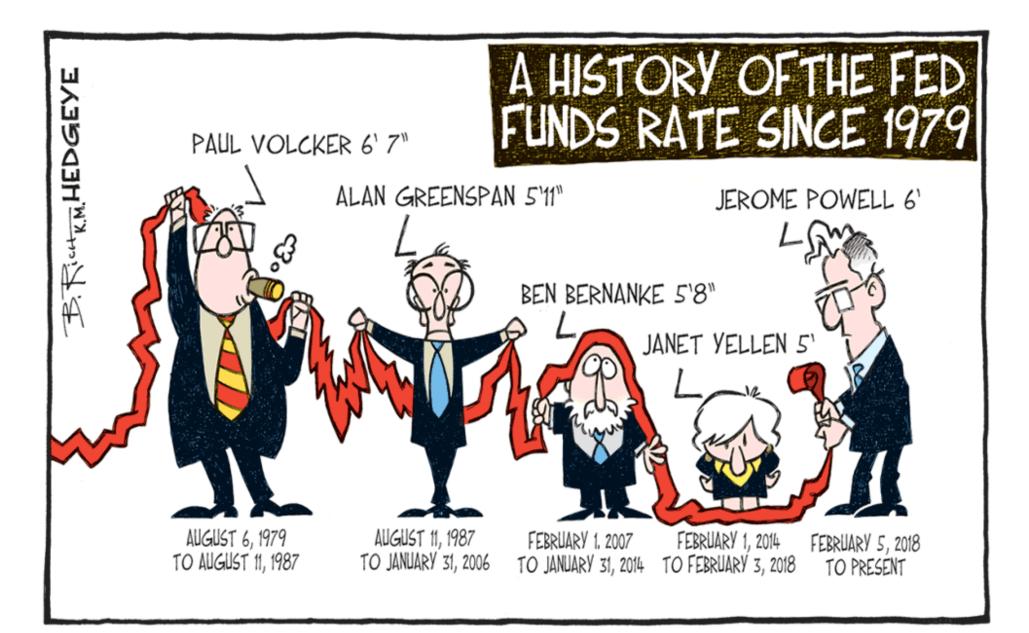




# Gender and Central Banking, 2019



# **Correlation Is Not Causation...**



# What is Money? Maybe the Constructivists Are Right...

FANTASY FOOTBALL

#### **U.S. Economy Grinds To Halt As Nation Realizes Money Just A Symbolic, Mutually Shared Illusion**

NEWS · Treasure · ISSUE 46.07 · Feb 16, 2010



WASHINGTON—The U.S. economy ceased to function this week after unexpected existential remarks by Federal Reserve chairman Ben Bernanke shocked Americans into realizing that money is, in fact, just a meaningless and intangible social construct.



Calling it "basically no more than five rectangular strips of paper," Fed chairman Ben Bernanke illustrates how much "\$200" is actually worth.

What began as a routine report before the Senate Finance Committee Tuesday ended with Bernanke passionately disavowing the entire concept of currency, and negating in an instant the very foundation of the world's largest economy.

"Though raising interest rates is unlikely at the moment, the Fed will of course act appropriately if we...if we..." said Bernanke, who then paused for a moment, looked down at his prepared statement, and shook his head in utter disbelief. "You know what? It doesn't matter. None of this—this so-called 'money'—really matters at all."

"It's just an illusion," a wide-eyed Bernanke added as he removed bills from his wallet and slowly spread them out before him. "Just look at it: Meaningless pieces of paper with numbers printed on them. Worthless."

According to witnesses, Finance Committee members sat in thunderstruck silence for several moments until Sen. Orrin Hatch (R-UT) finally shouted out, "Oh my God, he's right. It's all a mirage. All of it—the money, our whole economy—it's all a lie!"

Screams then filled the Senate Chamber as lawmakers and members of the press ran for the exits, leaving in their wake aisles littered with the remains of torn currency.

# Why Are Money and Exchange Rates Important?

# Three functions of money

- Medium of exchange
- Unit of account
- Store of value

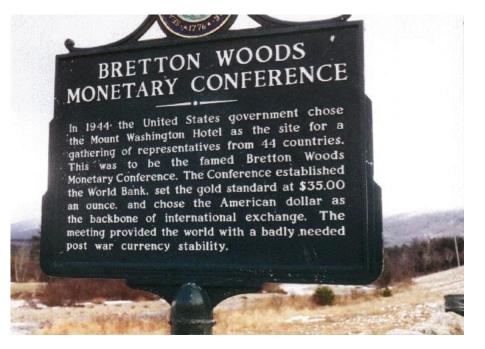
# The role of the international monetary "system"

• The "oil" that keeps the world economy operating



# **Elements of the International Monetary System**

- 1. Exchange rate "regime": Do most currencies *float*, or are they *fixed*?
  - Fixed: gold standard,
    Bretton Woods (1945-1973)
  - Float: the "system" today



