LECTURE EIGHT - PART TWO

#1: The Debt-to-GDP Ratio

- The Debt-to-GDP Ratio: A very good yardstick of comparison.
- Why?: A $5 trillion national debt is a very large number in the abstract.
- $5 trillion is relatively small for the U.S. versus a small country like Thailand.

A Very Key Point!

Using the Debt-to-GDP Ratio gives us a good measure of a nation's ability to produce and therefore its ability to pay off its debt.

#2: The Real Versus Nominal Deficit

- Distinguish clearly between the real and nominal budget deficits!
- This distinction allows us to measure how inflation reduces the effective burden of the debt.

The Terms Defined

- The real deficit is the actual or "nominal" deficit adjusted for inflation's effect on the debt.

Key Formula

Real Deficit = Nominal Deficit – (Inflation * Total Debt)

Pop Quiz

ASSUME

- Nominal deficit = $100 billion
- Inflation rate = 10%.
- Total debt = $5 trillion.

QUESTION

What's the <u>real</u> deficit?

Inflation Erodes the Real Value of the Debt!

Answer

Real Deficit = Nominal Deficit – (Inflation * Total Debt)

Real Deficit = $100 billion – (10%*$5 Trillion) = minus $400 billion

$500 billion

"Inflating The Debt"

- Key Point: Inflation can erode the total debt burden even if the nominal deficit increases in a given year!!
- Key Implication: The government can lower the debt burden by increasing inflation!!

An Important Caveat

If bond holders anticipate inflation, they will demand a higher interest rate and thereby drive up the nominal deficit through higher interest payments.

#3: Structural Versus Cyclical Deficits

- Structural Deficit: The part of the budget deficit that would exist even if the economy were at full employment.
- It is due to the existing structure of tax and spending programs.
- The structural part of the budget is active and determined by discretionary policies.

The Cyclical or Passive Deficit

- That part of the deficit attributable to recession.
- Partly due to "automatic stabilizers."
- Definition: Increased income transfers in a recession for unemployment compensation, food stamps, & other welfare benefits.

Key Point
The cyclical deficit results primarily from the shortfall of tax revenues that arises when the economy's resources are underutilized such as in the downward portions of the business cycle.

Automatic Stabilizers & Income Transfers

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- Income Transfers: Payments to individuals by the government for which no current goods or services are exchanged.
- Examples: Social Security, welfare, and unemployment benefits.

Some Income Transfers Are Automatic Stabilizers

- Some income transfers, particularly welfare and unemployment, are part of the government's automatic stabilizer system.

Key Definition

Automatic stabilizers are defined as Federal revenues or expenditures that automatically respond to changes in the GDP in a countercyclical way.

A. ***Changes in Unemployment***

When the unemployment rate increases by 1 percentage point:

1. Government spending (G) automatically increases for:
   - Unemployment insurance benefits
   - Food stamps
   - Welfare benefits
   - Social Security benefits
   - Medicaid

   Total increase in outlays: +$4 billion
2. Government tax revenues (T) automatically decline for:
   - Individual income taxes
   - Corporate income taxes
   - Social Security payroll taxes

   Total decline in revenues: −$35 billion
3. The deficit widens by $39 billion

B. ***Changes in Inflation***

When the inflation rate increases by 1 percentage point:

1. Government spending (G) automatically increases for:
   - Indexed retirement and Social Security benefits
   - Higher interest payments

   Total increase in outlays: +$8 billion
2. Government tax revenues (T) automatically increase for:
   - Corporate income taxes
   - Social Security payroll taxes

   Total increase in revenues: +$7 billion
3. The deficit widens by $1 billion

Source: Congressional Budget Office.

Government spending thereby acts "counter-cyclically" to offset the recession.

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Inflation can widen a budget deficit because of the inflation "indexing" of benefits like Social Security.

The Broader Points

- Neither the President nor the Congress has complete control over the Federal deficit.
- That's why the distinction between the structural and cyclical deficits is so important.