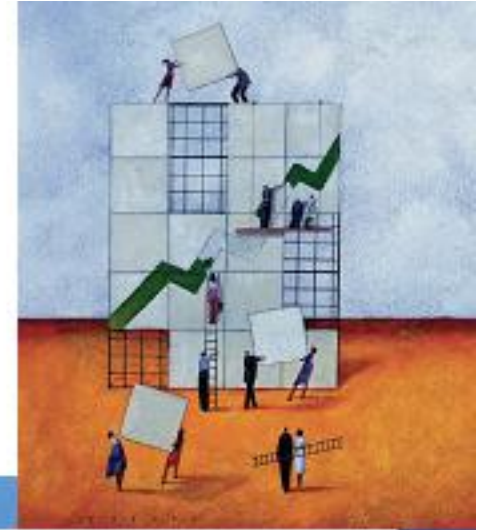


Chapter 10



The Short-Run Macro Model

U.S. Consumption and Disposable Income

- **Figure 1** U.S. Consumption and Disposable Income, 1985–2005

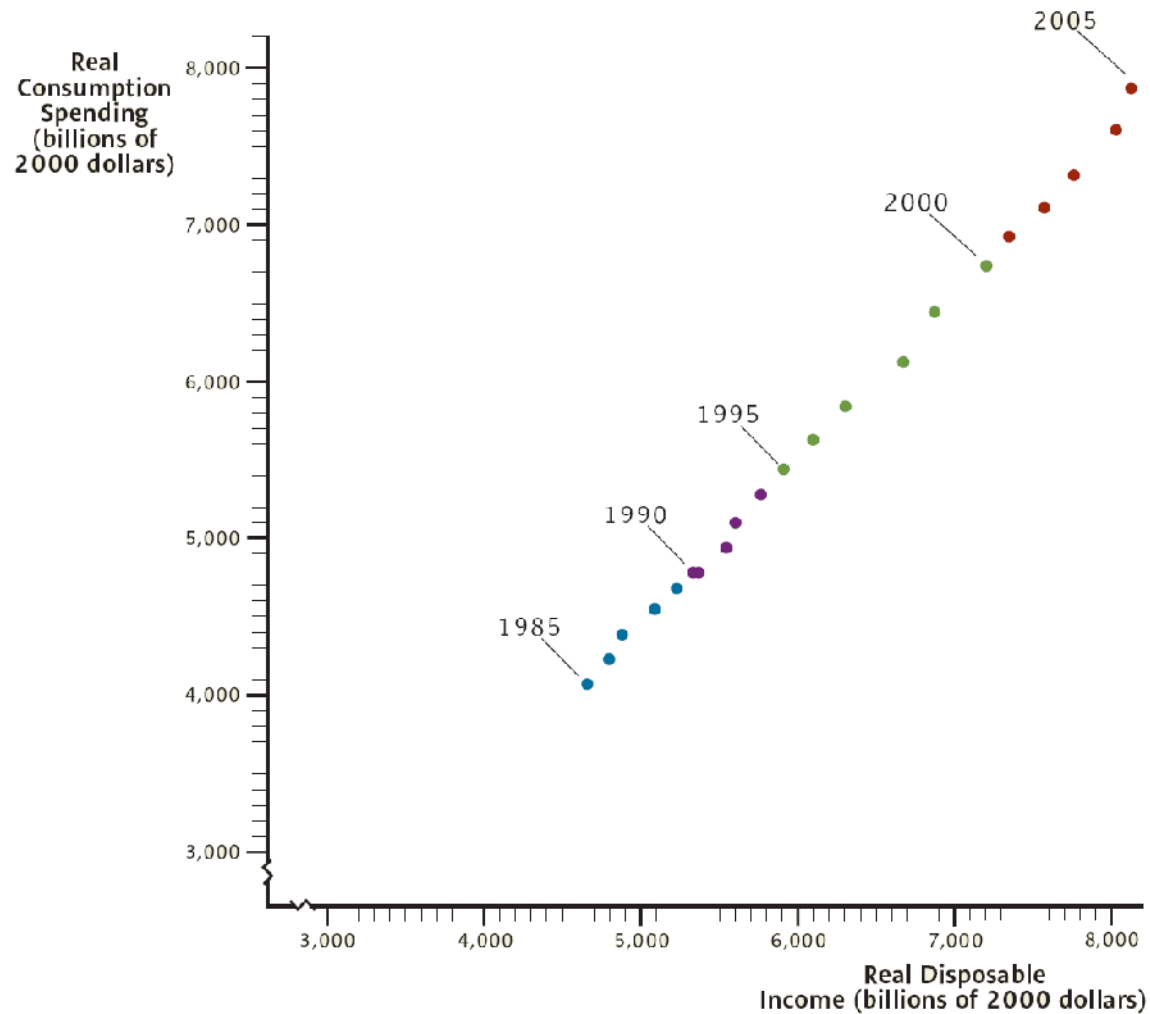


Table 1: Hypothetical Data on Disposable Income and Consumption

Real Disposable Income (billions of dollars per year)	Real Consumption Spending (billions of dollars per year)
0	2,000
1,000	2,600
2,000	3,200
3,000	3,800
4,000	4,400
5,000	5,000
6,000	5,600
7,000	6,200
8,000	6,800

