Deficits

• about the size of the U.S. government’s debt, and how it compares to that of other countries
• problems measuring the budget deficit
• the traditional and Ricardian views of the government debt
• other perspectives on the debt
### Indebtedness of the world’s governments

<table>
<thead>
<tr>
<th>Country</th>
<th>Gov Debt (% of GDP)</th>
<th>Country</th>
<th>Gov Debt (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>173</td>
<td>U.K.</td>
<td>59</td>
</tr>
<tr>
<td>Italy</td>
<td>113</td>
<td>Netherlands</td>
<td>55</td>
</tr>
<tr>
<td>Greece</td>
<td>101</td>
<td>Norway</td>
<td>46</td>
</tr>
<tr>
<td>Belgium</td>
<td>92</td>
<td>Sweden</td>
<td>45</td>
</tr>
<tr>
<td><strong>U.S.A.</strong></td>
<td>73</td>
<td>Spain</td>
<td>44</td>
</tr>
<tr>
<td>France</td>
<td>73</td>
<td>Finland</td>
<td>40</td>
</tr>
<tr>
<td>Portugal</td>
<td>71</td>
<td>Ireland</td>
<td>33</td>
</tr>
<tr>
<td>Germany</td>
<td>65</td>
<td>Korea</td>
<td>33</td>
</tr>
<tr>
<td>Canada</td>
<td>63</td>
<td>Denmark</td>
<td>28</td>
</tr>
<tr>
<td>Austria</td>
<td>63</td>
<td>Australia</td>
<td>14</td>
</tr>
</tbody>
</table>
The U.S. experience in recent years

Early 1980s through early 1990s
– debt-GDP ratio: 25.5% in 1980, 48.9% in 1993
– due to 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
– due to rapid growth, stock market boom, tax hikes
The U.S. experience in recent years

Early 2000s
– the return of huge deficits, due to Bush tax cuts, 2001 recession, Iraq war

The 2008-2009 recession
– fall in tax revenues
– huge spending increases (bailouts of financial institutions and auto industry, stimulus package)
The troubling long-term fiscal outlook

• The U.S. population is aging.
• Health care costs are rising.
• Spending on entitlements like Social Security and Medicare is growing.
• Deficits and the debt are projected to significantly increase...
U.S. population age 65+, as percent of population age 20-64

Percent of pop. age 20-64

actual | projected

Year:
2000
2005
2010
2015
2020
2025
2030
2035

Percent of GDP

Projected U.S. federal govt debt in two scenarios, 2000-2035

“Extended baseline scenario” – assumes no changes to current law

“Alternative fiscal scenario” incorporates widely-expected changes to current law, such as extension of Bush tax cuts

Percent of GDP

Actual
Problems measuring the deficit

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

Inflation

- Suppose the real debt is constant, which implies a zero real deficit.
- In this case, the nominal debt $D$ grows at the rate of inflation:

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

- The reported deficit (nominal) is $\pi D$ even though the real deficit is zero.
- Hence, should subtract $\pi D$ from the reported deficit to correct for inflation.
MEASUREMENT PROBLEM 1: Inflation

• Correcting the deficit for inflation can make a huge difference, especially when inflation is high.

• Example: In 1979,

  nominal deficit = $28 billion
  inflation = 8.6%
  debt = $495 billion

  \[ \pi D = 0.086 \times $495b = $43b \]

  real deficit = $28b − $43b = $15b surplus
MEASUREMENT PROBLEM 2: Capital Assets

- Currently, deficit = change in debt
- Better, capital budgeting: deficit = (change in debt) − (change in assets)
- EX: Suppose govt 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 govt 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 govt workers
  - future Social Security payments
  - contingent liabilities, *e.g.*, covering federally insured deposits when banks fail
  (Hard to attach a dollar value to contingent liabilities, due to inherent uncertainty.)
CASE STUDY:

Accounting for TARP

• Troubled Asset Relief Program (TARP):
  – The U.S. Treasury gave money to help struggling banks.
  – In return, the Treasury became part owner of the banks, will receive dividends, will eventually relinquish ownership when banks repay principal.
CASE STUDY:
Accounting for TARP

• Should the TARP outlays count toward the deficit?
  – The U.S. Treasury considered TARP outlays to be expenditures that increased the deficit, and will consider bank repayments as revenues that will reduce the deficit.
  – Congressional Budget Office (CBO) counted the net present value of the program – outlays minus eventual repayments – adjusted for the risk of non-repayment. This works out to 25 cents for each dollar spend on TARP.
MEASUREMENT PROBLEM 4: The business cycle

• The deficit varies over the business cycle due to automatic stabilizers (unemployment insurance, the income tax system).

• These are not measurement errors, but do make it harder to judge fiscal policy stance.
  – *E.g.*, is an observed increase in deficit due to a downturn or an expansionary shift in fiscal policy?
MEASUREMENT PROBLEM 4:
The business cycle

• Solution: **cyclically adjusted budget deficit** (aka “full-employment deficit”) – based on estimates of what govt spending & revenues would be if economy were at the natural rates of output & unemployment.
The bottom line

We must exercise care when interpreting the reported deficit figures.