

ECON 3010

Intermediate Macroeconomics

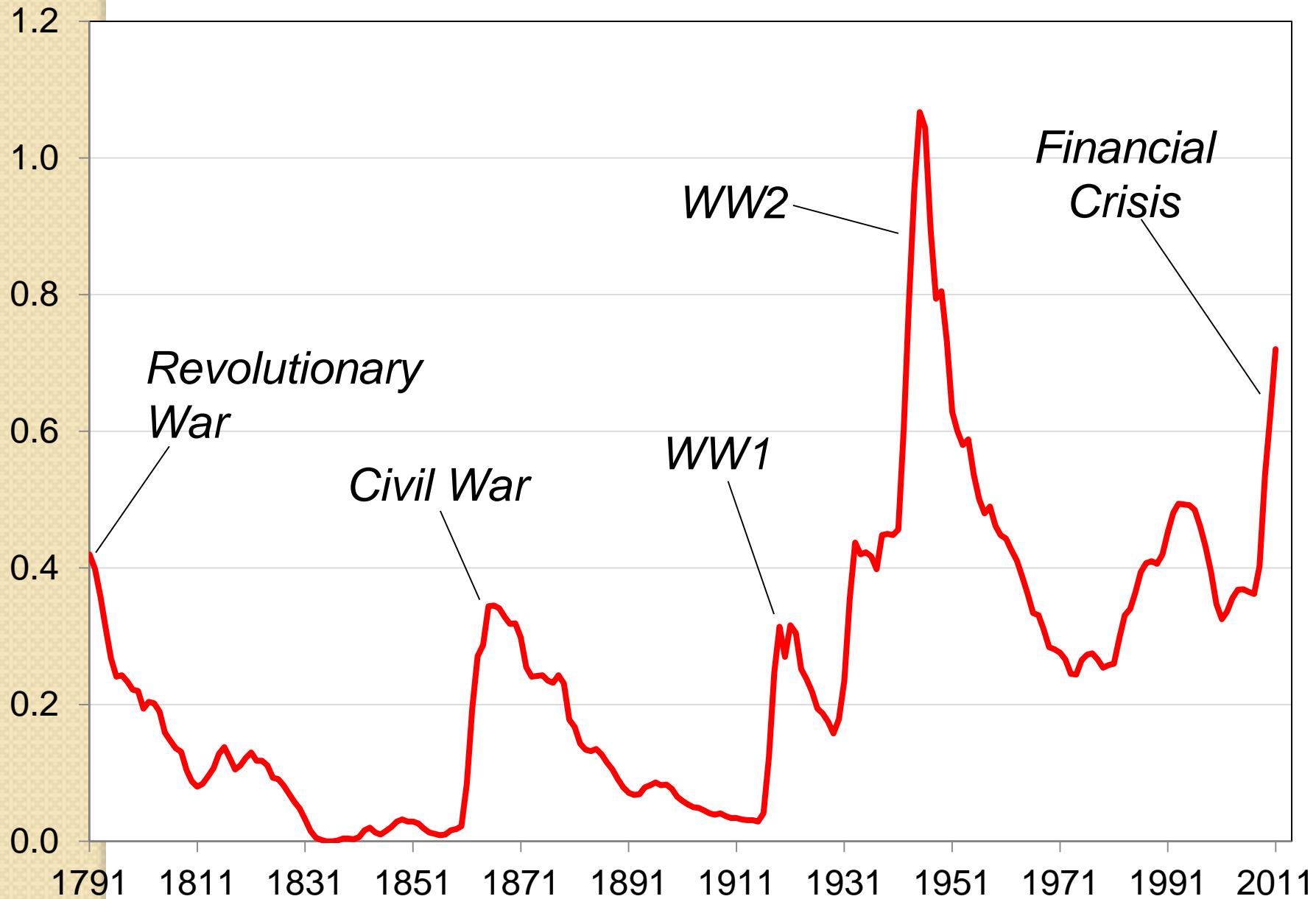
Chapter 19

Government Debt and Budget Deficits

Indebtedness of the world's governments

<i>Country</i>	<i>Gov Debt</i> (% of GDP)	<i>Country</i>	<i>Gov Debt</i> (% of GDP)
Greece	133.1	U.K.	61.7
Japan	127.6	Germany	51.5
Italy	106.2	Spain	45.6
Belgium	80.4	Netherlands	37.7
Portugal	75.8	Canada	33.6
United States	73.8	Australia	4.9
France	62.7	Switzerland	0.4

Ratio of U.S. government debt to GDP



The U.S. experience in recent years

Early 1980s through early 1990s

- debt–GDP ratio: 25.5% in 1980, 48.9% in 1993
- Reagan tax cuts, increases in defense spending & entitlements

Early 1990s through 2000

- \$290b deficit in 1992, \$236b surplus in 2000
- debt–GDP ratio fell to 32.5% in 2000
- rapid growth, stock market boom, tax hikes