The Consumption Function

- **Figure 2** The Consumption Function

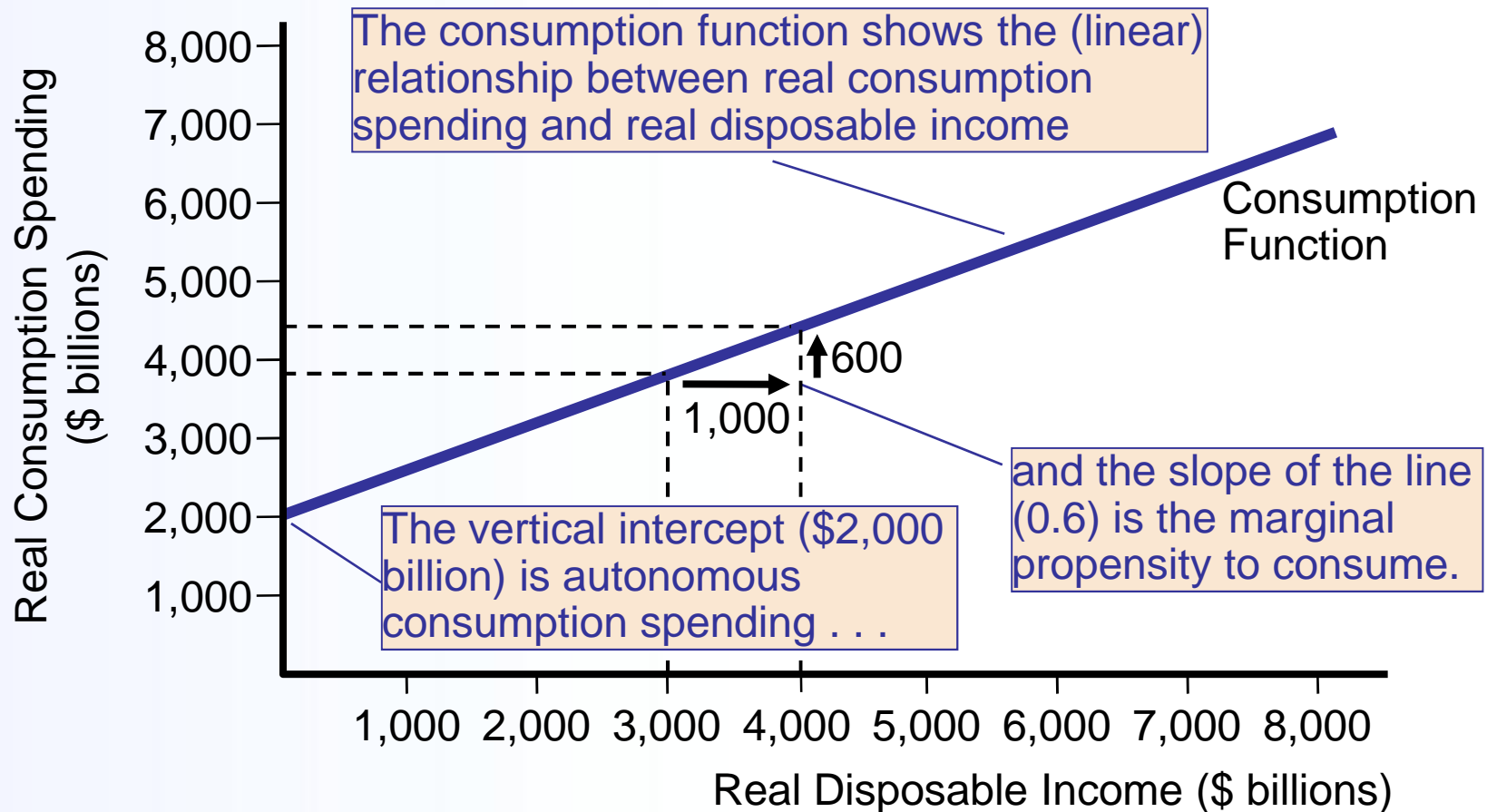
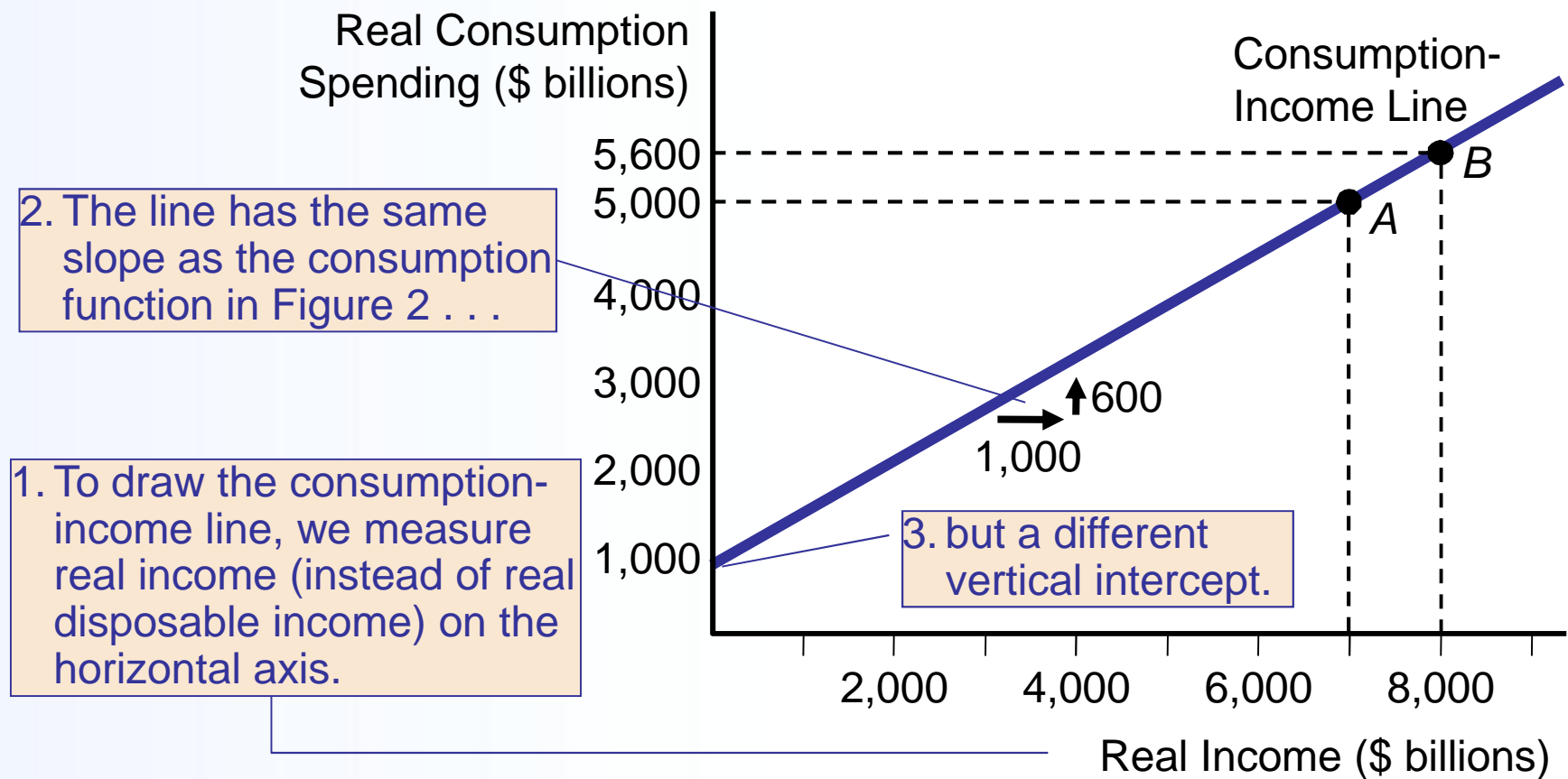


Table 2: The Relationship Between Consumption and Income

Income or GDP (billions of dollars per year)	Tax Collections (billions of dollars per year)	Disposable Income (billions of dollars per year)	Consumption Spending (billions of dollars per year)
2,000	2,000	0	2,000
3,000	2,000	1,000	2,600
4,000	2,000	2,000	3,200
5,000	2,000	3,000	3,800
6,000	2,000	4,000	4,400
7,000	2,000	5,000	5,000
8,000	2,000	6,000	5,600
9,000	2,000	7,000	6,200
10,000	2,000	8,000	6,800

