



# Fiscal Policy Part II

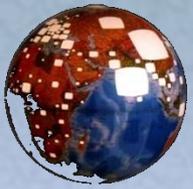
Much fiscal policy is implemented, not through spending increases, but through tax credits and other so-called tax expenditures. The markets should respond to them as they do spending cuts, with little contraction in economic activity.

Alan Greenspan



# Tax Cuts

- By lowering taxes, the government increases the disposable income of the private sector.
  - **Disposable income** is the after-tax income of consumers; personal income less personal taxes.



# Taxes and Consumption

- Tax cuts directly increase the disposable income of consumers.
- How much consumption increases depends on the marginal propensity to consume.

$$\text{initial increase in consumption} = \text{MPC} \times \text{tax cut}$$



# Taxes and Consumption

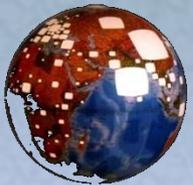
A dollar increase in tax cuts is less stimulative than a dollar increase in government purchases.



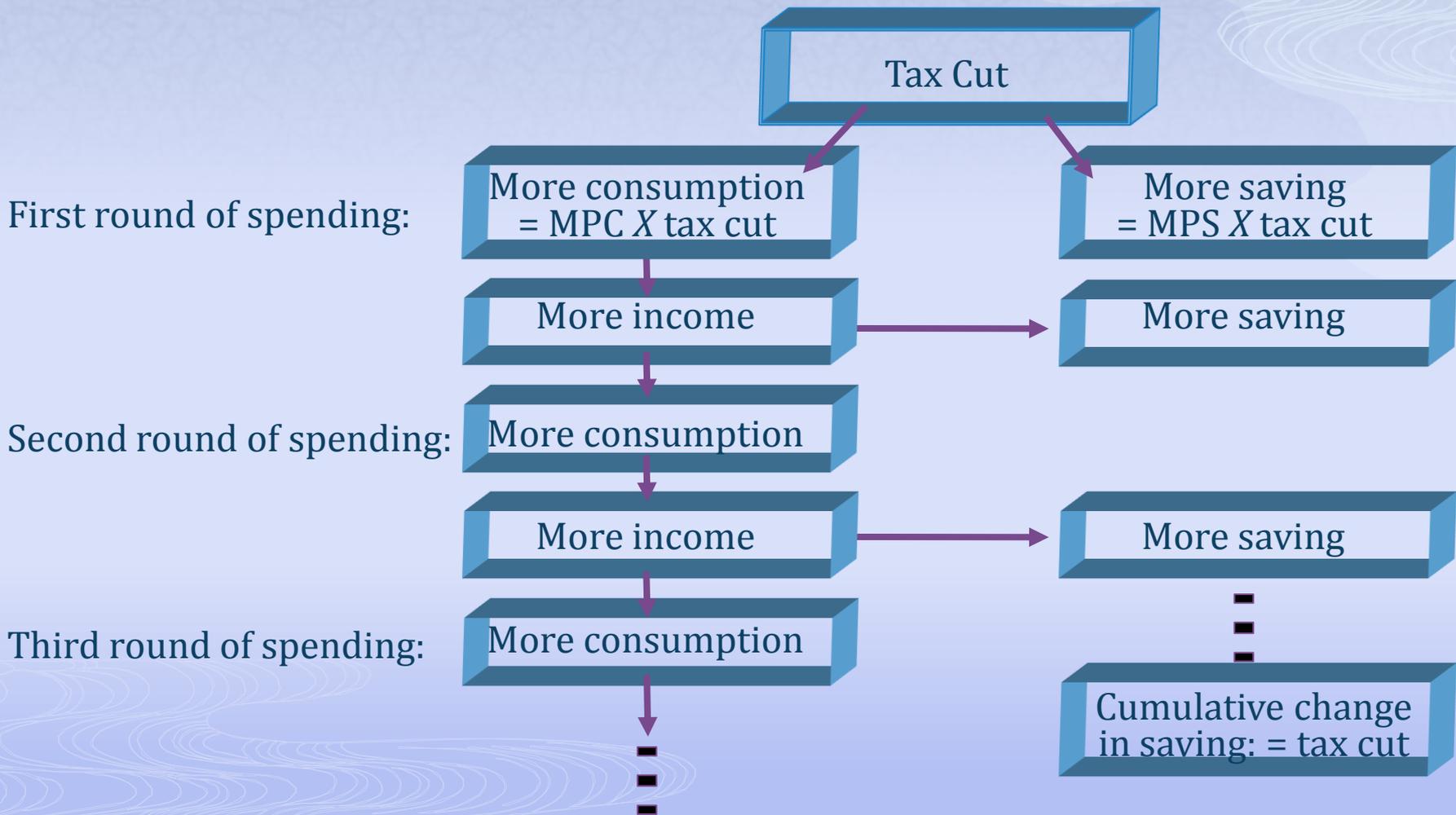
# Taxes and Consumption

An AD shortfall can be closed with a tax cut.

