

Introduction

- Spending, in the short run, may not be sufficient to support a normal level of output.
- Therefore, recessionary gaps are caused by insufficient aggregate spending.

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Planned Aggregate Expenditure

- Planned Aggregate Expenditure
 - Total *planned* spending on final goods and services

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Planned Aggregate Expenditure

- The Components of Planned Aggregate Expenditure
 - Consumer expenditure or Consumption (C)
 - ◆ Household spending on durables, nondurables, and services

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Planned Aggregate Expenditure

- The Components of Planned Aggregate Expenditure
 - Investment (I)
 - ◆ New capital goods spending
 - ◆ New residential spending
 - ◆ Increases in inventories

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Planned Aggregate Expenditure

- The Components of Planned Aggregate Expenditure
 - Government purchases
 - ◆ Federal, state, and local spending on goods and services

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Planned Aggregate Expenditure

- The Components of Planned Aggregate Expenditure
 - Net exports
 - ◆ Exports - imports

$$PAE = C + I + G + NX$$

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Planned Aggregate Expenditure

- Planned Spending Versus Actual Spending
 - In the Keynesian model, output is determined by *PAE*.
 - Actual expenditures may not equal *PAE*.
 - ◆ If inventories are larger than expected:
 - $I > I^P$
 - ◆ If inventories are smaller than expected:
 - $I < I^P$

$$PAE = C + I^P + G + NX$$

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Planned Aggregate Expenditure

- Planned Aggregate Expenditure

$$PAE = C + I^P + G + NX$$

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Planned Aggregate Expenditure

- Hey Big Spender! Consumer Spending and the Economy
 - Consumption (C) accounts for two thirds of total spending
 - The primary determinant of C is disposable income or $Y - T$

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Planned Aggregate Expenditure

- Consumption Function
 - The relationship between consumption spending and its determinants, in particular, disposable (after-tax) income

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Planned Aggregate Expenditure

- Relating Consumption to Income and Other Determinants
 - The consumption function:

$$C = \bar{C} + c(Y - T)$$
 - \bar{C} = a constant; represents the non income determinants of C
 - ◆ Consumer optimism
 - ◆ Wealth
 - ◆ Real interest rates

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Planned Aggregate Expenditure

- Consumption Function

$$C = \bar{C} + c(Y - T)$$

- c = marginal propensity to consume
- c = the amount by which consumption rises when disposable income rises by \$1; $0 < c < 1$

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A Consumption Function

$$C = \bar{C} + c(Y - T)$$

Slope = $c = MPC$

Consumption spending C

Disposable income $Y - T$

Consumption function

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The U.S. Consumption Function, 1960-2001

Consumption (1996 dollars, billions)

Disposable income (1996 dollars, billions)

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Planned Aggregate Expenditure

Planned Aggregate Expenditure and Output

- The relationship between changes in production and income and *PAE*
 - C* is a large part of *PAE*
 - C* depends on *Y*
 - PAE* depends on *Y*



Planned Aggregate Expenditure

Example

- $PAE = C + I^P + G + NX$
- $C = \bar{C} + c(Y - T)$
- $PAE = \bar{C} + c(Y - T) + I^P + G + NX$
- $C = 620; c = 0.8; T = 250; I^P = 220; G = 330; NX = 20$



Planned Aggregate Expenditure

Example

- Then:

$$PAE = [620 + 0.8(Y - 250)] + 220 + 330 + 20$$

$$PAE = [620 + 0.8Y - 0.8(250)] + 220 + 330 + 20$$

$$PAE = 620 + 0.8Y - 200 + 220 + 330 + 20$$

$$PAE = (620 - 200 + 220 + 330 + 20) + 0.8Y$$

$$PAE = 960 + 0.8Y$$

Planned Aggregate Expenditure

- Short-run Equilibrium Output
 - Keynesian Assumption
 - Producers meet demand at preset prices in the short-run
 - Short-run equilibrium: $Y = PAE$

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Planned Aggregate Expenditure

- Short-run Equilibrium Output
 - The level of output at which output Y equals planned aggregate expenditure PAE
 - Short-run equilibrium output is the level of output that prevails during the period in which prices are predetermined


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Numerical Determination of Short-Run Equilibrium Output

(1) Output Y	(2) Planned aggregate expenditure $PAE = 960 + 0.8Y$	(3) $Y - PAE$	(4) $Y = PAE?$
4,000	4,160	-160	No
4,200	4,320	-120	No
4,400	4,480	-80	No
4,600	4,640	-40	No
4,800	4,800	0	Yes
5,000	4,960	40	No
5,200	5,120	80	No

-Equilibrium: $Y = PAE$; $Y (4,800) = PAE (4,800)$
 -If $Y = 4,000 < PAE = 960 + .8(4,000) = 4,160$
 -If $Y = 5,000 > PAE = 960 + .8(5,000) = 4,960$


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Planned Aggregate Expenditure

- Observations
 - Other factors remaining constant, a decline in autonomous spending causes short-run equilibrium output to fall and creates a recessionary gap.
 - A decrease in autonomous spending can be caused by a reduction in \bar{C} , I^p , G , and/or NX .

