



CENTRAL  
*to*  
AMERICA'S  
ECONOMY™

# The U.S. Fiscal Situation

Christopher J. Neely

Assistant Vice President

Federal Reserve Bank of St. Louis

Wednesday Club

Ladue, MO

October 16, 2013

# Disclaimer #1



CENTRAL  
*to*  
AMERICA'S  
ECONOMY™

Disclaimer: The views expressed are those of the author and do not necessarily reflect those of the Federal Reserve Bank of St. Louis or the Federal Reserve System. Really.

I thank Sean Grover for his assistance with this presentation.

# Disclaimer #2



CENTRAL  
*to*  
AMERICA'S  
ECONOMY™

Disclaimer: Government spending and taxation are political decisions. The Federal Reserve and I are strictly apolitical.

My remarks should not be construed as supporting any political position or party.

# The Agenda

---

- Governments have budget constraints and do default.
- Debt is measured relative to GDP
- U.S. debt spikes have followed wars.
- US deficits began in the late 1960s.
- Defense and discretionary spending has been falling.
- Big issue: Medicare/medicaid & SS expenditures.
- US deficits/debt are large internationally.
- Resolutions of the U.S. Fiscal Situation?

# The Government Budget Constraint

---

- The present value of total expenditures (forever) cannot exceed the present value of taxes (forever).
  - A government doesn't have to balance its budget every year; neither does your family.
  - Governments live approximately forever. (Or something close.)
- Balanced budgets aren't necessary or wise.
  - Reasons for unbalanced budgets: Recessions, wars, capital investments and demographic imbalances.

# The Government Budget Constraint

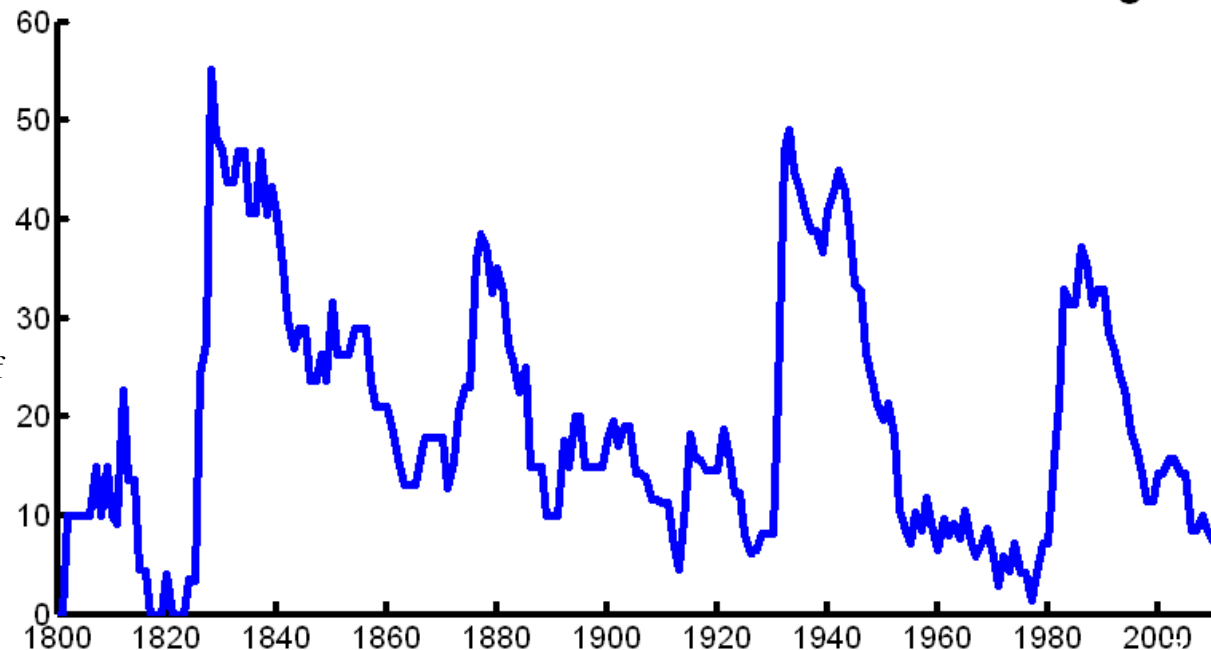
---

- Ben Franklin believed in balanced budgets, period by period.
  - “Neither a borrower nor a lender be.”

# The Government Budget Constraint

- Government defaults are common.
  - See Reinhart and Rogoff: “This Time Is Different.”
  - Explicit vs. implicit (inflation) defaults.

Percent of Countries in Default or Restructuring



Source: This Time Is Different: A Panoramic View Of Eight Centuries Of Financial Crises, Carmen M. Reinhart, Kenneth S. Rogoff, WP 13882  
<http://www.nber.org/papers/w13882>

## How to measure debt?

---

- Measure with respect to GDP.
  - Debt sustainability is relative to income/wealth.



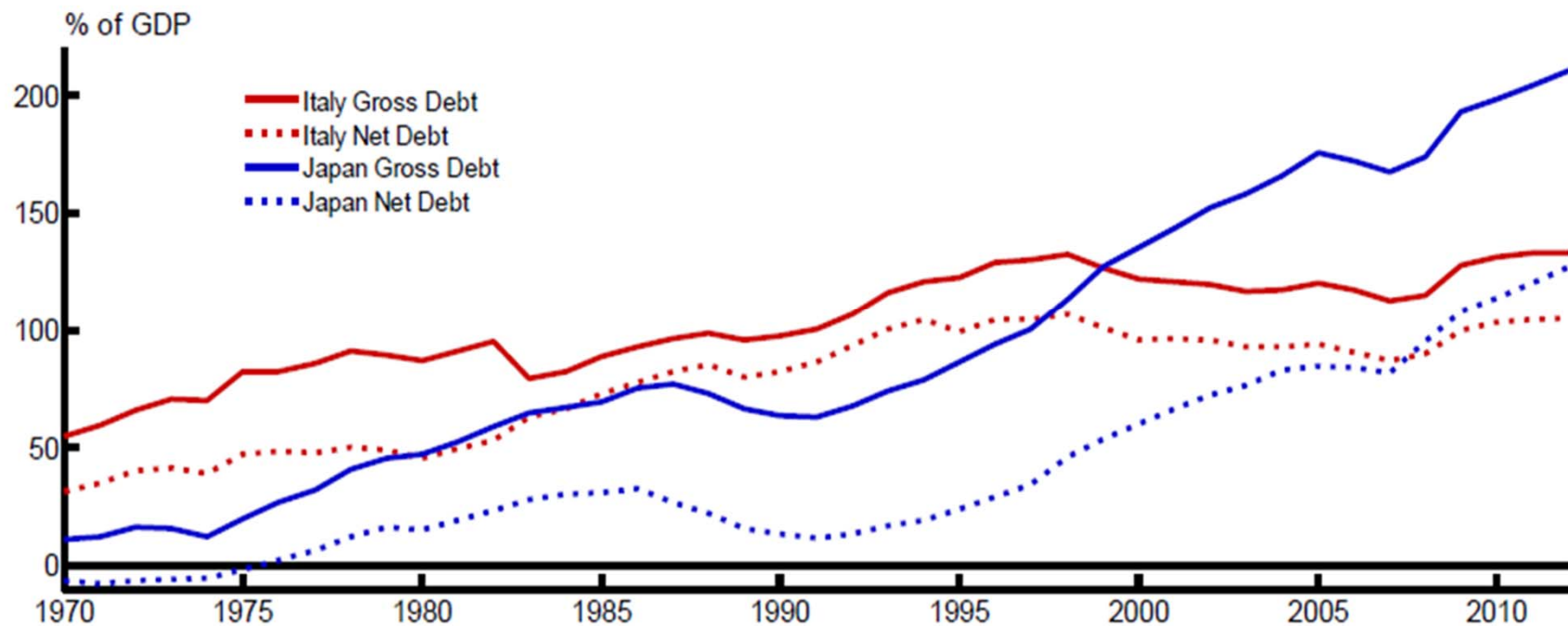
## How to measure debt?

---

- Many possible ways to measure debt-to-GDP
  - Gross versus net debts
  - Include state/local debt
  - Net out government/Fed held debt?
  - Future liabilities? E.g., Social security and Medicare.
- Different “rules” produce different numbers.
  - The sustainability of debt doesn't usually depend on the definition.

## How to measure debt?

- How large of a deficit/debt can a country run?
  - Deficits and debts are typically expressed as a % of GDP.



## Consequences of “excessive” debt

---

- Less national saving and future income.
  - Government deficit is “dissaving.”
  - Saving is fuel for investment/future income.
- Larger (distortionary) taxes.
- Reduced ability to respond to emergencies.
- Higher probability of a fiscal crisis.

## Is debt a burden on our children?

---

- Analogous answer to that for an individual.
- What causes the debt?
  - Investment versus consumption.
    - High returns on infrastructure.
    - Capital budgeting would reveal no debt.
  - One-time necessary expenditures: War
  - Tax cuts
    - May not matter at all, but probably do.

