Agenda

- Fiscal Policy and Budget Balances
- Measuring Budget Change
  - Automatic versus Discretionary Changes
- Designing Effective Short-run Fiscal Policy

Fiscal Policy and Budget Balances

- Budget Arithmetic:
  - $G = G$
  - $T = tY$
  - $T - G = tY - G$, where
    - $G$ is the autonomous budget, and
    - $tY$ is the induced budget.
Fiscal Policy and Budget Balances

• Y is determined in the IS – LM model.

• T – G is determined by the BB line.

Actual budget balance

- G
- Surplus (+)
T - G
T - G

Fiscal Policy and Budget Balances

• Automatic Stabilizers:

  ➢ *Automatic stabilizers* cause fiscal policy to be counter-cyclical by changing government spending and/or tax revenues automatically.

  • For example, during recessions, unemployment insurance payments rise because the number of unemployed people increases.

  • For example, during recessions, tax revenues fall because (taxable) income declines.

• Automatic Stabilizers:

  ➢ Because of automatic stabilizers, the government budget balance will rise during recessions and fall during booms.
Fiscal Policy and Budget Balances

• Automatic Stabilizers:
  - Automatic changes in the budget balance result primarily from changes in induced taxes.
  - \( BB = T - G = tY - G \)
  - \( \Delta T = t \Delta Y \)
  - \( \Delta BB = \Delta(T - G) = t \Delta Y - G \)
  - Represented by movement along a given BB line.

Automatic stabilizers

\[
\begin{align*}
\text{T} - \text{G} & \quad \text{Surplus (+)} \\
- \text{G} & \quad \text{Deficit (-)}
\end{align*}
\]

Fiscal Policy and Budget Balances

• Discretionary Fiscal Policy:
  - Deliberate changes in fiscal policy.
    • Changes in \( G \).
    • Changes in \( t \).
  - Represented by a change in the BB line.
    • Changes in \( G \) generate a parallel shift.
    • Changes in \( t \) generate a rotation.

Increasing government purchases

\[
\begin{align*}
\text{r} & \quad \text{LM}_0 \\
r_0 & \quad \text{IS}_0 \\
Y_0 & \quad Y
\end{align*}
\]
Increasing government purchases

Decreasing tax rates

Measuring Budget Change

- How do we compare:
  - A change in G (measured in dollars) with
  - A change in t (measured in %)?

- Alternatively, how do we compare:
  - A parallel shift in the BB line with
  - A rotation of the BB line?
Measuring Budget Change

- Automatic versus Discretionary Changes:
  - Select a given \( Y \).
    - Full-employment output, \( Y^* \).
  - The budget balance at full-employment output is called the **Structural Budget Balance**, SBB.
    - Also, the standardized, natural employment, or full employment budget.
    - If \( T - G = tY - G \).
    - Then \( SBB = tY^* - G \).

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Structural Budget Balance

- The full-employment budget balance is a measure of what the government budget balance would be *IF* the economy were at full-employment.
- So the full-employment budget balance does not change with the business cycle; only with changes in government fiscal policy.
- Changes in the structural budget balance will represent changes in discretionary fiscal policy.

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Increasing government purchases
Decreasing tax rates

Measuring Budget Change

• Budget Concepts:
  ➢ Actual budget balance, ABB, is measured at actual Y.
  ➢ Structural budget balance, SBB, is measured at Y*.
  ➢ Cyclical budget balance, CBB, occurs when economy is not at full-employment output.

  • CBB = BB – SBB.
    ➢ If actual budget < structural, then cyclical budget < 0.
    ➢ If actual budget > structural, then cyclical budget > 0.

Three Budget Balances

Designing Effective Short-run Fiscal Policy

• Size and composition of fiscal package.

  ➢ Relative effectiveness:
    • A dollar more of G has a larger effect than a dollar less of T.
      ➢ The G multiplier is larger than the T multiplier.
      ➢ G has direct effect on spending, T has indirect effect.
Designing Effective Short-run Fiscal Policy

• Government spending considerations.
  ➢ New spending or replacement outlays.
  ➢ Prospective timing of outlays.
    • How quickly can you spend the money.
  ➢ Nature and location of the prospective outlays.
    • How much “leaks” abroad.

Designing Effective Short-run Fiscal Policy

• Tax considerations:
  ➢ Personal Taxes.
    • Permanent or temporary.
    • Marginal propensities to consume.
    • Design of tax.
    • Ease of implementation.

Designing Effective Short-run Fiscal Policy

• Tax considerations:
  ➢ Corporate Taxes.
    • Permanent or temporary.
    • Design of tax.
    • Ease of implementation.