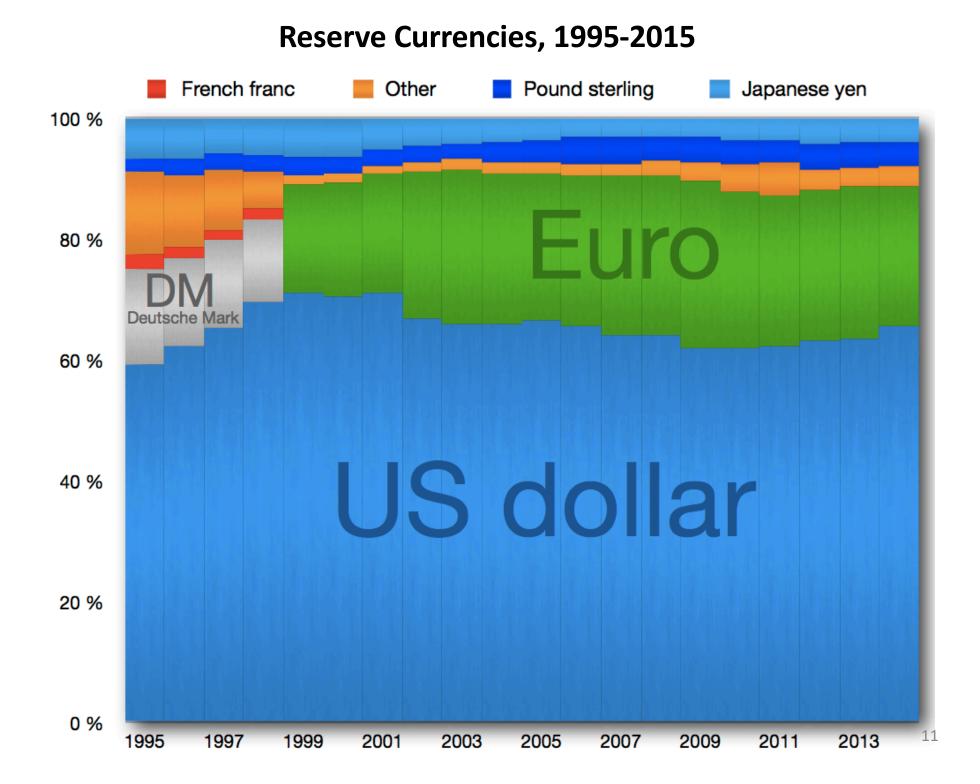
# **Elements of the International Monetary System**

- 2. **Monetary standard**: will there be a common *base* or *standard*?
- Commodity standard: a good with some intrinsic value: precious metals (gold, silver)
- Commodity-backed paper standard: Governments issue paper currency that has a fixed value in terms of a commodity (Gold standard, 1870-1914)
- Hybrid: Bretton Woods (1945-73): U.S. dollar fixed to gold, and all other currencies to the dollar



# Monetary standards, continued

- National paper currency standard:
  - National currencies backed only by government commitments to maintain their value ("fiat currency")
  - A few major ("reserve") currencies are used as the basis for international exchange
  - This has been the system since 1973, with the \$ and € as key currencies (also yen, pound, Swiss franc)