## Long-run trends in the US fiscal outlook

---

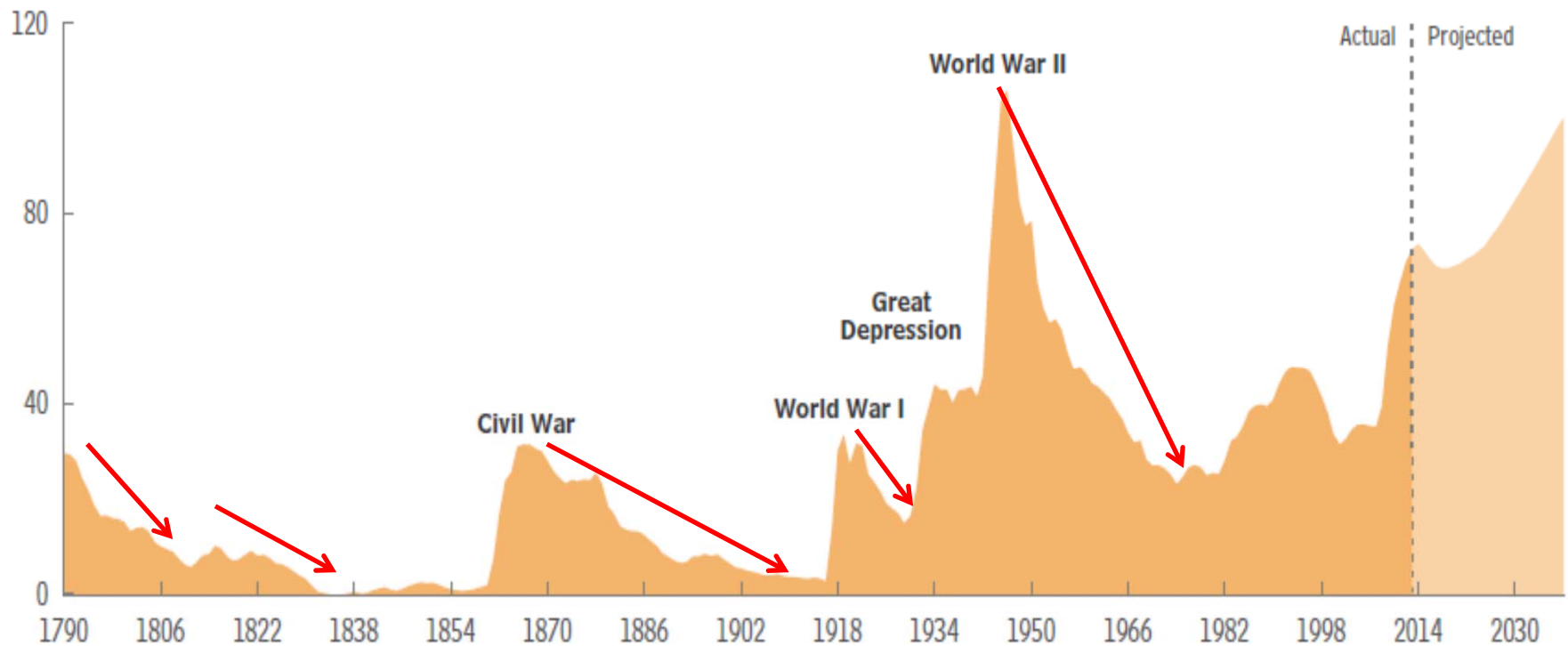
- US debt used to fluctuate around wars
- Revenue broadly stable; expenditures up since 1970s.
- Less on defense since the 1980s. Less in the future.
- Less on other discretionary programs.
- Aging population; rising healthcare costs.
  - More on healthcare.
  - More on transfers programs.

# U.S. debt used to fluctuate around wars

**Figure 1-1.**

## Federal Debt Held by the Public Under CBO's Extended Baseline

(Percentage of gross domestic product)

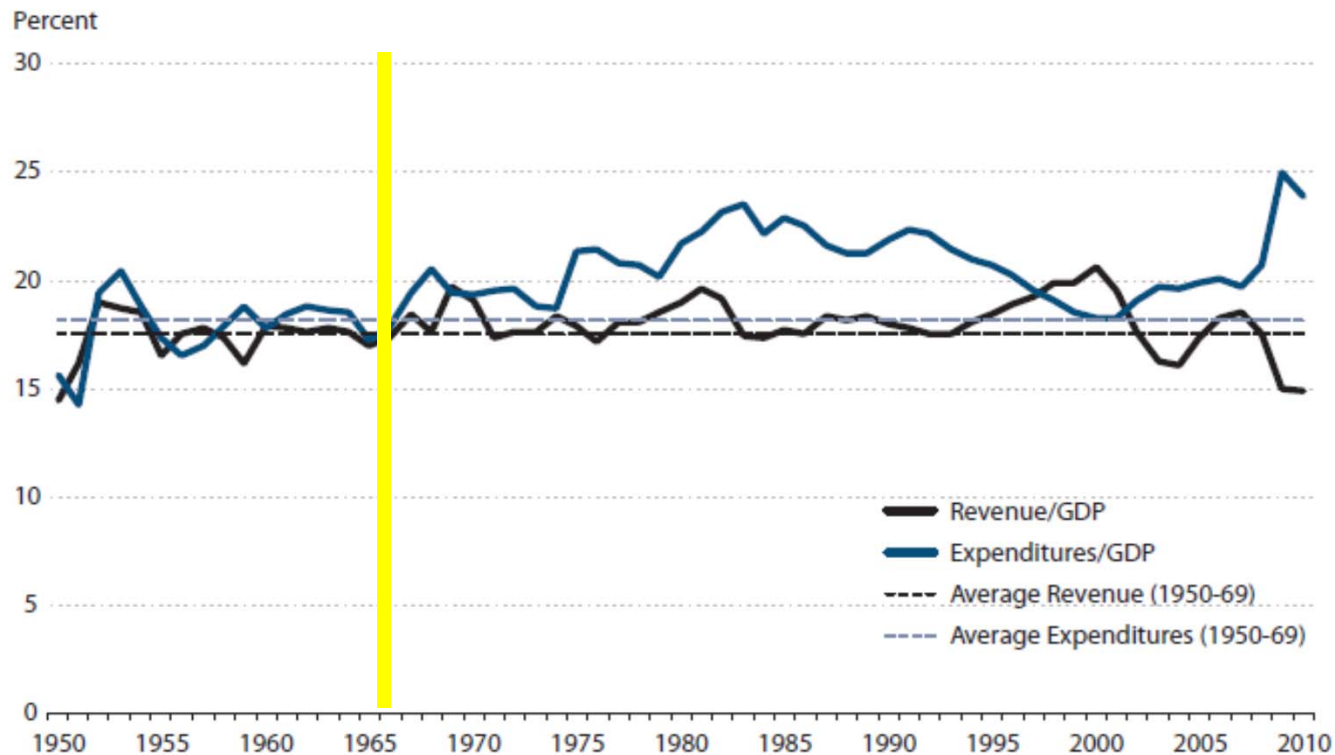


# Revenues vs. expenditures

- Expenditures rose in the 1970s; revenue stayed.

Figure 3

Revenue and Expenditures as a Percent of GDP (1950-2010)



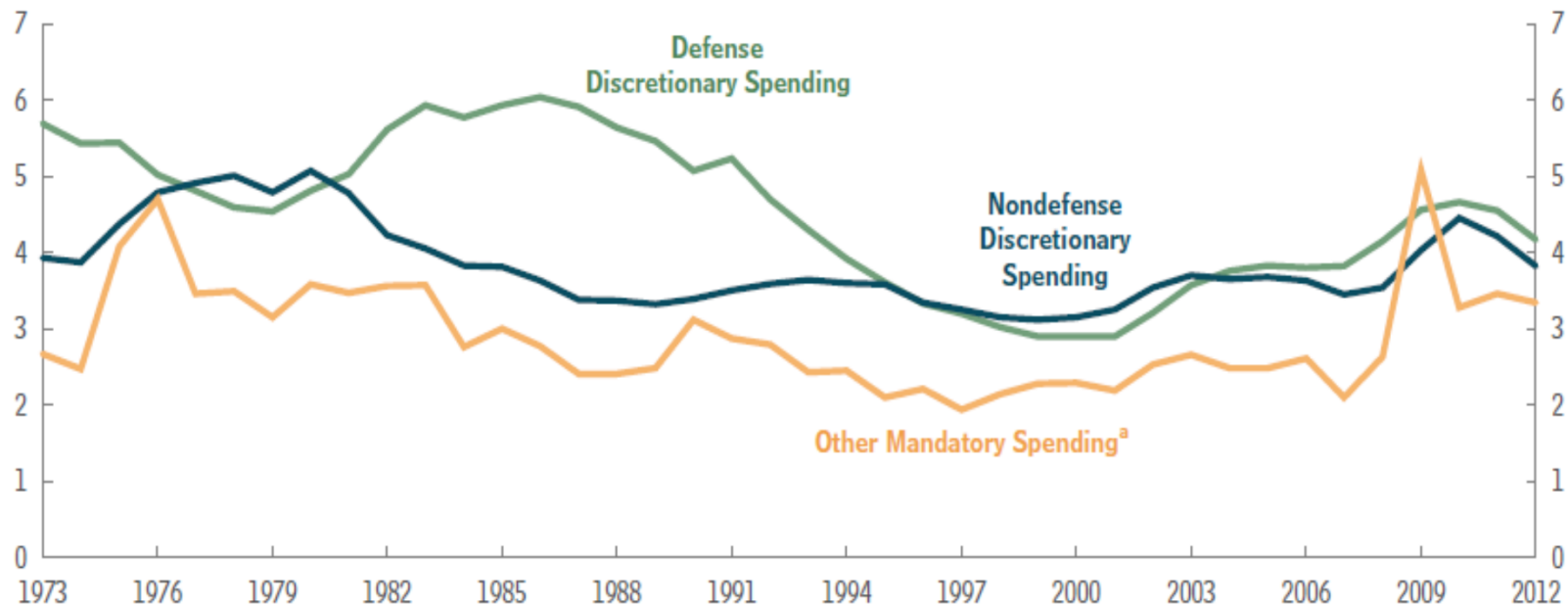
## Lower defense spending

- Defense spending fell from 5-6% of GDP to 3%, then back up.

**Figure 4-2.**

### Other Federal Spending, by Category, Since 1973

(Percentage of gross domestic product)



Source: Congressional Budget Office.

- a. Other mandatory spending is all mandatory spending other than that for major health care programs, Social Security, and net interest. It includes the refundable portions of the earned income and child tax credits and of the American Opportunity Tax Credit.