The U.S. experience in recent years

Early 2000s

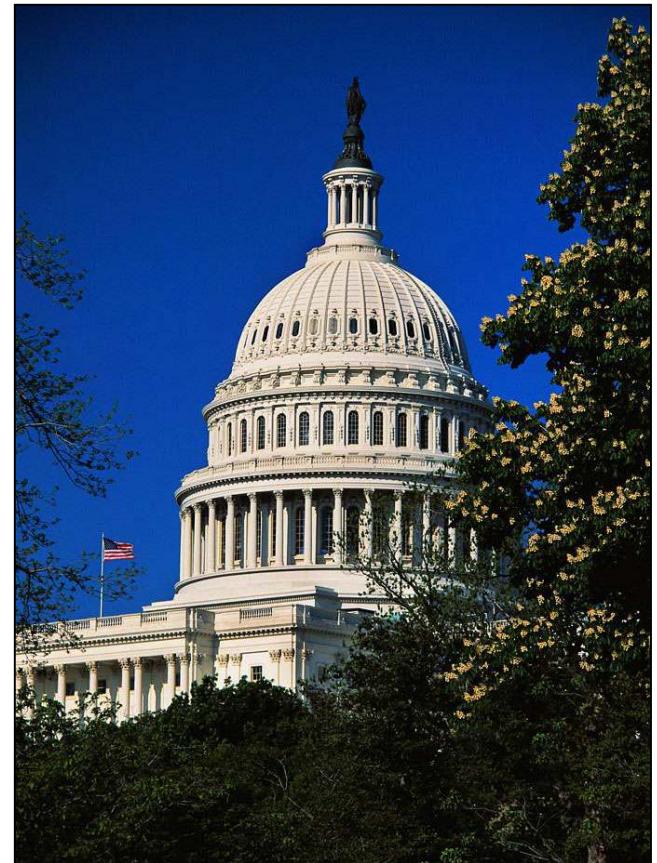
- return of big deficits
- Bush tax cuts, 2001 recession, Iraq war

The 2008-2009 recession and its aftermath

- fall in tax revenues
- financial bailouts, auto industry, stimulus package
- tepid recovery