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Planned Aggregate Expenditure




Economic Naturalist

- What caused the 1990-1991 recession?
 - ◆ Decline in consumer confidence
 - ◆ Credit crunch

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Planned Aggregate Expenditure



Economic Naturalist

- What caused the 2001 recession in the United States?
 - ◆ Reduction in investment spending


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Planned Aggregate Expenditure

- Income-Expenditure Multiplier
 - The effect of a 1-unit increase in autonomous expenditure on short-run equilibrium output
 - For example, a multiplier of 5 means that a 10-unit decrease in autonomous expenditure reduces short-run equilibrium output by 50 units


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Planned Aggregate Expenditure

- The Multiplier
 - Recall
 - ◆ $PAE = 960 + 0.8Y$, equilibrium $Y = 4,800$
 - ◆ \bar{C} fell by 10
 - ◆ $PAE = 950 + 0.8Y$, equilibrium $Y = 4,750$

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Planned Aggregate Expenditure

- The Multiplier Effect
 - The decrease in the equilibrium Y was 5 times the fall in \bar{C} .
 - The income-expenditure multiplier equaled 5.
 - The size of the multiplier is influenced by the MPC.

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

- In the Keynesian Model:
 - Recessionary and expansionary gaps are caused by inadequate or excessive spending, respectively.
 - *Stabilization policies* are used to affect planned aggregate expenditures to eliminate output gaps.

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

- Stabilization Policies
 - Government policies that are used to affect planned aggregate expenditure, with the objective of eliminating output gaps

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

- Expansionary Policies
 - Government policy actions intended to increase planned spending and output

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

- **Contractionary Policies**
 - Government policy actions designed to reduce planned spending and output

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

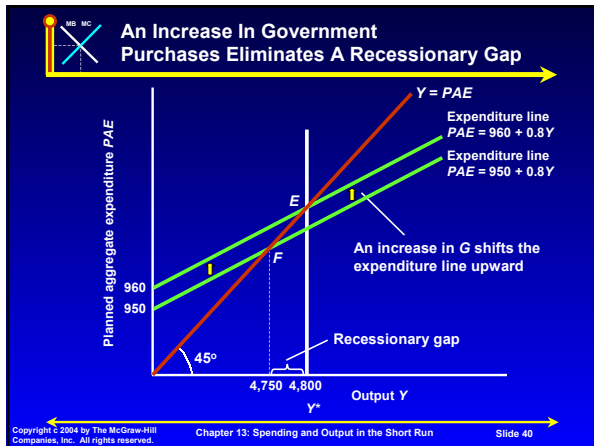
- **Tools of Stabilization Policy**
 - Monetary policy
 - Fiscal policy

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**Stabilizing Planned Spending:
The Role of Fiscal Policy**

- **Tools of fiscal policy**
 - Government spending
 - ◆ Direct effect on *PAE*
 - Taxation
 - ◆ Indirect effect on *PAE*
 - Transfer payments
 - ◆ Indirect effect on *PAE*

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Stabilizing Planned Spending: The Role of Fiscal Policy

- Taxes, Transfers, and Aggregate Spending
 - Taxes and transfers affect PAE indirectly

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Fiscal Policy as a Stabilization Tool: Three Qualifications

- Fiscal Policy and the Supply Side
 - Fiscal policy may affect potential output as well as PAE.
 - ◆ Government spending and potential output
 - Public capital
 - R & D
 - Human Capital

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Fiscal Policy as a Stabilization Tool: Three Qualifications

- Fiscal Policy and the Supply Side
 - Fiscal policy may affect potential output as well as *PAE*.
 - ◆ Taxation and potential output
 - Tax break for new investment
 - Tax break on interest income may stimulate saving
 - ◆ Fiscal policy affects both *PAE* and Y^* .

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Fiscal Policy as a Stabilization Tool: Three Qualifications


- The Problem of Deficits
 - Sustaining government deficits reduce saving and investment in new capital goods.

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Fiscal Policy as a Stabilization Tool: Three Qualifications


- The Problem of Deficits
 - The goal of keeping deficits low may reduce the incentive to use fiscal policy to control a recessionary gap.

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 **Fiscal Policy as a Stabilization Tool: Three Qualifications**


- The Relative Inflexibility of Fiscal Policy
 - A lack of flexibility may reduce the effectiveness of fiscal policy
 - ◆ Two limits to fiscal policy flexibility
 - The problem of time lags and the legislative process
 - Competing political objectives

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 **Fiscal Policy as a Stabilization Tool: Three Qualifications**

- The Relative Inflexibility of Fiscal Policy
 - A lack of flexibility may reduce the effectiveness of fiscal policy
 - ◆ *Automatic stabilizers* help offset the inflexibility of fiscal policy
 - Transfer payments
 - Income tax collections
 - ◆ Fiscal policy may be useful to address prolonged periods of recession

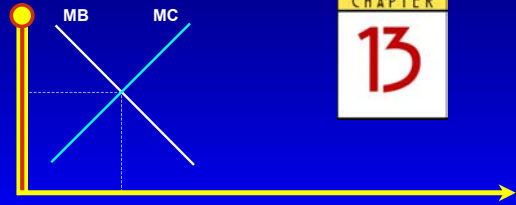
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 **Fiscal Policy as a Stabilization Tool: Three Qualifications**

- Automatic Stabilizers
 - Provisions in the law that imply *automatic* increases in government spending or decreases in taxes when real output declines

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End of
Chapter



CHAPTER
13