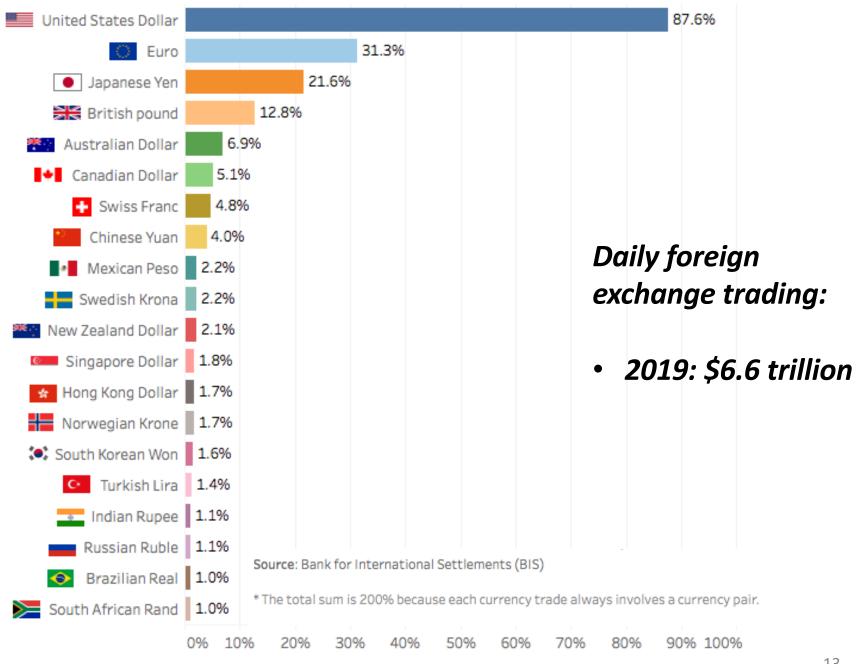


# **Exchange Rates**

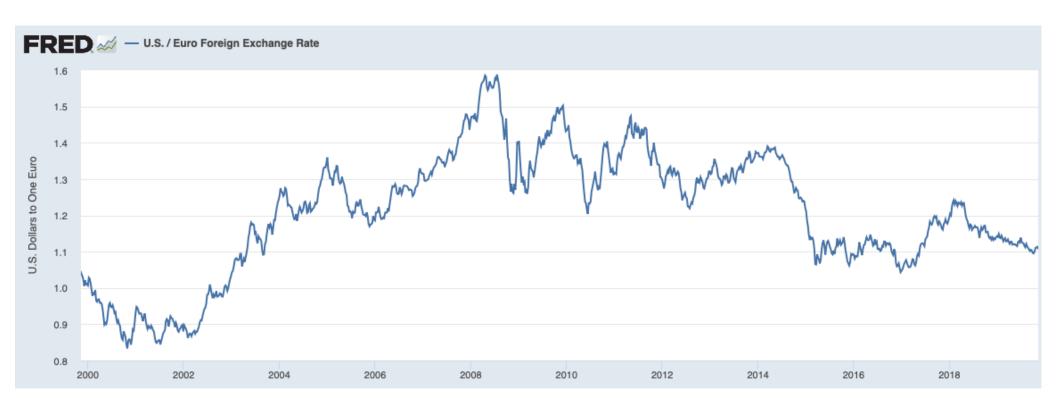
- Definition: price of one currency in terms of another
- Movements: *appreciation* vs. *depreciation*
- When a currency goes up in terms of another currency, it strengthens or *appreciates:* (e.g., if \$1 were to buy €1 instead of 0.9046); When a currency goes down, it weakens or *depreciates* (e.g., if \$1 were to buy €0.50)

Cross rates			Majors	~
Currencies	GBP £	EUR €	USD \$	JPY ¥
<b>United Kingdom</b> 1 GBP	N/A	1.1669	1.2899	140.25
United States 1 USD	0.775	0.9046	N/A	108.73
European Union 1 EUR	0.8563	N/A	1.105	120.15
Australia 1 AUD	0.5284	0.6169	0.6819	74.14
Canada 1 CAD	0.5861	0.6841	0.7563	82.23
China 1 CNY	0.1106	0.1291	0.1427	15.5129
<b>Japan</b> 1 JPY	0.0071	0.0083	0.0092	N/A
Switzerland 1 CHF	0.7827	0.9137	1.01	109.82
Data delayed at least 15 minutes, as of No	v 16 2019 02:40 GMT.			

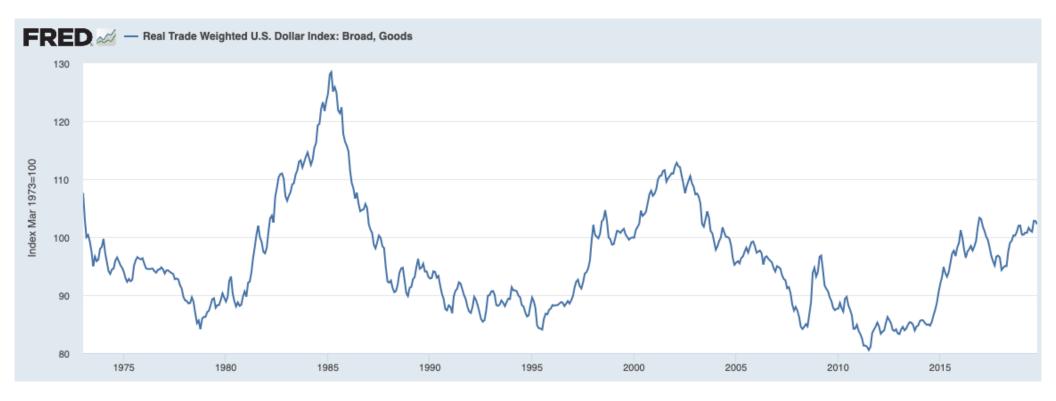
#### Most Traded Currencies By Value (2016)



#### Dollar/Euro Exchange Rate, 1999-2019



### Dollar: Trade-Weighted Real Exchange Rate Index (1973=100), 1973-2019



# What Causes Movements in Exchange Rates?

- Changes in interest rates
- Changes in consumers' tastes
- Changes in relative national incomes
- Changes in market sentiments

# **Currency Movements: Why Do We Care?**

• Exchange rate movements have distributional consequences, like trade:

#### Appreciation:

- Bad for exporters: more expensive for foreigners to buy your goods
- Good for consumers: cheaper to import foreign goods / travel abroad (and buy stuff at Target and Amazon)

#### **Depreciation**:

- Good for exporters: cheaper for foreigners to buy your goods
- Bad for consumers: more expensive to import from abroad