$$\text{desired tax cut} = \frac{\text{desired fiscal stimulus}}{\text{MPC}}$$



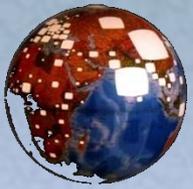
# Diagram: The Tax Cut Multiplier





# Taxes and Investment

- ❑ A tax cut may also be an effective mechanism for increasing investment spending.
- ❑ Tax cuts have been used numerous times to stimulate the economy.



# Increased Transfers

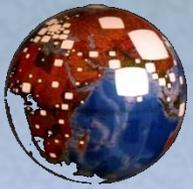
- Increasing transfer payments stimulates the economy.
- The initial fiscal stimulus (injection) of increased transfer payments is:

$$\text{initial fiscal stimulus} = \text{MPC} \times \text{increase in transfer payments}$$



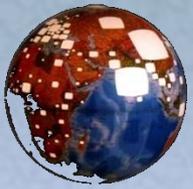
# Fiscal Restraint

- There are times when the economy is expanding too fast and fiscal restraint is more appropriate.
  - **Fiscal restraint** is using tax hikes or spending cuts intended to reduce (shift) aggregate demand.



# The Fiscal Target

- The **AD excess** is the amount by which aggregate demand must be reduced to achieve price stability after allowing for price-level changes.
- The AD excess exceeds the GDP gap.