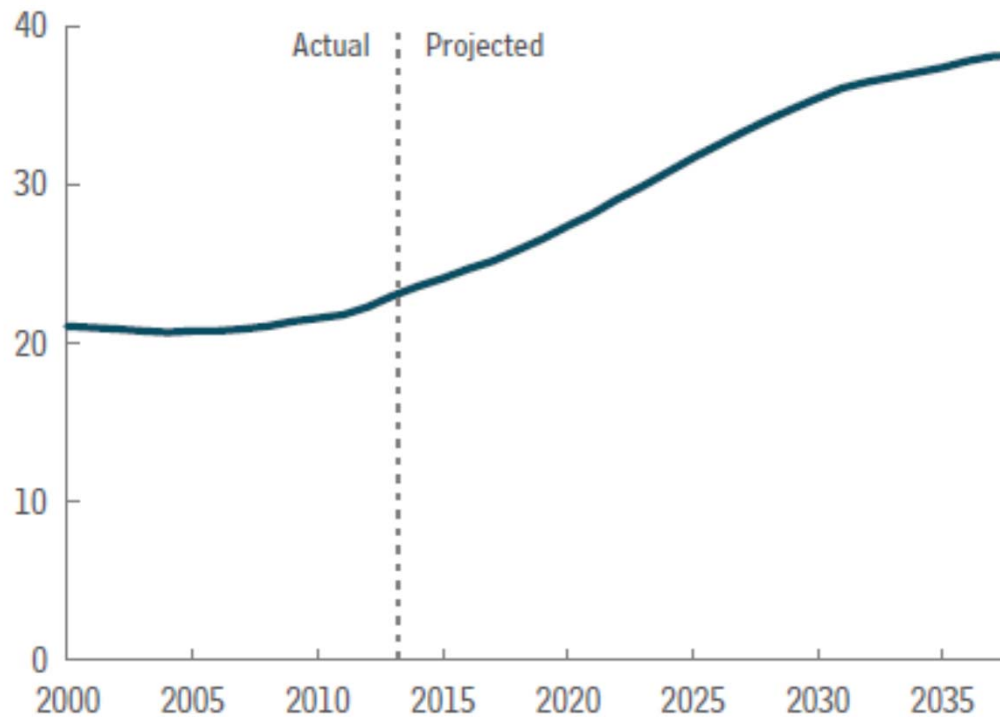


# Aging population; rising health costs

**Figure 3-2.**

## Population Age 65 or Older as a Share of the Population Ages 20 to 64

(Percent)



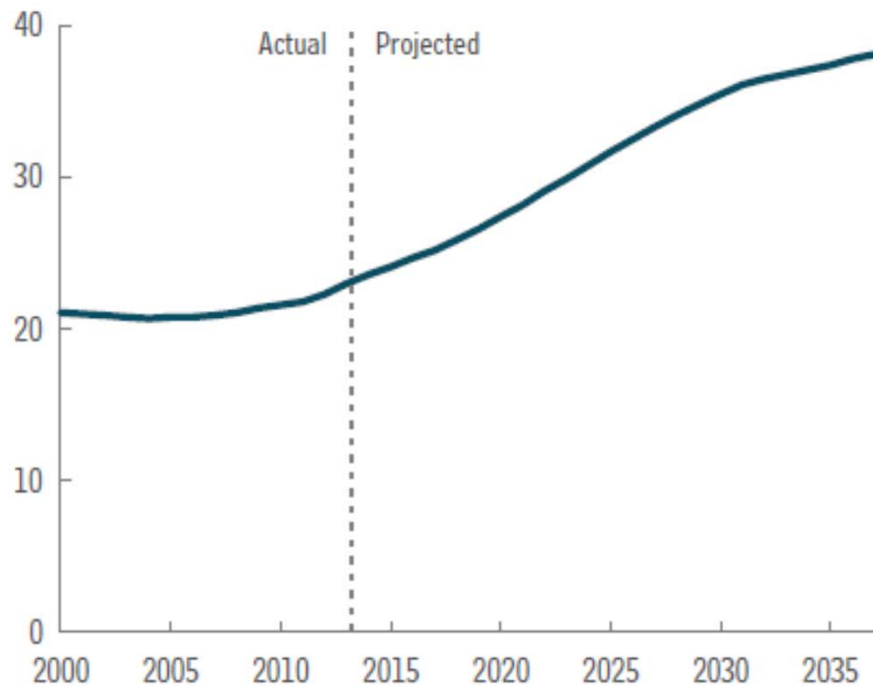
Source: Congressional Budget Office.

# Aging population

**Figure 3-2.**

## Population Age 65 or Older as a Share of the Population Ages 20 to 64

(Percent)

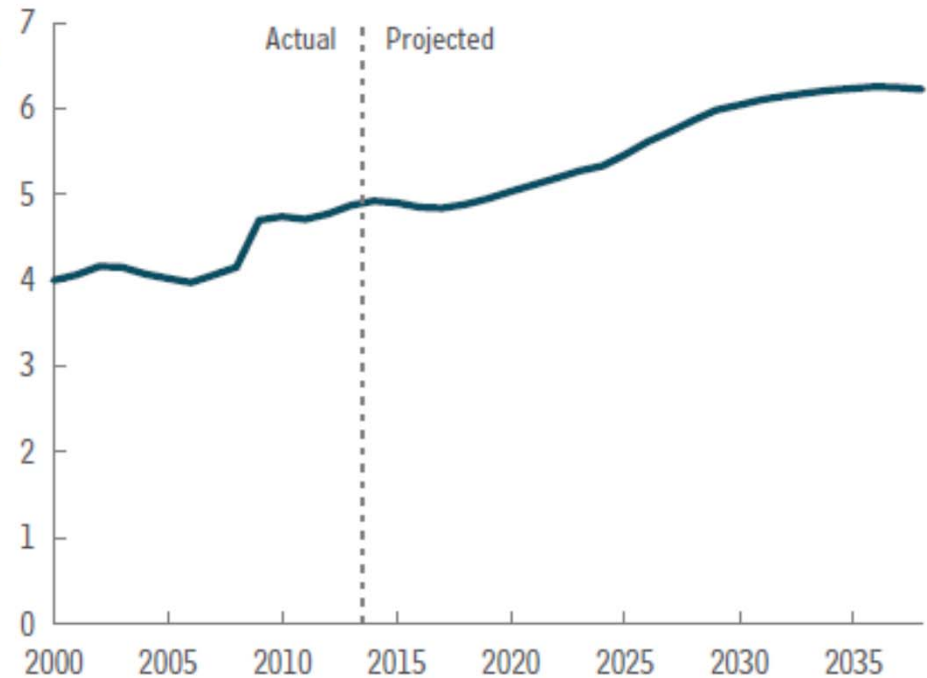


Source: Congressional Budget Office.

**Figure 3-1.**

## Spending for Social Security Under CBO's Extended Baseline

(Percentage of gross domestic product)



Source: Congressional Budget Office.