### **Currency Movements: Why Do We (Really) Care?**



# **Exchange Rate Regimes**

#### Flexible (floating) exchange rate regime

• Driven by market forces; gov't lets currency *"float"* against others

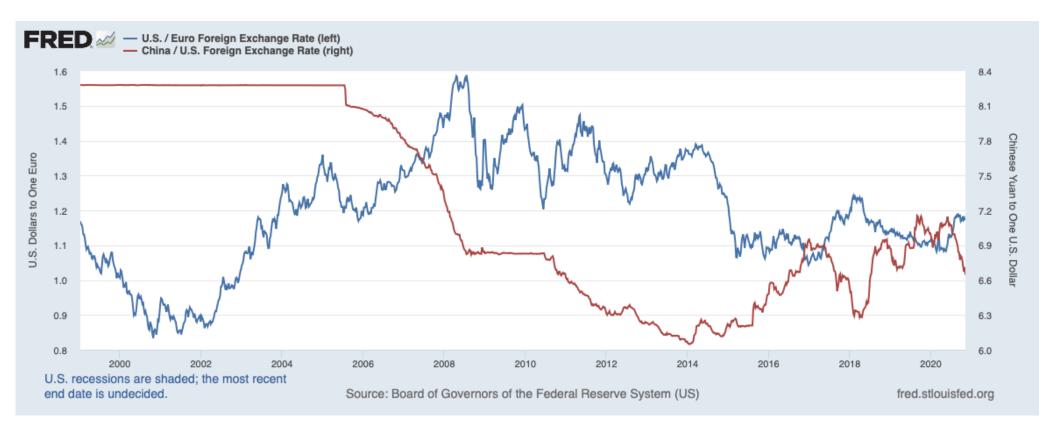
#### Fixed exchange rate regime

• Government chooses & defends a *"peg"* against another currency

#### How does a government maintain a fixed ER?

- Government (central bank) directly trades FX / gov't bonds
- Monetary policy: Central bank raises/lowers interest rates or prints currency to affect money supply/demand

#### **Exchange Rate Regimes: Fixed vs. Floating**



# To Fix or To Float? Tradeoffs!

### **Benefits of fixed rates**

- Stable exchange rates (good for more trade/financial flows)
- Low inflation (stable prices)

# **Costs of fixed rates**

- Loss of domestic monetary autonomy (**↑**↓ interest rates)
- Risk of currency crises

### Most countries choose *intermediate* regimes

- Lots of middle options ("managed" floating, "soft" peg)
- "Soft" peg is a peg that is open to change

### **Exchange Rate Regimes: Most Countries Do Something In the Middle**

#### Table 3. Exchange Rate Arrangements, 2010–18

#### (Percent of IMF members as of April 30)<sup>1</sup>

Exchange Rate Arrangement	<b>2010</b> <sup>2</sup>	<b>2011</b> <sup>3</sup>	<b>2012</b> <sup>3</sup>	2013	2014	2015	<b>2016</b> <sup>4</sup>	2017	2018
Hard peg	13.2	13.2	13.2	13.1	13.1	12.6	13.0	12.5	12.5
No separate legal tender	6.3	6.8	6.8	6.8	6.8	6.8	7.3	6.8	6.8
Currency board	6.9	6.3	6.3	6.3	6.3	5.8	5.7	5.7	5.7
Soft peg	39.7	43.2	39.5	42.9	43.5	47.1	39.6	42.2	46.4
Conventional peg	23.3	22.6	22.6	23.6	23.0	23.0	22.9	22.4	22.4
Stabilized arrangement	12.7	12.1	8.4	9.9	11.0	11.5	9.4	12.5	14.1
Crawling peg	1.6	1.6	1.6	1.0	1.0	1.6	1.6	1.6	1.6
Crawl-like arrangement	1.1	6.3	6.3	7.9	7.9	10.5	5.2	5.2	7.8
Pegged exchange rate within horizontal bands	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Floating	36.0	34.7	34.7	34.0	34.0	35.1	37.0	35.9	34.4
Floating	20.1	18.9	18.4	18.3	18.8	19.4	20.8	19.8	18.2
Free floating	15.9	15.8	16.3	15.7	15.2	15.7	16.1	16.1	16.1
Residual									
Other managed arrangements	11.1	8.9	12.6	9.9	9.4	5.2	10.4	9.4	6.8

Source: AREAER database.

# The Politics of Exchange Rates (Frieden): Interests

#### Who wants exchange rate stability (and why)?

- Internationally-oriented actors (financial sector, exporters) prefer to minimize currency movements and risk
- Domestically-oriented actors ("non-tradable" sectors) prefer flexibility / monetary policy autonomy

#### Who cares about the level of the exchange rate (and why)?

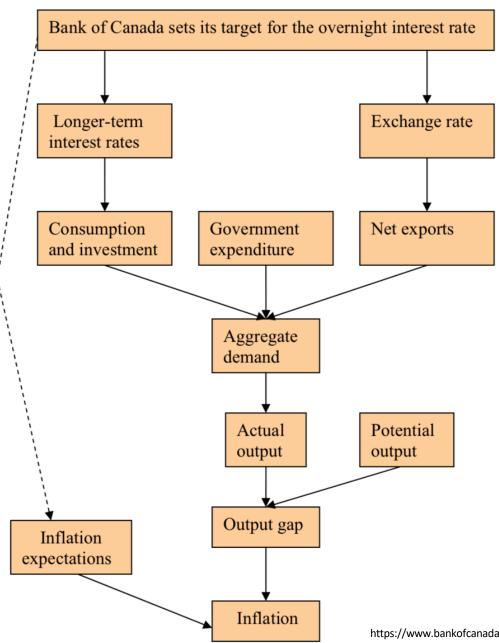
- A more *appreciated* currency is good for consumers (travel, imports), but bad for exporters
- A more *depreciated* currency is good for exporters, but bad for consumers...and can lead to higher inflation