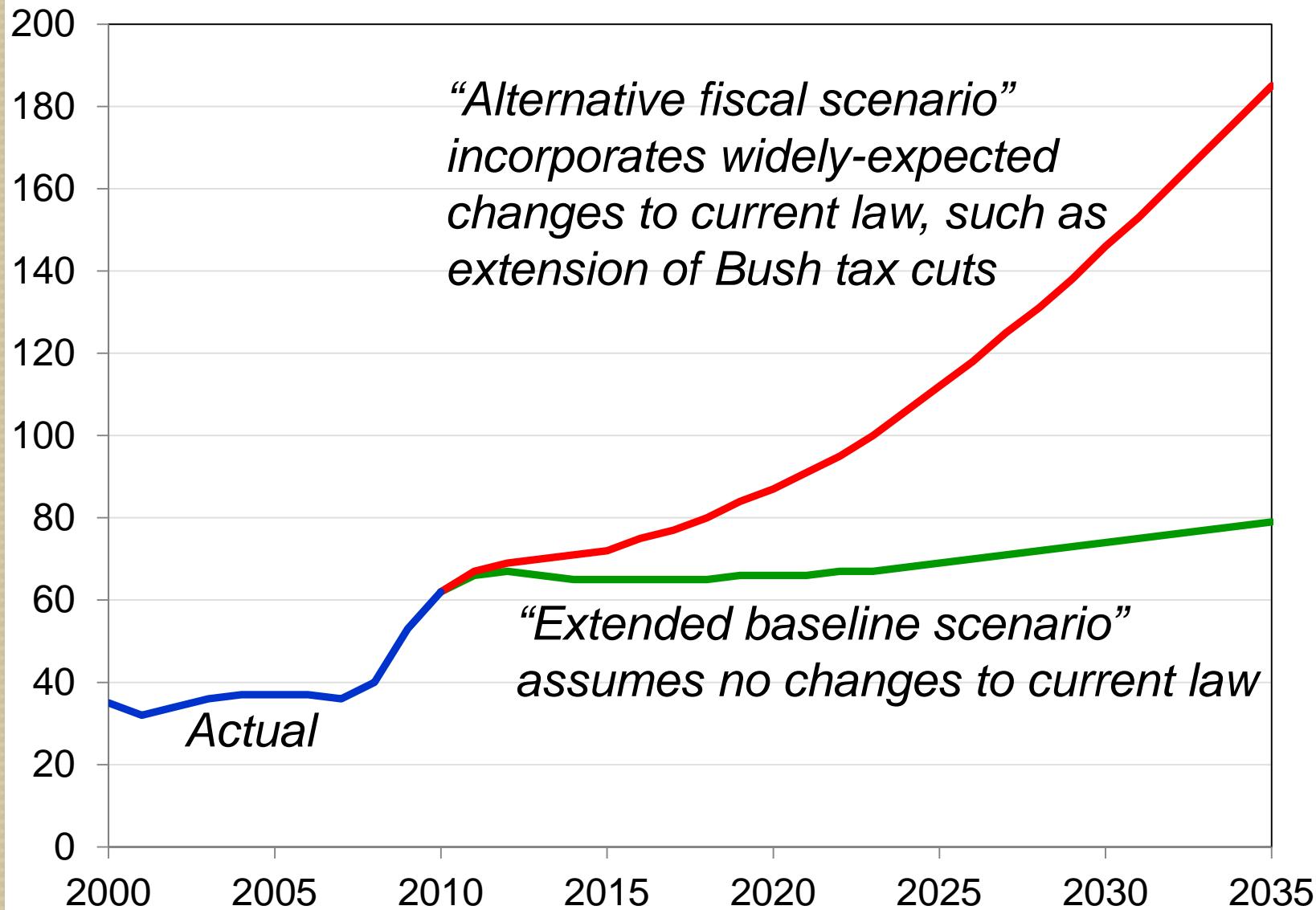
The troubling long-term fiscal outlook

- U.S. population is aging.
- Health care costs are rising.
- Growth in entitlements like Social Security and Medicare.
- Deficits and the debt are projected to significantly increase...



Projected U.S. federal government debt, 2000–2035

Percent of GDP



Problems measuring the deficit

1. Inflation
2. Capital assets
3. Uncounted liabilities
4. The business cycle

MEASUREMENT PROBLEM I: Inflation

- Suppose the real debt is constant.
- In this case, the nominal debt D grows at the rate of inflation:

$$\Delta D/D = \pi \quad \text{or} \quad \Delta D = \pi D$$

- The reported deficit (nominal) is πD even though the real deficit is zero.
- Hence, should subtract πD from the reported deficit to correct for inflation.

MEASUREMENT PROBLEM 2: Capital Assets

- Currently, deficit = change in debt
- Better, **capital budgeting:**
deficit = (change in debt) – (change in assets)
- EX: Suppose government sells an office building and uses the proceeds to pay down the debt.
 - under current system, deficit would fall
 - under capital budgeting, deficit unchanged, because fall in debt is offset by a fall in assets.
- Problem w/ cap budgeting: Determining which government expenditures count as capital expenditures.

MEASUREMENT PROBLEM 3: Uncounted liabilities

- Current measure of deficit omits important liabilities of the government:
 - future pension payments owed to current government workers
 - future Social Security payments
 - contingent liabilities, e.g., covering federally insured deposits when banks fail
 - Value of contingent liabilities??

MEASUREMENT PROBLEM 4:

The business cycle

- The deficit varies over the business cycle due to automatic stabilizers
 - unemployment insurance
 - the income tax system
- Not measurement errors but does make it harder to judge fiscal health.
 - Is an observed increase in deficit due to a downturn or fiscal policy?
 - Solution: cyclically-adjusted budget deficit

Is the government debt really a problem?

Consider a tax cut with corresponding increase in the government debt.

Two viewpoints:

1. Traditional view
2. Ricardian view

The traditional view

- Short run: $\uparrow Y, \downarrow u$
- Long run:
 - Y and u back at their natural rates
 - closed economy: $\uparrow r, \downarrow l$
 - open economy: $\uparrow \varepsilon, \downarrow NX$ (higher trade deficit)
- Very long run:
 - slower growth until economy reaches new steady state with lower income per capita

The Ricardian view

- due to David Ricardo (1820), advanced more recently by Robert Barro
- According to **Ricardian equivalence**, a debt-financed tax cut has no effect on consumption, national saving, the real interest rate, investment, net exports, or real GDP, even in the short run.

The logic of Ricardian Equivalence

- Consumers are forward-looking,
- They know that a debt-financed tax cut today implies an increase in future taxes.
- Consumers save the full tax cut in order to repay the future tax liability.
- Result: Private saving rises by the amount public saving falls, leaving national saving unchanged.

Problems with Ricardian Equivalence

- **Myopia:** Not all consumers think so far ahead; some see the tax cut as a windfall.
- **Borrowing constraints:** Some consumers cannot borrow enough to achieve their optimal consumption, so they spend a tax cut.
- **Future generations:** If consumers expect that the burden of repaying a tax cut will fall on future generations, they may increase spending.

CHAPTER SUMMARY

1. Relative to GDP, the U.S. government's debt is moderate compared to that of some countries.
2. Standard figures on the deficit are imperfect measures of fiscal policy because they:
 - are not corrected for inflation.
 - do not account for changes in government assets.
 - omit some liabilities (e.g., future pension payments to current workers).
 - do not account for effects of business cycles.