# What is the U.S. Fiscal Situation?

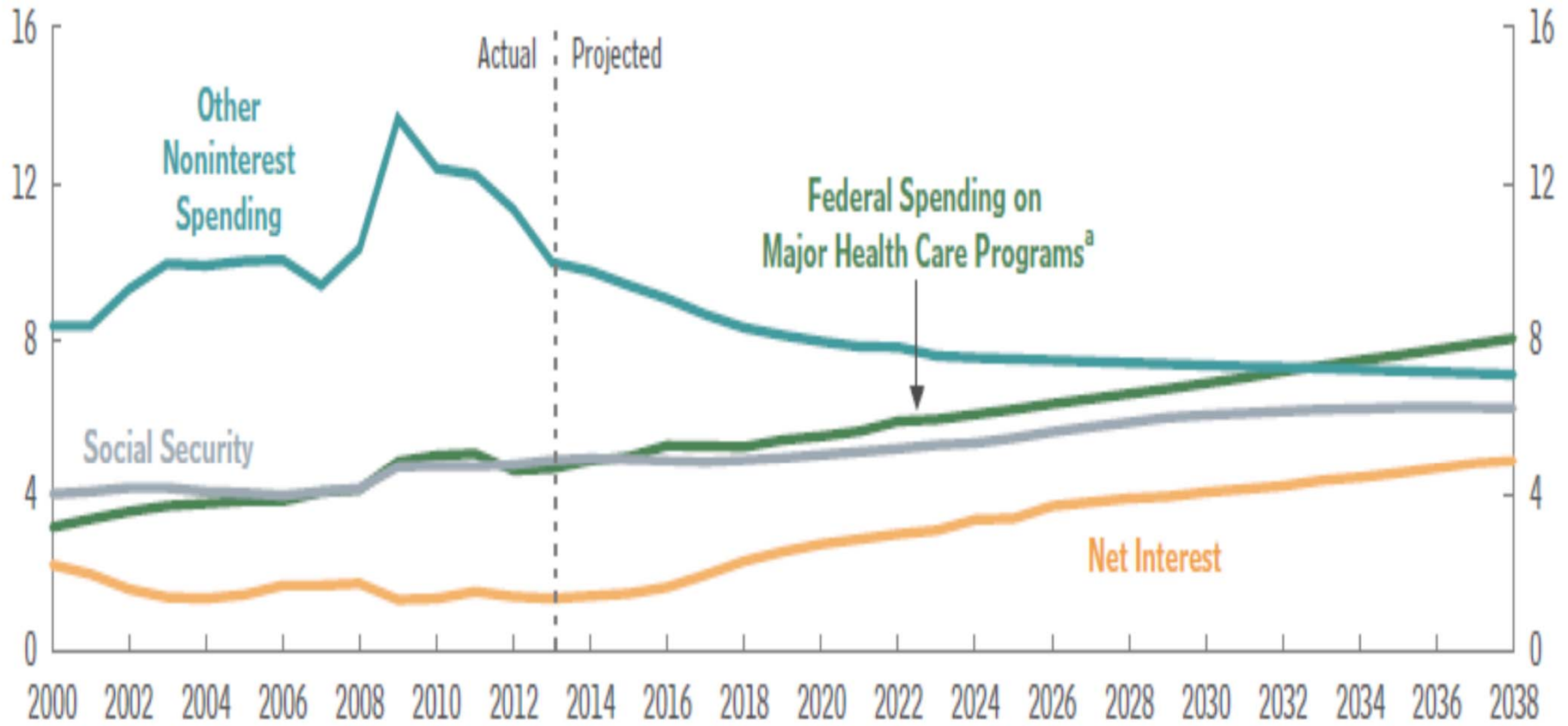
## Not good at all

---

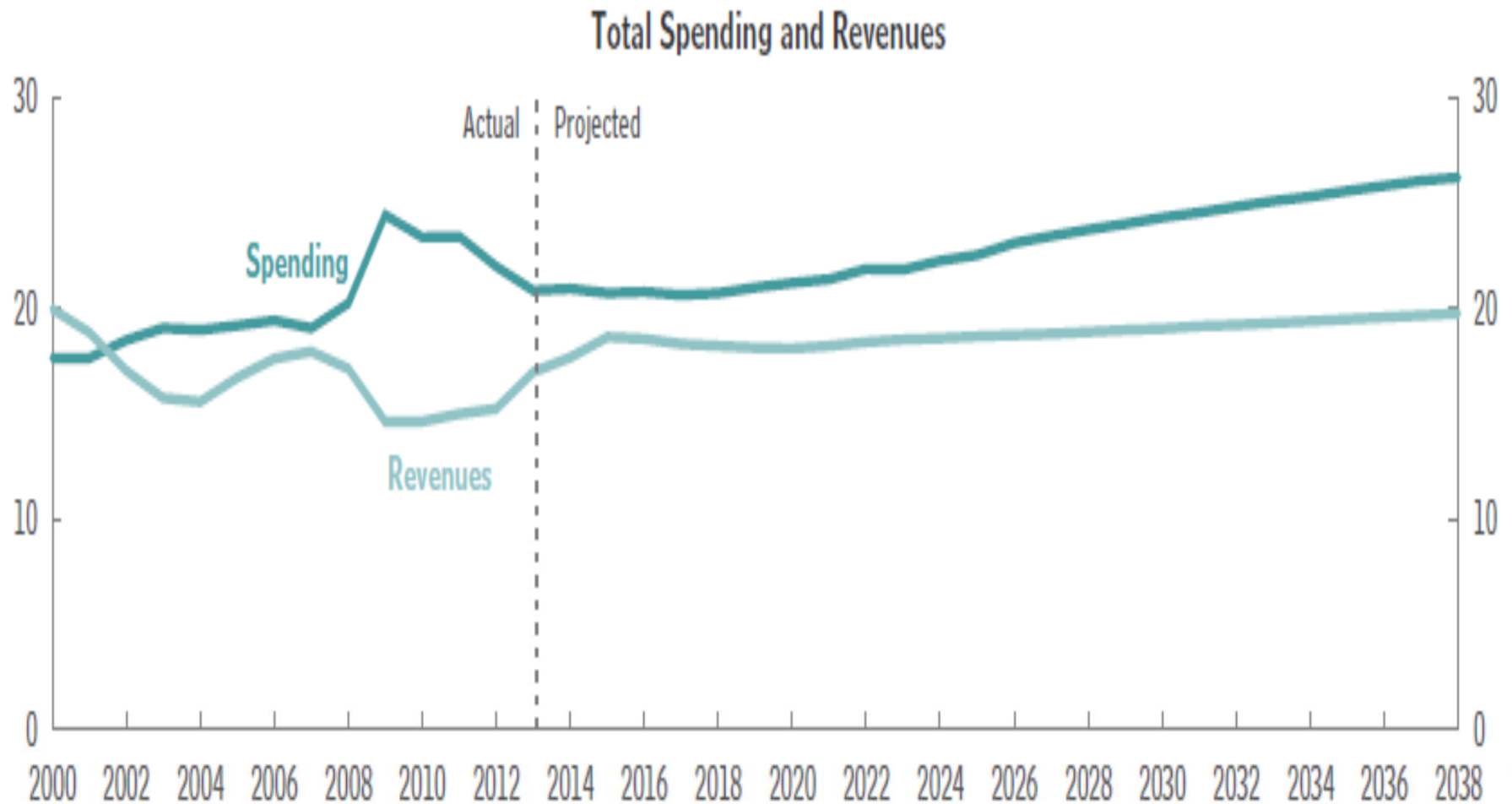
- Medicare is the big long-term problem.
  - Structural problem: Economic & technological growth lead us to want to pay a higher fraction of our income for medical care.
  - A third party payer removes a check on growth.

# Rising health care expenditures

Components of Total Spending



# Endless large deficits?

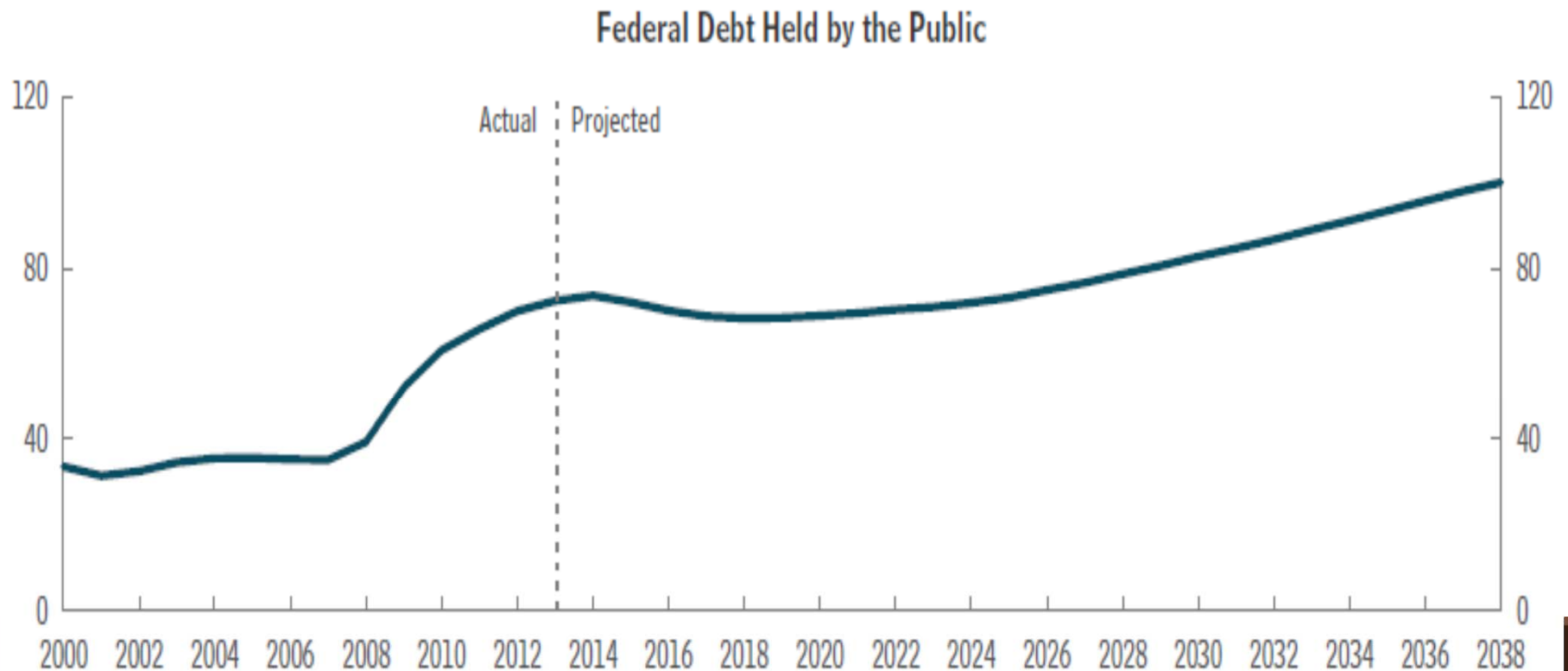


# Rising debt?

## Summary Figure 1.

### Debt, Spending, and Revenues Under CBO's Extended Baseline

(Percentage of gross domestic product)