# The Politics of Exchange Rates: Institutions

#### **Democracy and exchange rate policy**

- Non-democracies are more likely to adhere to fixed exchange rates
- Why?
  - Fixed rates requires sacrificing domestic monetary autonomy (raising/lowering interest rates to "prime" the economy)
  - High interest rates may lead to unemployment, economic stagnation
  - These costs are of less concern to non-democratic governments, since they don't face election (or face only a limited electorate)
- Example: gold standard (1870-1914) vs. gold standard (1919-1939)
  - Extension of suffrage and rising prominence of social democratic/labor parties undermined governments' willingness/ability to maintain pegs in the 1920s and 1930s

#### Monetary Policy: The Why, What, and How of Central Banks and Interest Rates



The rate banks can borrow from the government (for short-term lending/cash needs; credit is the "blood supply" of an industrialized economy)

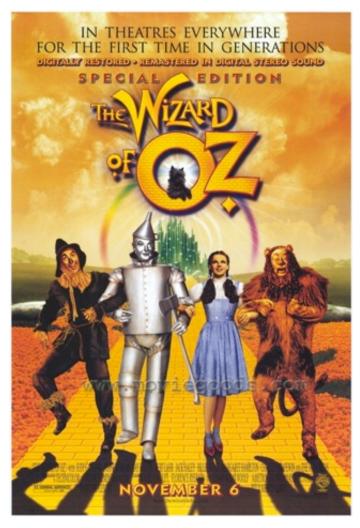
(Flexible) exchange rate rises (falls) as interest rate rises (falls)

Changes in exchange rates and interest rates affect prices of exports/imports and decisions about consumption, investment, borrowing --> overall (aggregate) demand in the economy

Central bank also thinks about whether economy is "running at full speed" or not

Interest rate choices affect inflation (how fast prices are increasing) today and expectations (firms, households) about inflation tomorrow

# The Wizard of Oz as an Allegory for Gold Standard Politics



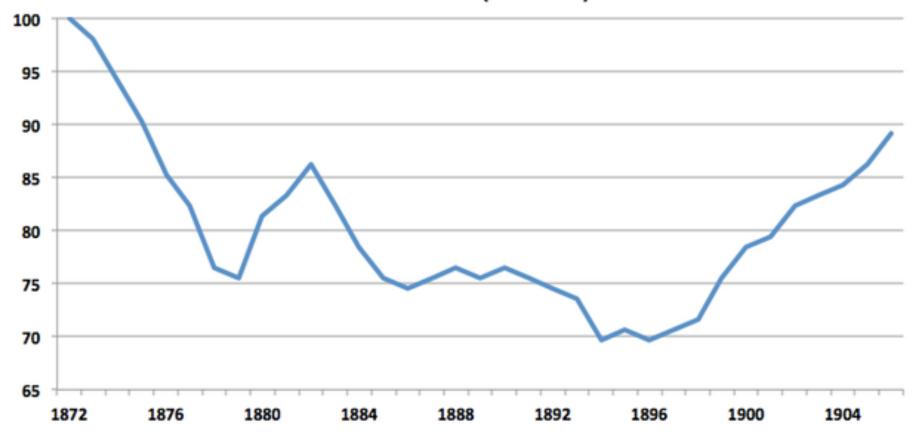
- Yellow brick road = Gold Standard
- **Oz** = ounce of gold, Washington DC
- **Slippers** = silver standard

- **Dorothy** = average rural Americans
- **Scarecrow** = farmers (politically witless)
- **Tin Man** = alienated industrial workers
- **Cowardly Lion** = William J. Bryan (lots of hot air, little political success)
- Wicked Witch of the East = New York bankers, merchants
- **Munchkins** = dim eastern voters, slaves to internationalists/Republican politicians
- Wizard = Mark Hanna (Rep. party chair)
- Toto = Prohibitionists (teetotalers, part of silver coalition)
- Wicked Witch of the West = William McKinley

https://www.unc.edu/~salemi/Econ006/Rockoff.pdf

http://americanhistory.si.edu/blog/populism-oz

## The Original "Great" Depression: 1873-96



Price Index (1872=100)

# Gold Standard Politics in the US, 1873-1914

### Gold Standard supporters (fixed ER, appreciated \$, lower inflation)

- Interests with stakes in the international economy
- NY bankers (J.P. Morgan, etc.)
- International investors and merchants

