LECTURE EIGHT - PART THREE

Calculating the Structural and Cyclical Parts of the Budget Deficit

Assumptions

- GDP = \$10 trillion
- Budget deficit = \$100 billion
- Unemployment rate = 7% (1% above full employment rate)
- Marginal tax rate = 30%

Question

How can we calculate which portion of the \$100 billion deficit is structural and which portion is cyclical?

We Can Use Okun's Law!

- Okun's Law: A 1% fall in the unemployment rate will lead to a 2% increase in GDP.

Exercise

Try first using Okun's law to calculate the increase in GDP that would result if the unemployment rate were to fall from 7% to the full employment rate of 6%.

Step One: Calculate The Change In The GDP

- If the unemployment rate falls by 1%, by Okun's Law, real GDP must increase by 2%.
- If GDP = $10 trillion as we have assumed, GDP will increase by $200 billion.

Step Two: Calculate the Change in Tax Revenues

Question

If GDP increases by $200 billion from the drop in the unemployment rate, what is the increase in tax revenues at a 30% marginal tax rate?

The Calculation

- At a 30% marginal tax rate, $200 billion of new GDP income generates $60 billion in new tax revenues.
- Calculation: (0.3 * $200B) = $60B

Question

So what part of the total $100 billion deficit is structural and what part is cyclical?

Step Three: Calculate Components of the Deficit

Answer

- The structural deficit clearly is $40 billion because that's how much of the total deficit remains at full employment.
- Therefore, the cyclical portion of the budget deficit was $60 billion.

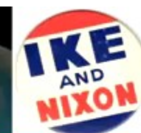
Why The Structural Versus Cyclical Deficit Is So Important

- Identifies long term structural budget deficit increases from discretionary policies versus short run cyclical increases caused by recession.

Policy Guidelines

- Keynesian stimulus can be used to decrease a cyclical budget deficit by returning the economy to full employment.
- Keynesian stimulus in the presence of a structural budget deficit will only increase that deficit.

Historical Example: Use Keynesian Stimulus in 1958?

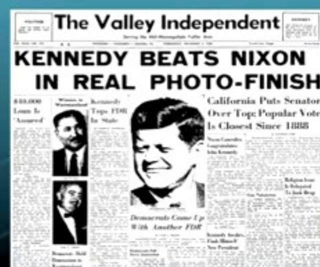


- Eisenhower Administration running a $10 billion cyclical deficit.
- V.P. Nixon wants an expansionary tax cut to stimulate the economy.
- Eisenhower rejects the tax cut for fear it will balloon the deficit.

Key Point
Pres. Eisenhower didn't understand the difference between a structural and cyclical deficit!

When Bad Economics is Bad Politics!

Key Point
If Eisenhower had simply listened to Nixon and cut taxes, the result would have been strong economic growth, a budget surplus of about $5 billion, and likely the election of Nixon and not JFK!!!


The Valley Independent

KENNEDY BEATS NIXON IN REAL PHOTO-FINISH

California Puts Senator Over Top; Popular Vote Is Closest Since 1888

Democrats Come Up With Another FDR

Who Gets The Credit? Clinton or Bush?

- Clinton Claim: His policies reduced the budget deficit by more than half!

FACT
or
FICTION?

The Clinton Deficit Reduction Plan

- Republican Claim #1: Economic recovery reduced what was a cyclical deficit!
- Republican Claim #2: George Bush deserved most of the credit since the economic recovery began well before Clinton ever took office!

Who's Right?

- Between 1992 and 1996, the federal deficit fell from $290 billion to $144 billion—a more than a 50% reduction.
- How much of this deficit reduction was really structural and brought about by Clinton's Deficit Reduction Act of 1993 and other policies?

Congressional Budget Office Estimates

Key Findings of CBO

- Structural deficit fell by $70 billion.
- So of the $146 billion in deficit reduction, about half of that was due to Clinton Administration policies.
- The other half was due to improved economic conditions!!!!!!

The Calculation of the Structural Deficit is Sensitive to the Natural Rate of Unemployment

Key Point

The structural deficit will be <u>lower</u> if we assume the economy can sustain a 4% rate of unemployment without increasing inflation as opposed to, say, a 6% rate!

The Fiscal Policy Problem

- The natural rate of unemployment is 4%, the real unemployment rate is 6%, and the budget deficit is $120 billion for a $10 trillion GDP.
- When GDP increases by 4%, this leads to a $400 billion GDP increase and $120 billion increase in tax revenues. Therefore, the entire deficit must have been cyclical!

Two Questions

- What change in fiscal policy would a Keynesian economist recommend facing such a large cyclical deficit?
- More importantly, what would happen if the natural rate of unemployment actually turned out to really be 6%?

The Keynesian Conundrum

- A Keynesian would use a stimulus package to close the recessionary gap AND eliminate the perceived purely cyclical deficit.
- However, if the natural rate of unemployment was actually 6%, the Keynesian stimulus would not eliminate the cyclical deficit – which was actually structural.
- The result would be an even bigger deficit AND a bad case of demand-pull inflation!!!!!!!!