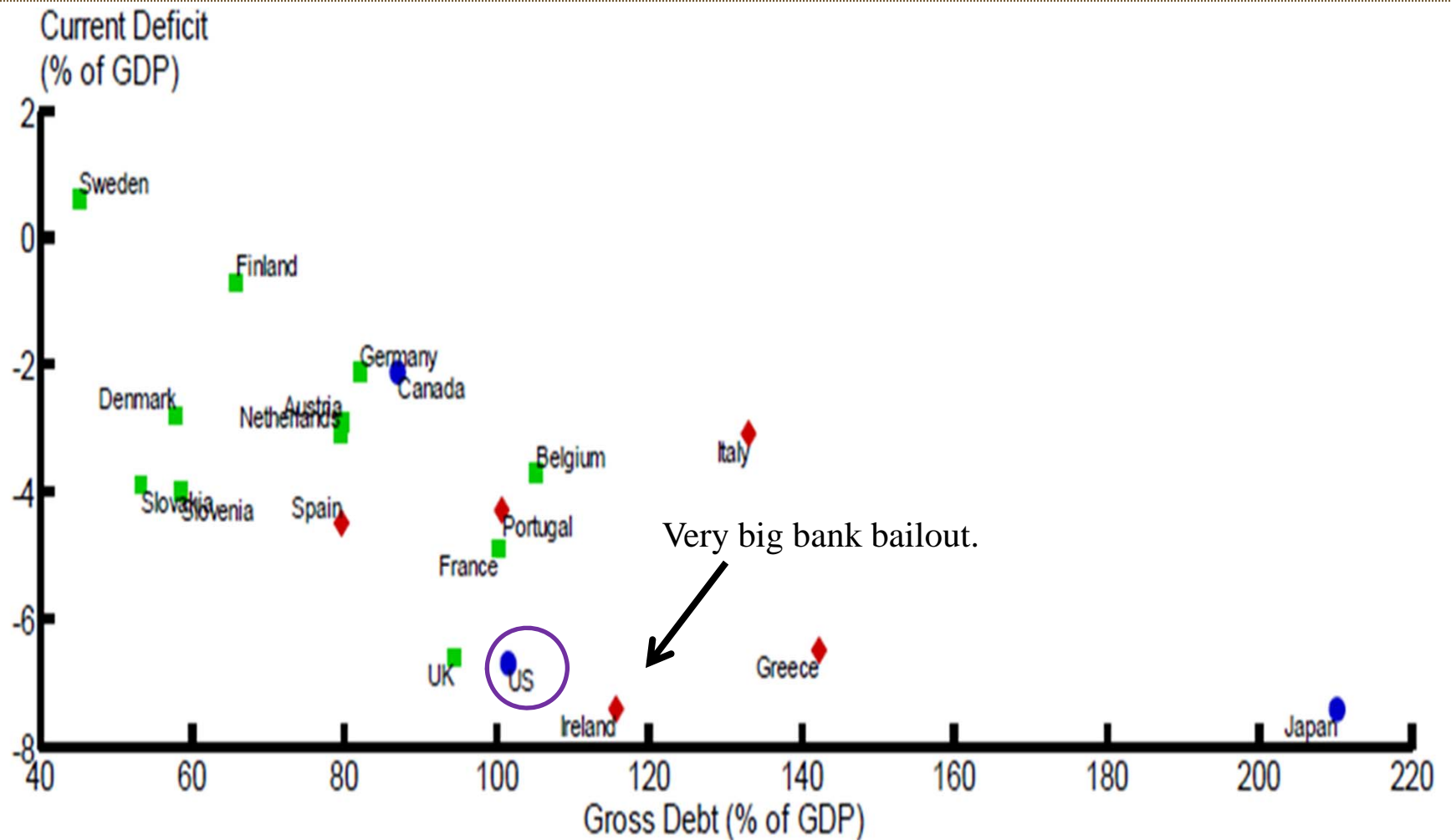


# What is the U.S. Fiscal Situation? An International Comparison

---

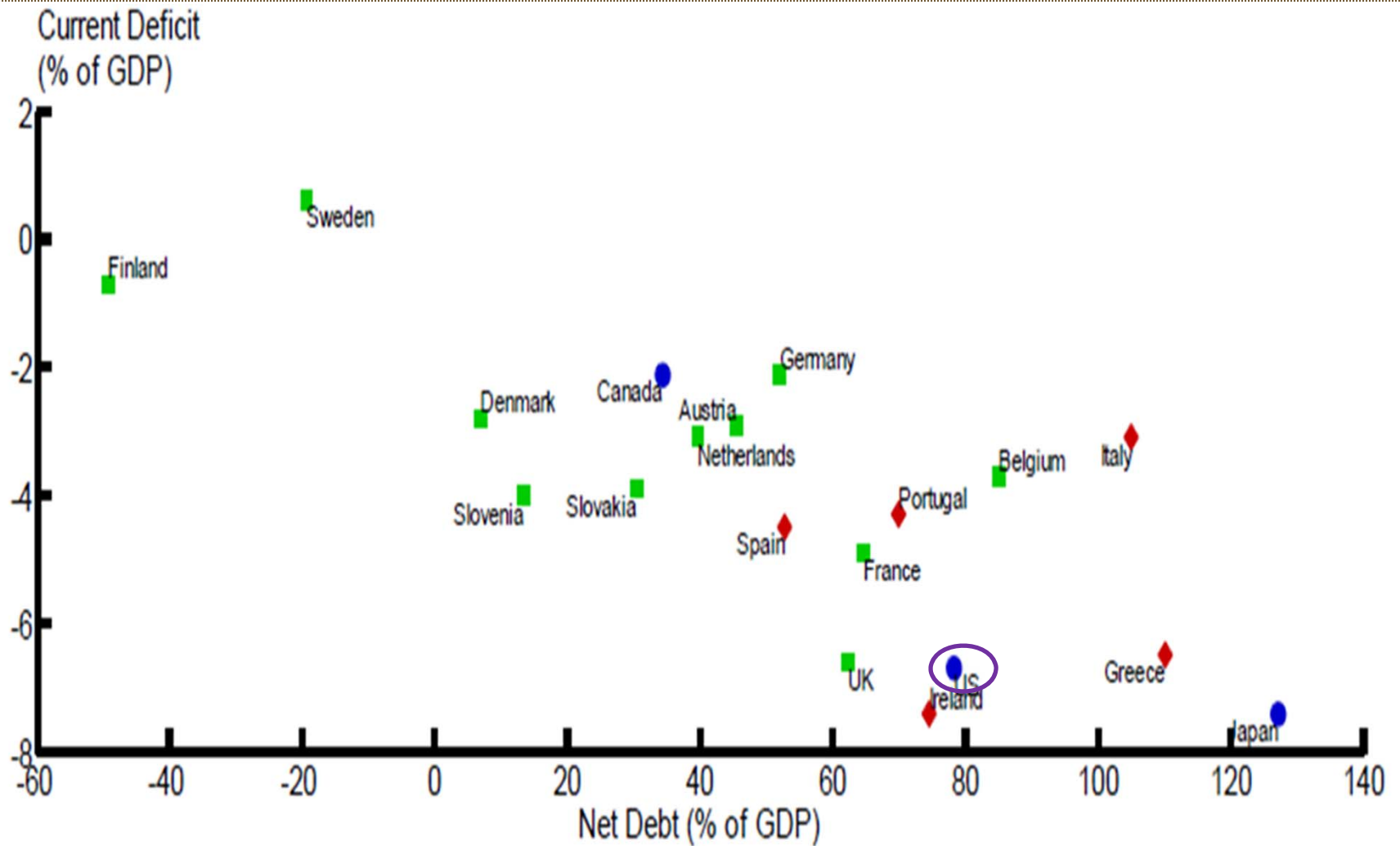
- Federal problems
  - Large deficits.
  - Serious long-term challenges over Medicare/Social Security.
    - Short term problems are resolvable; the long-term situation is more serious.
- There are also big State problems
  - Discussions of state “bankruptcy.”

# Current Deficits v. Gross Debt





# Current Deficits v. Net Debt



# What is the U.S. Fiscal Situation? An International Comparison

---

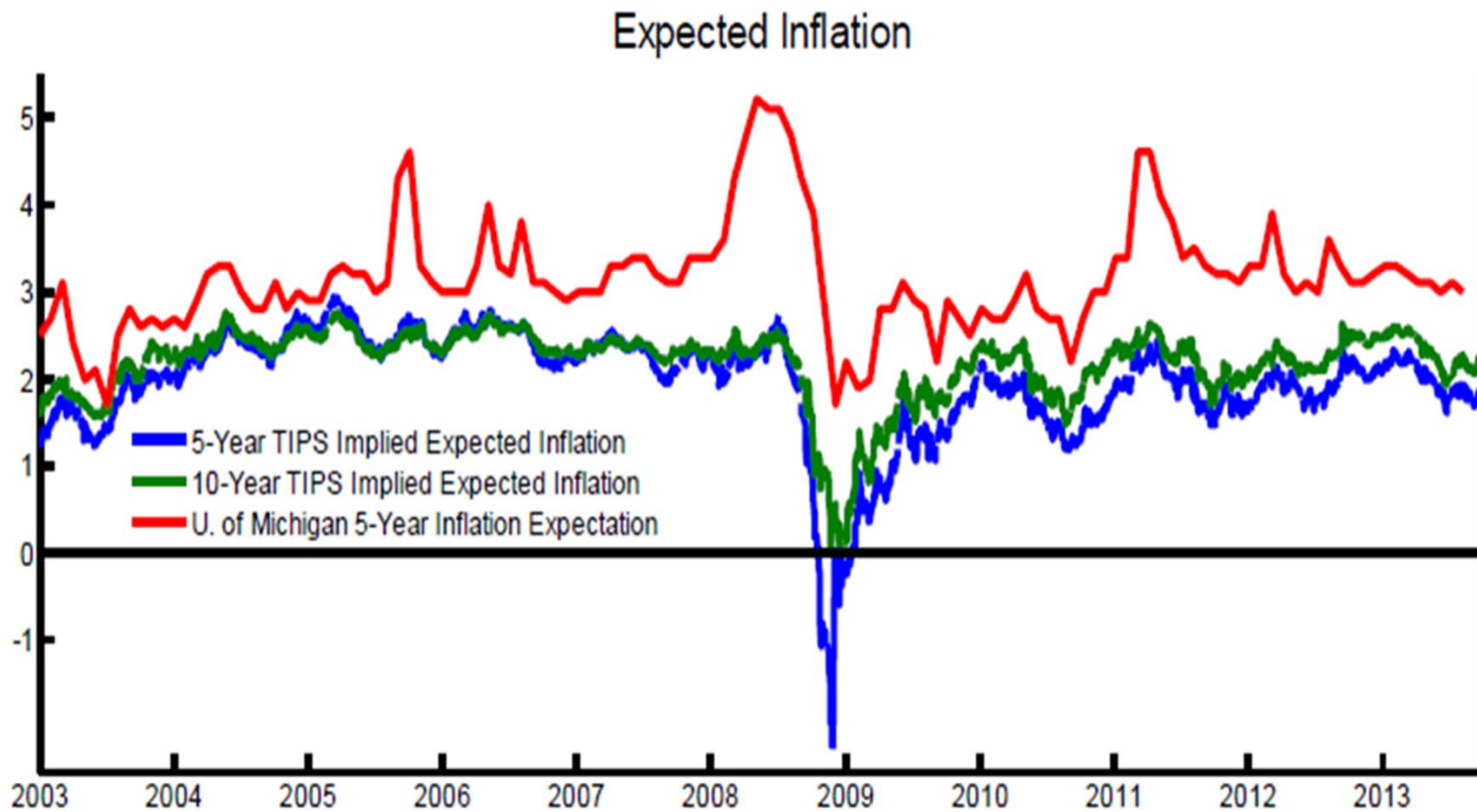
- The U.S. has very large deficits and a large debt ratios.
- EMs cannot accumulate so much debt.
- The U.S. is helped by its size and reputation for not defaulting.