### Gold standard opponents (floating ER, devalued \$, higher inflation)

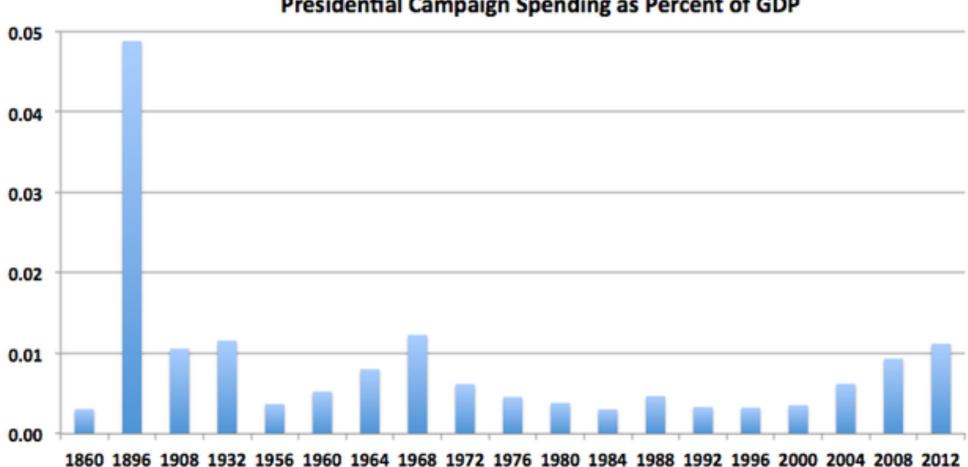
- Western farmers
- Debtors (farmers, railroads)
- Labor
- Silver mine owners

# The "Ruby" Slippers?





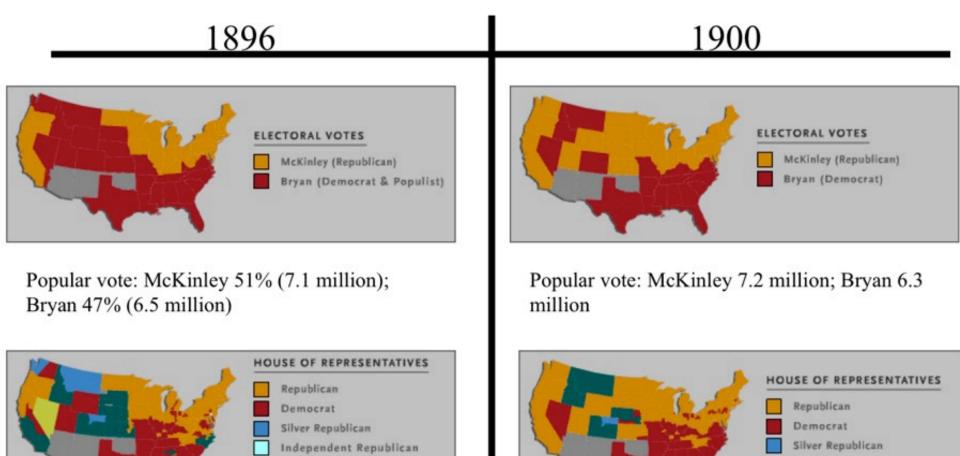
# **The Most Expensive US Election Ever!**



Presidential Campaign Spending as Percent of GDP

https://www.theatlantic.com/business/archive/2012/11/the-most-expensive-election-ever-1896/264649/

## US Election Results, 1896 and 1900



Populist Silver

In 1896, Bryan got over 6.5 million votes and nearly won the election.

Bryan lost again in 1900 as reflation, stemming from the increase in the world's gold supply (Yukon discoveries), undermined the power of his "free silver" appeal.

Populist

# The Politics of Exchange Rates: European Monetary Union



## Euro Euphoria, 2001 (Paris, Christmas)



## Euro Dystopia, 2011 (Athens, Dublin)



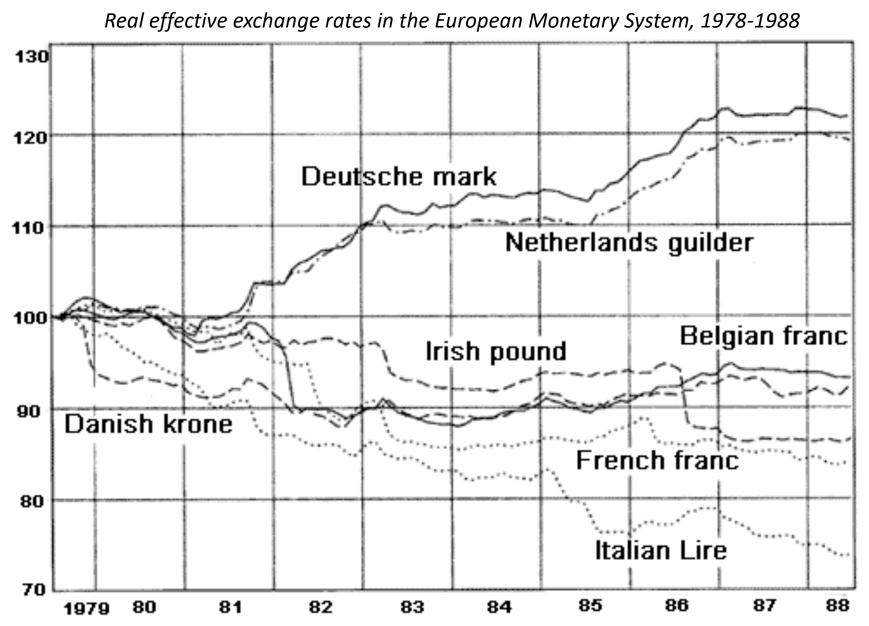
# EUROPE-WIDE WEEK OF PROTEST & SOLIDARITY STOP THE BAILOUTS STOP THE BAILOUTS OPPOSE EU/IMF CUTS END THE DICTATORSHIP OF THE MARKETS