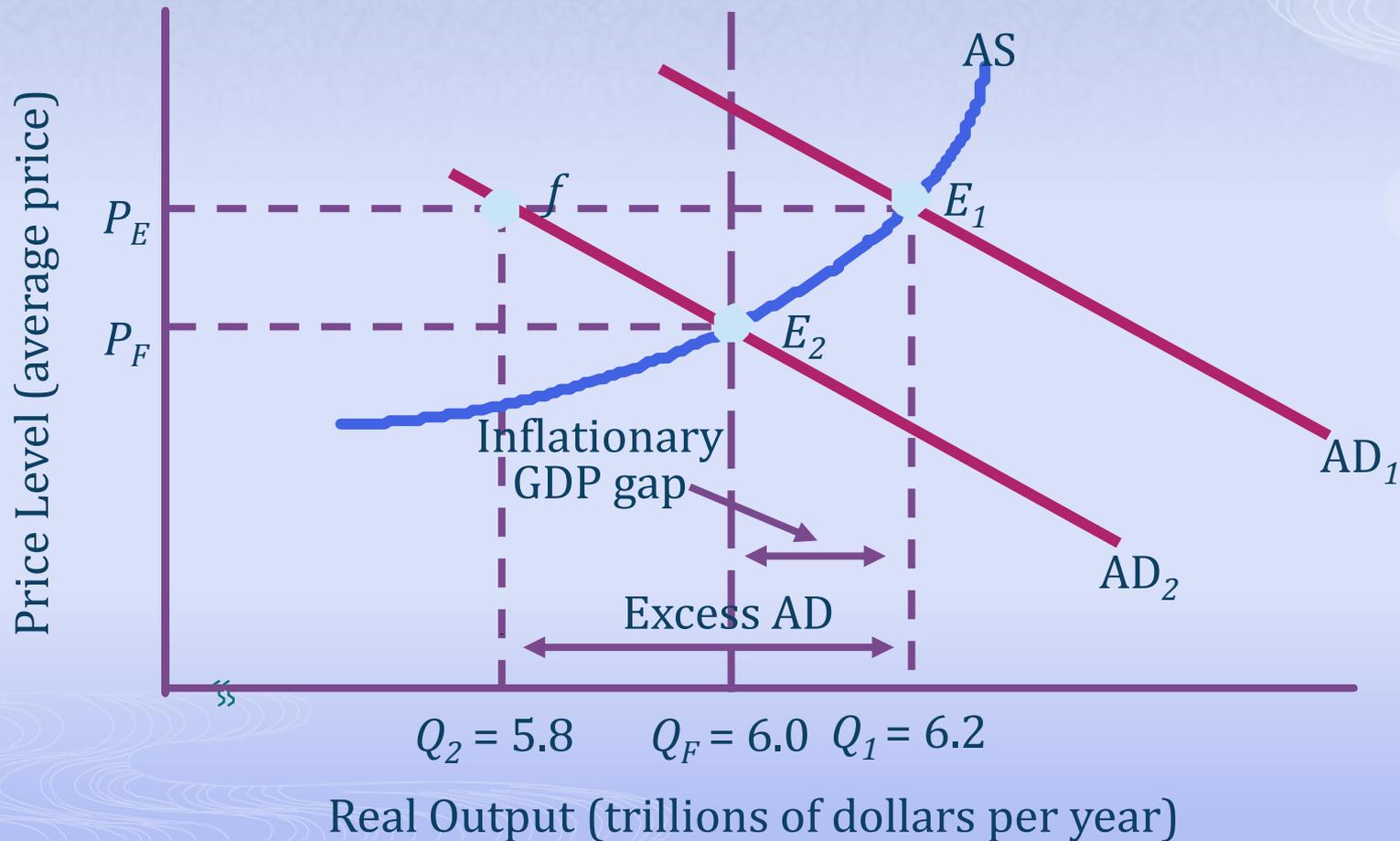
# The Fiscal Target

The first task is to determine how much AD needs to fall:

$$\begin{aligned} \text{desired fiscal restraint} &= \frac{\text{desired AD reduction}}{\text{multiplier}} \\ &= \frac{\text{excess AD}}{\text{multiplier}} \end{aligned}$$



# Chart: Excess Aggregate Demand





# Budget Cuts

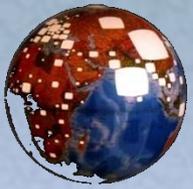
Budget cuts reduce government spending and induce cutbacks in consumer spending.

$$\text{cumulative reduction in spending} = \text{multiplier} \times \text{initial budget cut}$$



# Tax Hikes

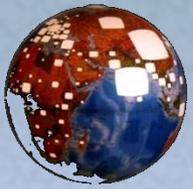
- ❑ Tax hikes can be used to shift the AD curve to the left.
- ❑ The direct effect of tax increases is a reduction in disposable income.



# Tax Hikes

Taxes must be increased more than a dollar to get a dollar of fiscal restraint.

$$\text{desired increase in taxes} = \frac{\text{desired fiscal restraint}}{\text{MPC}}$$



# Reduced Transfers

- ❑ A cut in transfer payments works like a tax hike, reducing the disposable income of transfer recipients.
- ❑ The desired reduction in transfers is the same as a desired tax increase.



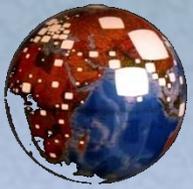
# Fiscal Guidelines

The essence of fiscal policy is the deliberate shifting of the aggregate demand curve.



# A Primer: Simple Rules

- The steps required to formulate fiscal policy are:
  - Specify the amount of the desired AD shift.
  - Select the policy tools needed to induce the desired shift.



# Table: Fiscal Stimulus

$$\text{Desired fiscal stimulus} = \frac{\text{AD shortfall}}{\text{the multiplier}}$$

Policy Option

Amount

Increase government purchases

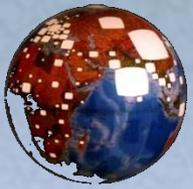
desired fiscal stimulus

Cut taxes

$$\frac{\text{desired fiscal stimulus}}{\mathbf{MPC}}$$

Increased transfers

$$\frac{\text{desired fiscal stimulus}}{\mathbf{MPC}}$$



# Table: Fiscal Restraint

$$\text{Desired fiscal restraint} = \frac{\text{excess AD}}{\text{the multiplier}}$$

Policy Option

Amount

Reduce government purchases

desired fiscal restraint

Increase taxes

$$\frac{\text{desired fiscal restraint}}{\mathbf{MPC}}$$

Reduce transfers

$$\frac{\text{desired fiscal restraint}}{\mathbf{MPC}}$$



# A Warning: Crowding Out

- Some of the intended fiscal stimulus may be offset by the crowding out of private investment expenditure.
  - **Crowding out** is a reduction in private-sector borrowing (and spending) caused by increased government borrowing.



# Time Lags

- It takes time to recognize that a problem exists and then formulate policy to address the problem.
- The very nature of macro problems can change if the economy is hit with other internal or external shocks.



# Pork-Barrel Politics

- ❑ Members of Congress want their constituents to get the biggest tax savings.
- ❑ They don't want spending cuts in their own districts.
- ❑ They don't want a tax hike or spending cut *before* an election.



1982  
2008

# The End