# Resolutions of the U.S. Fiscal Situation?

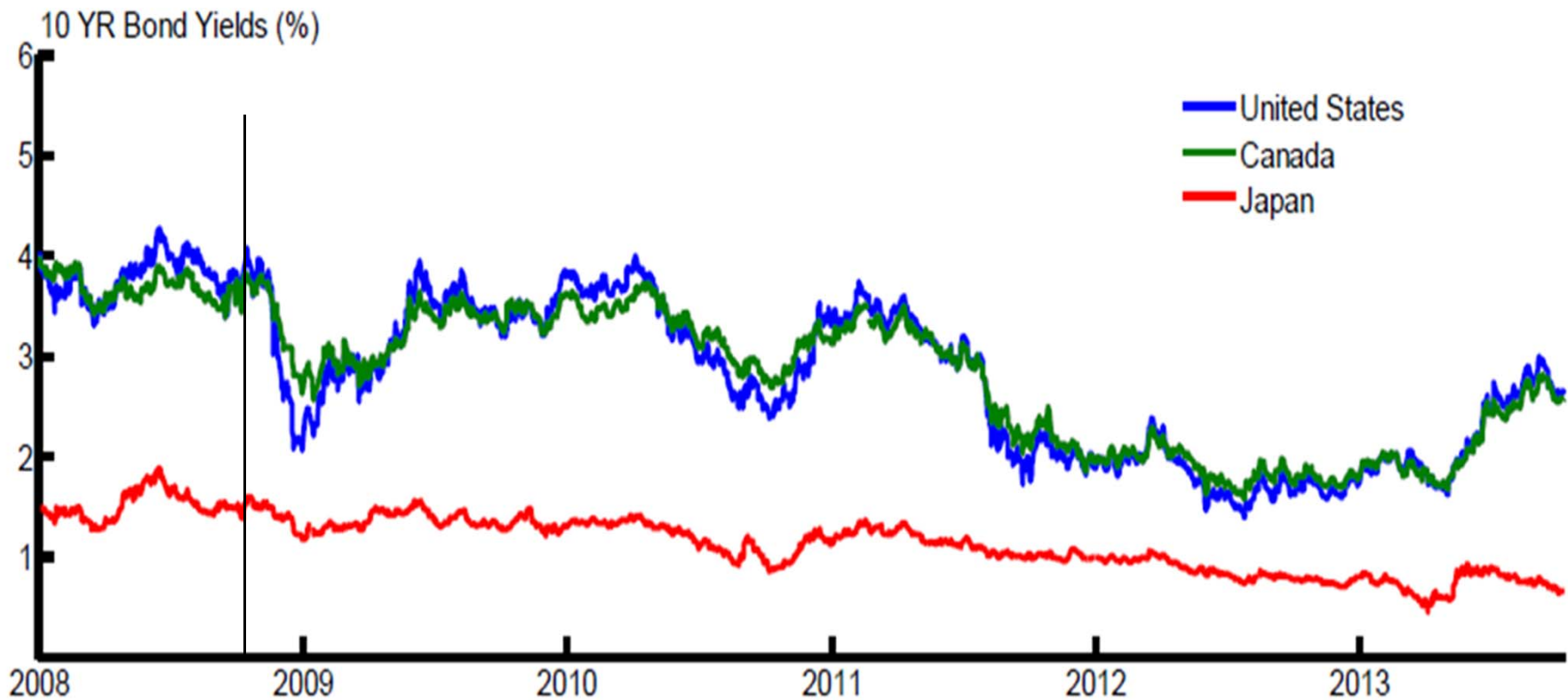
---

- Three ways to resolve the U.S. fiscal situation.
  - A change in tax/spending policies.
  - An explicit default. (Very bad.)
    - Markets place a low probability on this outcome.
    - CDS rates are still fairly low.
  - An implicit default through inflation. (Also very bad.)
    - Markets expect low inflation.
    - The U.S. debt structure would make this very difficult.