IVIARCH & RALLY 1pm Saturday 26 June Central Bank, Dame St, Dublin SPONSORED BY: JOE HIGGINS MEP

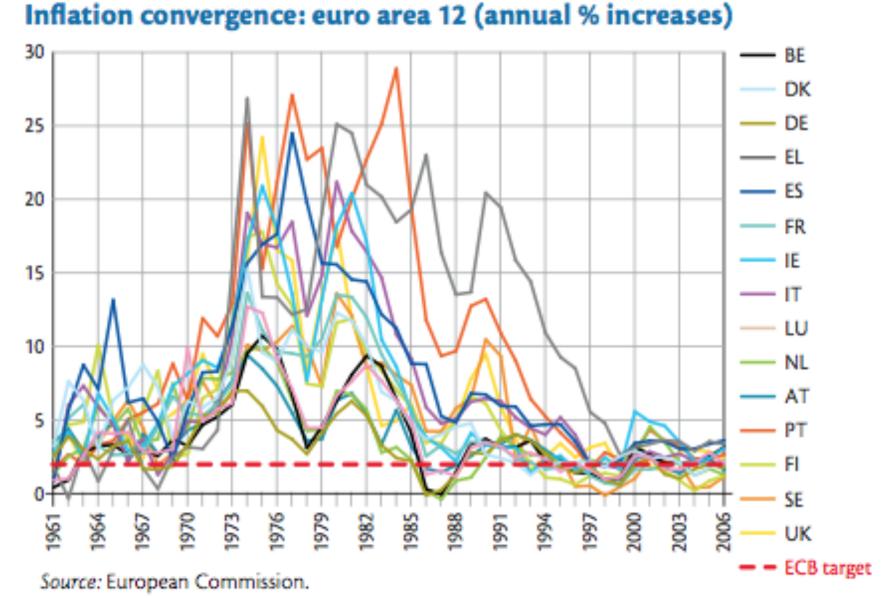
ENDORSED BY: Socialist Party, Workers' Party, Socialist Workers Party, People Before Profit Alliance, Right to Work, Workers Solidarity Movement, éirígí, Irish Socialist Network, Socialist Democracy

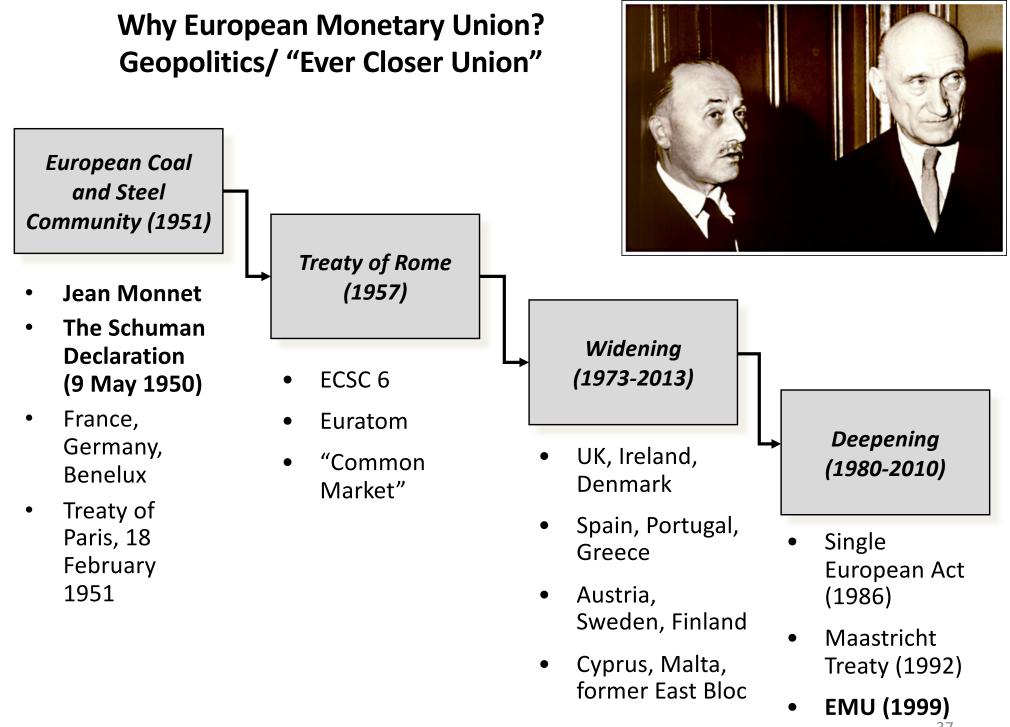
INFO: 01-6795030 / 26JUNEPROTEST@GMAIL.COI

