

MODULE

**31**

● 30 Fiscal Policy Basics

# ● 31 Fiscal Policy and the Multiplier

● 32 Budget Deficits and Public Debt



# Using the Multiplier to Estimate the Influence of Government Policy

- Fiscal policy has a **multiplier effect** on the economy.
- Fiscal policy can take the form of changes in taxes, transfers, and government spending.
- The multiplier on changes in government purchases is  $1/(1 - MPC)$ .

# Multiplier Effects of Changes in Taxes and Government Transfers

- Assume the government cuts personal taxes \$50 billion.
- There is no direct effect on AD by government purchases of goods and services; GDP goes up only because households spend some of that \$50 billion.
- How much will they spend?
  - If  $MPC = 0.5$ , the first-round increase in consumer spending will be \$25 billion ( $0.5 \times \$50 \text{ billion} = \$25 \text{ billion}$ ).
  - There will be a series of subsequent rounds in which real GDP, disposable income, and consumer spending rise further.

# Multiplier Effects of Changes in Government Transfers and Taxes

**TABLE 31-1**

Hypothetical Effects of a Fiscal Policy with Multiplier of 2

Effect on real GDP	\$50 billion rise in government purchases of goods and services	\$50 billion rise in government transfer payments
First round	\$50 billion	\$25 billion
Second round	\$25 billion	\$12.5 billion
Third round	\$12.5 billion	\$6.25 billion
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Eventual effect	\$100 billion	\$50 billion

# Multiplier Effects of Changes in Government Transfers and Taxes

- The multiplier on changes in taxes or transfers,  **$MPC/(1 - MPC)$** , because part of any change in taxes or transfers is absorbed by savings.
- The results from changes in taxes are complicated because governments rarely impose lump-sum taxes.
- ***Changes in government purchases have a more powerful effect on the economy than equal-sized changes in taxes or transfers.***

# How Taxes Affect the Multiplier

- Rules governing taxes and some transfers act as **automatic stabilizers**, reducing the size of the multiplier and automatically reducing the size of fluctuations in the business cycle.
- In contrast, **discretionary fiscal policy** arises from deliberate actions by policy makers.



# Economics in Action

## Multipliers and the Obama Stimulus

- The American Recovery and Reinvestment Act was the largest discretionary fiscal expansion in U.S. history -- \$787 billion.
- Economists assumed that the government spending and tax relief would yield an overall multiplier for the stimulus of 1.4, or add approximately 1.8 percentage points to real GDP.
- This didn't happen. The problem was that financial crises tend to produce very deep, prolonged slumps.