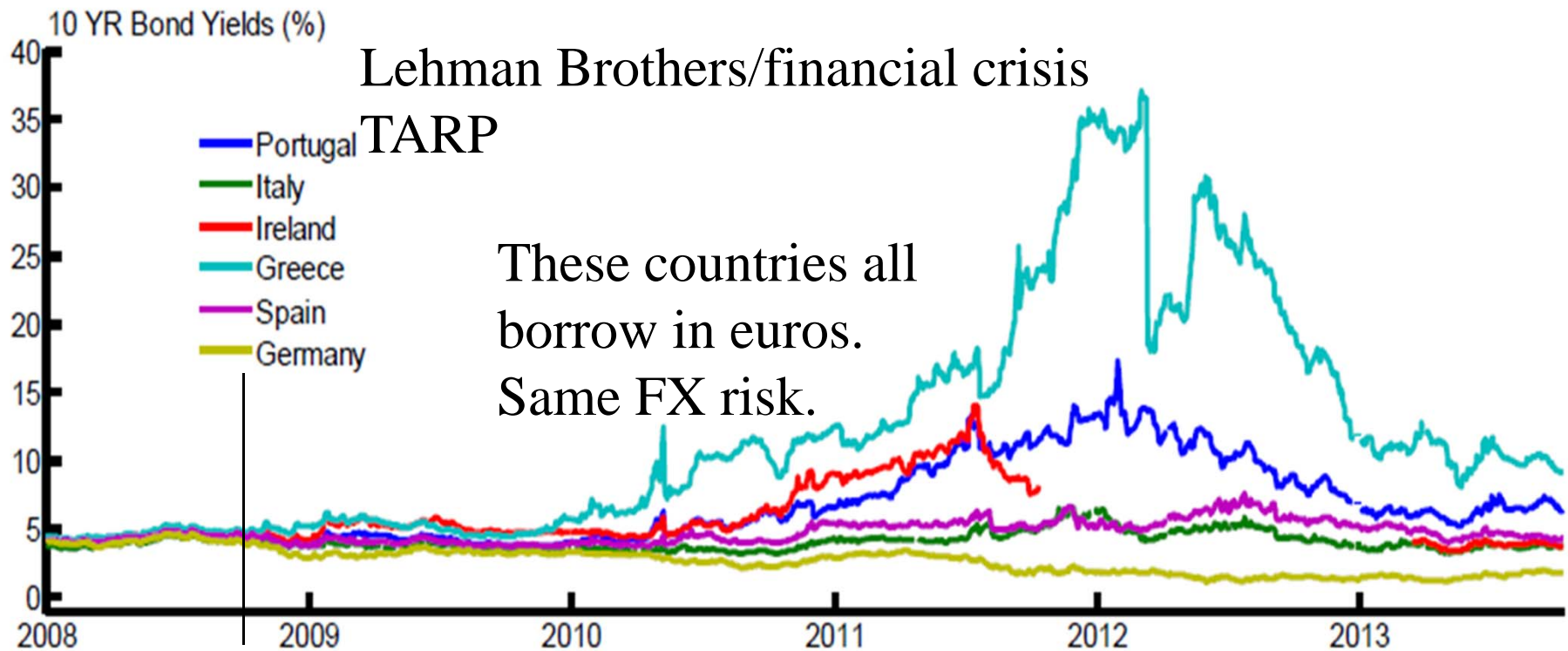
# Expected US inflation is low



# Deficits/debts affect bond yields?



# Deficits/debts affect bond yields?

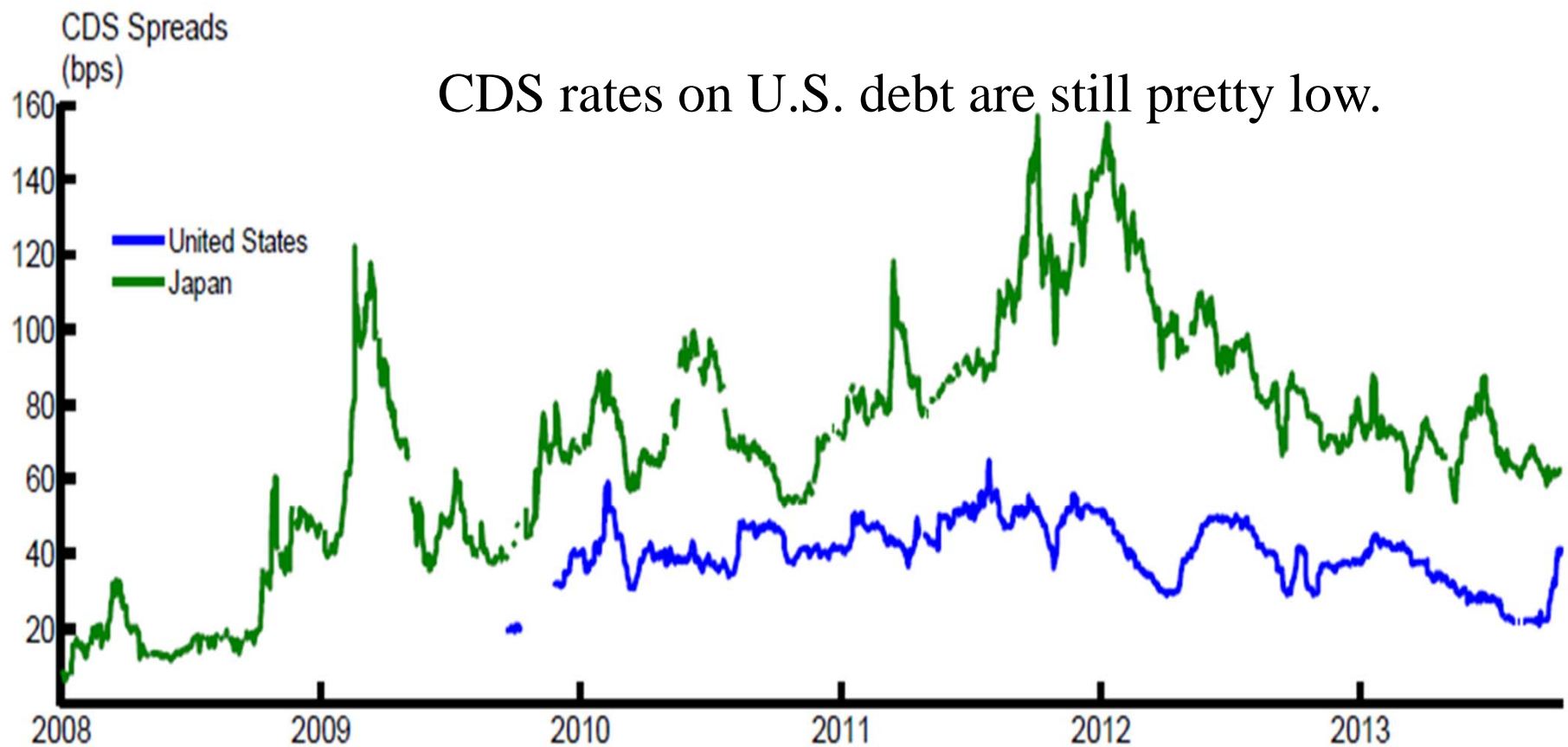


## What are CDS Rates?

---

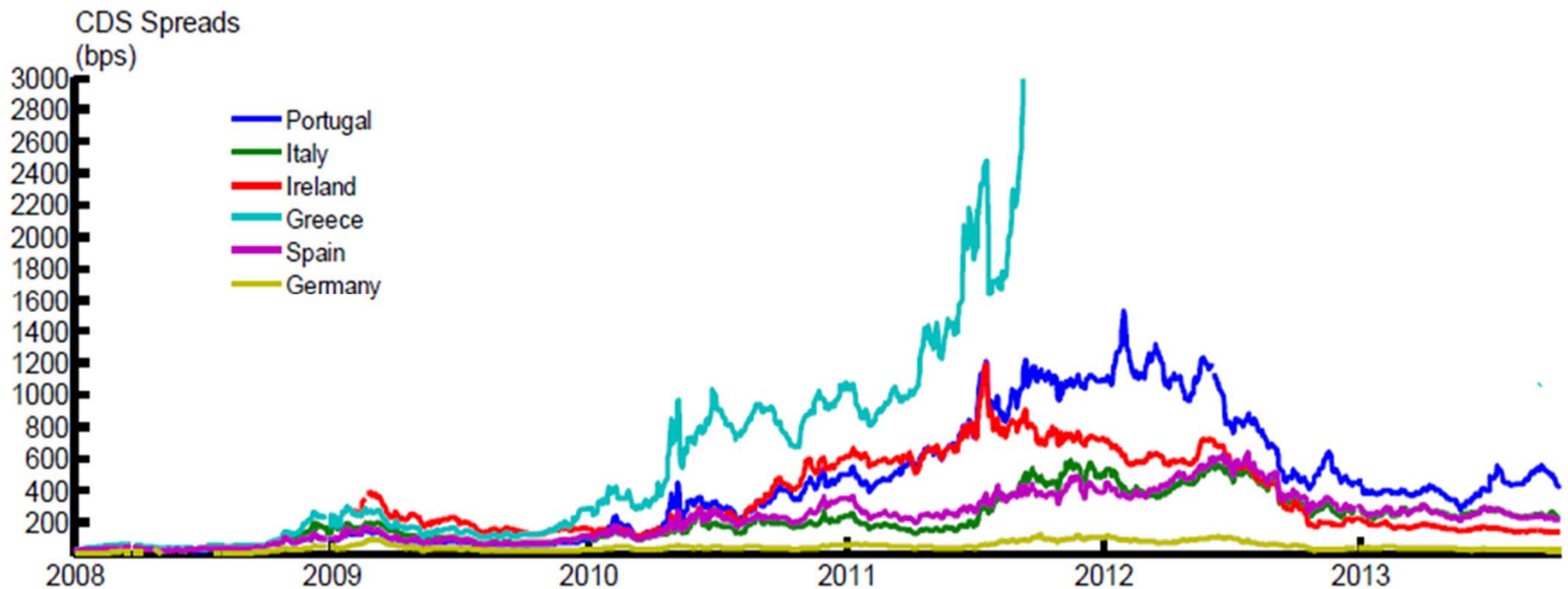
- CDS: Credit default swaps.
- CDSs function much like insurance for bonds.
- Can use CDS rates to derive “risk-neutral” probabilities of default.
  - What are “risk-neutral” probabilities?

## Deficits/Debts affect CDS rates?





# Deficits/Debts affect CDS rates?



## Resolutions of the U.S. Fiscal Situation?

---

- Simply print dollars?
  - Bad idea: Lead to hyperinflation.
  - This is well understood.
- Isn't that the Fed's QE programs?
  - No, QE are temporary.
  - QE purchases don't increase the broader M aggregates right now.
- So what good is QE?
  - It reduces long term interest rates and increases investment projects.

## U.S. Strength

---

- There are few good substitutes for U.S. government debt.
  - The euro, the yen, the pound.
  - The “Officer and a Gentleman” scenario: “I’ve got nowhere else to go.”

## The Bottom Line

---

- The United States faces a difficult fiscal situation.
  - The financial crisis has strongly affected short-run budgets.
  - The long run is actually a more serious problem.
    - Medicare growth, social security.
    - States share in these problems.
  - Low probability on a U.S. default, either implicit or explicit.
- The U.S. has benefitted to some extent from the PIIGS problems.

## Summary

---

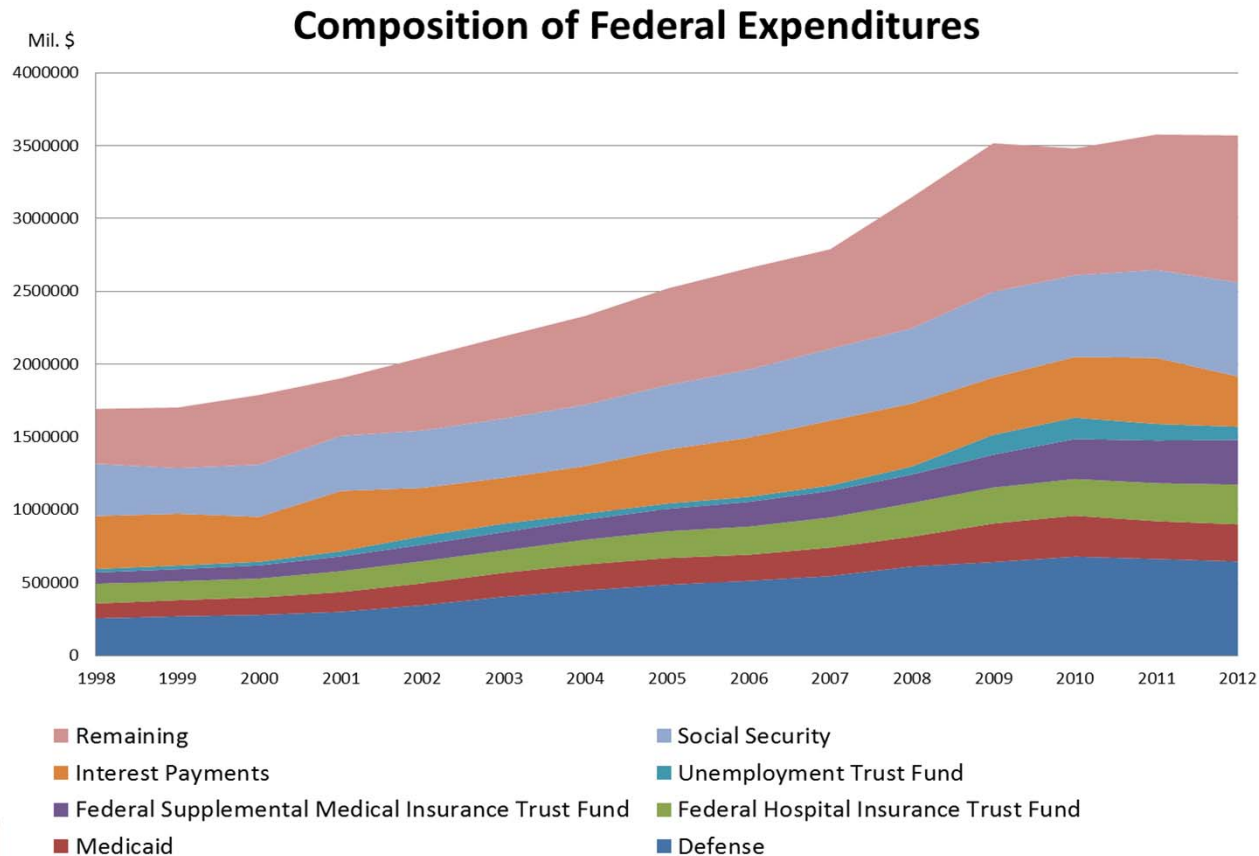
- Governments have budget constraints and do default.
- Debt is measured relative to GDP
- U.S. debt spikes have followed wars.
- US deficits began in the late 1960s.
- Defense and discretionary spending has been falling.
- Big issue: Medicare/medicaid & SS expenditures.
- US deficits/debt are large internationally.
- Resolutions of the U.S. Fiscal Situation?