# Why European Monetary Union? Exchange Rate Instability

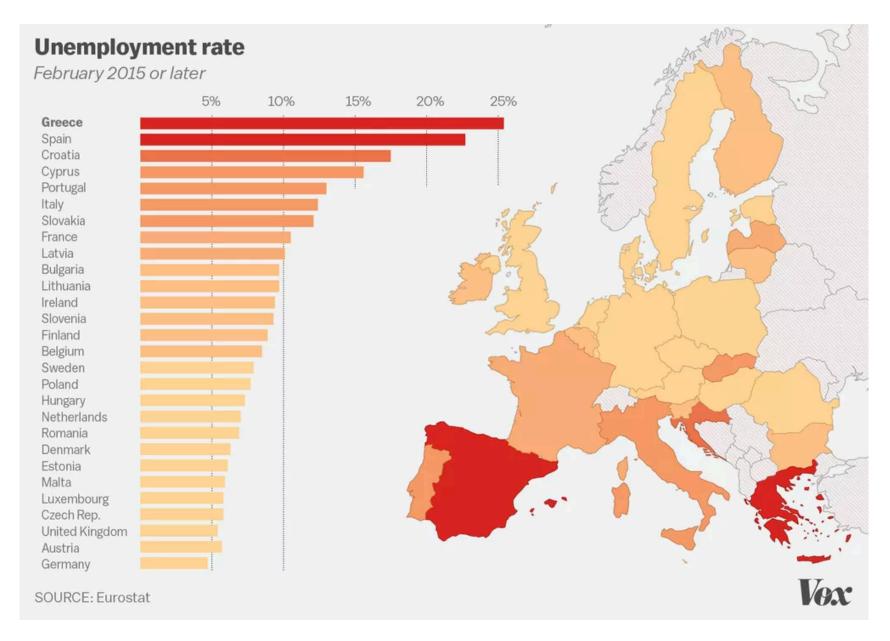


# Why European Monetary Union? Inflation





## The Euro Crisis: Maybe One Money Isn't Such a Great Idea?



#### "One size" monetary/fiscal policy doesn't fit all countries

# How Might Greece/Italy/Portugal/Spain Respond to This Crisis?

#### Increase the money supply

• Print more Euros

#### Increase demand in the economy

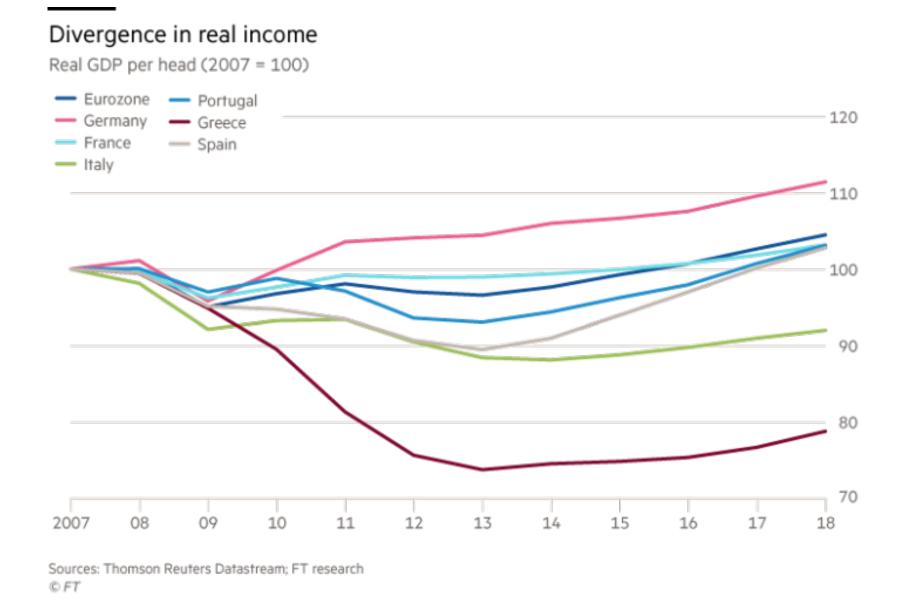
- Directly: government spends more itself (fiscal policy)
- Indirectly: cut interest rates (makes saving less attractive and consumer/firm borrowing and spending today cheaper)

#### **Devalue the currency**

• Let the exchange rate depreciate to stimulate exports and growth

#### PROBLEM: As Euro members, these countries don't have their own currency and can't do any of these things by themselves

### What Happens When Countries Can't Adjust Policies During Crises?



#### Greece's GDP per capita is still >20% below its 2007 level

40

# The Eurozone: Four Possible Medium-Term Solutions

#### Looser monetary policy/higher inflation for a very long time

• Problem: likely to work economically, unacceptable to Germany politically

#### Permanent "bailouts" of the southern "periphery" by the northern "core"

- Problem: might bankrupt the core (Germany, France, etc.)
- Problem: politically unsustainable in a monetary union of equals

#### Permanent austerity/depression in Greece and Italy

• Problem: politically acceptable to Germany, but not to  $G/I \rightarrow$  leads to....

#### Possible "-exits"/collapse of the Eurozone

• Problem: one country leaving may be slippery slope to complete collapse

# The Long-Term Debate (and Long Past Debate): Does Monetary Union Require Political Union?