---

# The End

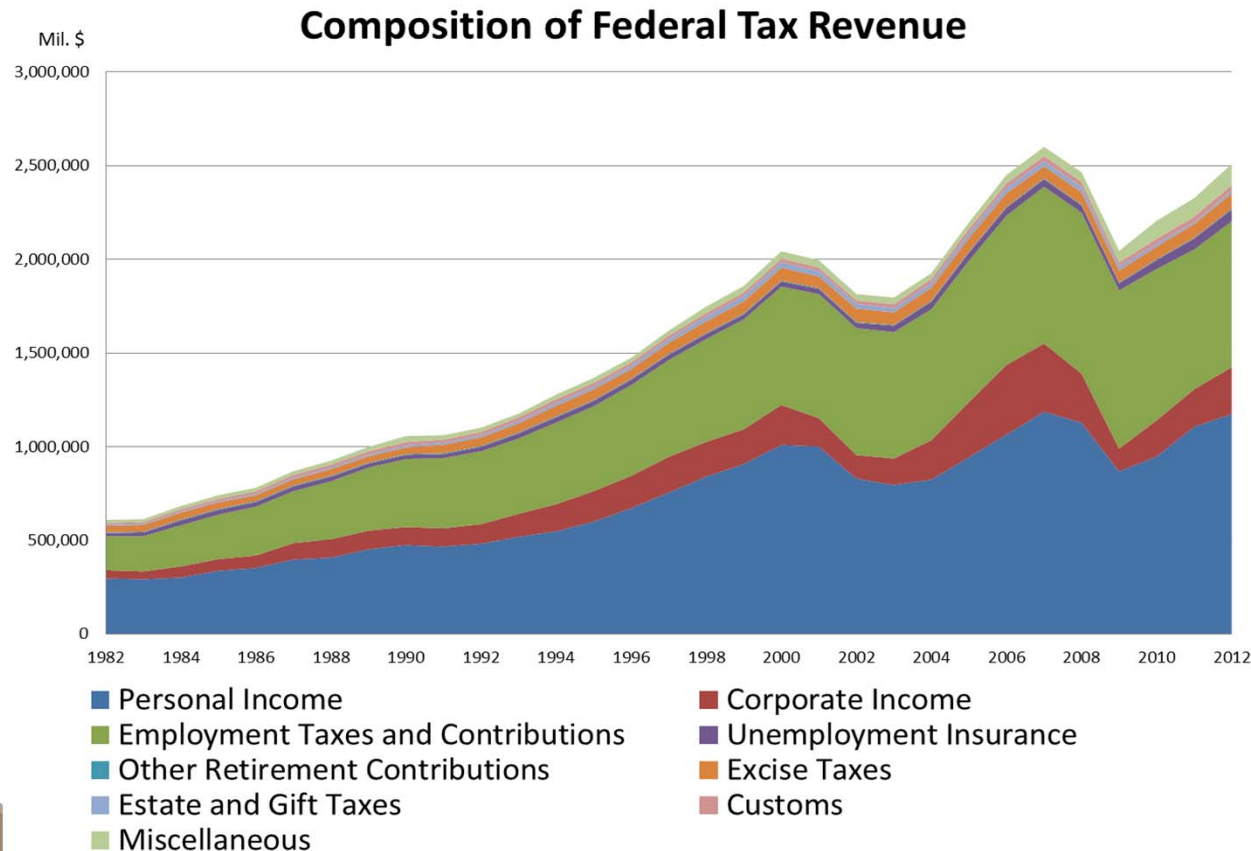
# What does the Federal Government buy?

## Defense, Interest payments, Social Security, Medicare and Medicaid



# Where does Federal revenue come from?

Personal income taxes, payroll taxes and corporate income taxes.

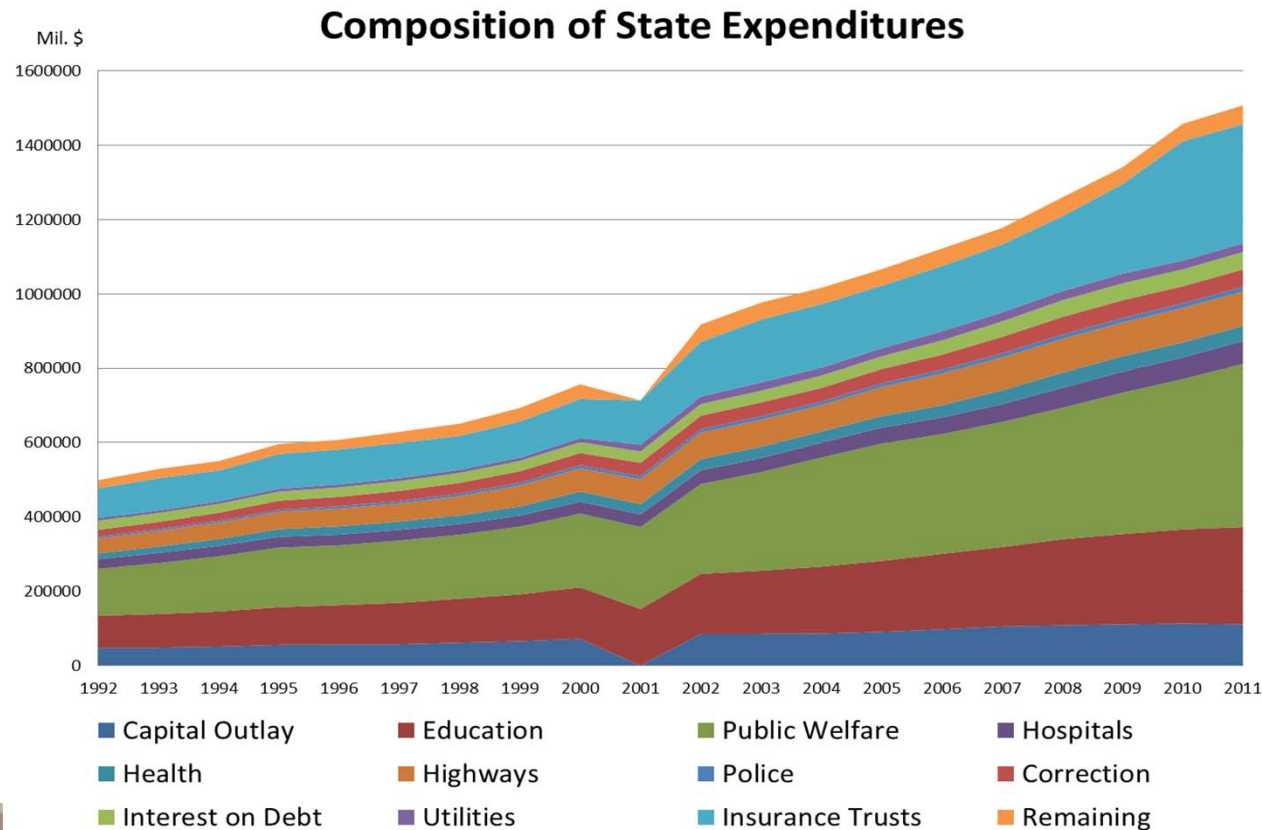


Source: U.S. Treasury



# What do State Governments buy?

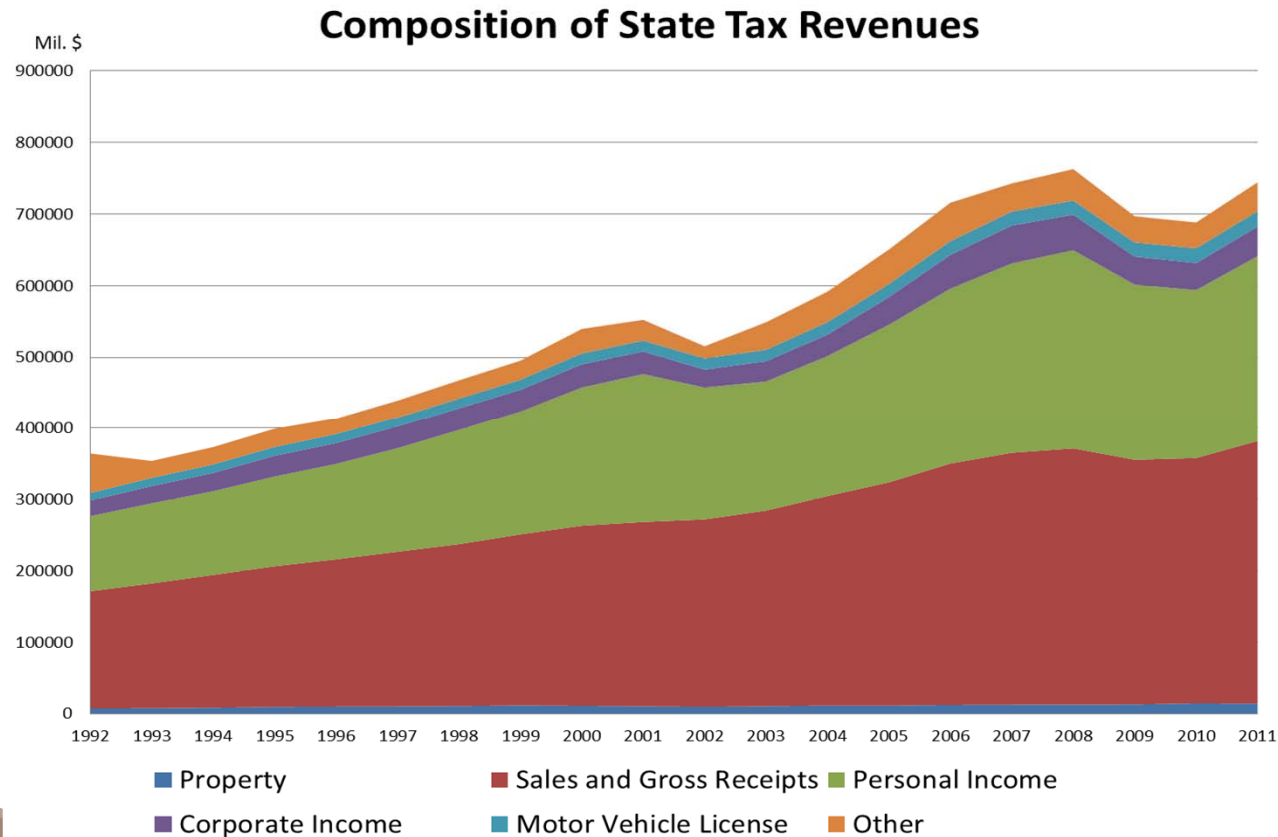
Welfare, schools, hospitals, highways.



Source: U.S. Census

# Where does state revenue come from?

Sales taxes, personal income taxes, corporate income taxes.



Source: U.S. Census