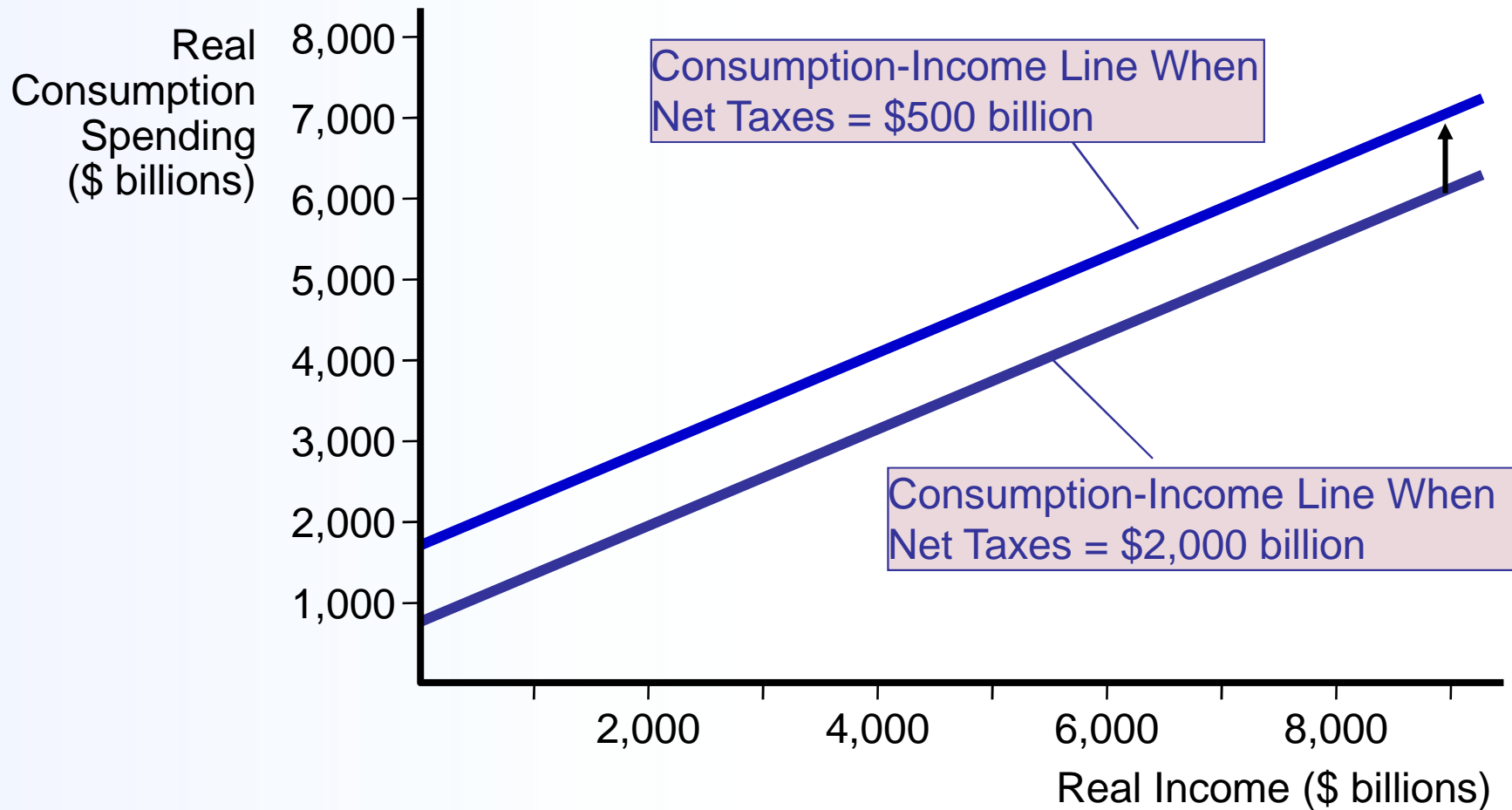
The Consumption-Income Line

- **Figure 3** The Consumption-Income Line



Shift the Consumption-Income Line

- **Figure 4** A Shift in the Consumption-Income Line



Shifts in the Consumption-Income Line

- **Table 3** Shifts in the Consumption-Income Line

Consumption–Income Line Shifts Upward When:

Net taxes ↓ {
 Transfers ↑
 Taxes ↓

Autonomous
 consumption
 (a) ↑ {
 Household wealth ↑
 Interest rate ↓
 Greater optimism

Consumption–Income Line Shifts Downward When:

Net Taxes ↑ {
 Transfers ↓
 Taxes ↑

Autonomous
 Consumption
 (a) ↓ {
 Household wealth ↓
 Interest rate ↑
 Greater pessimism

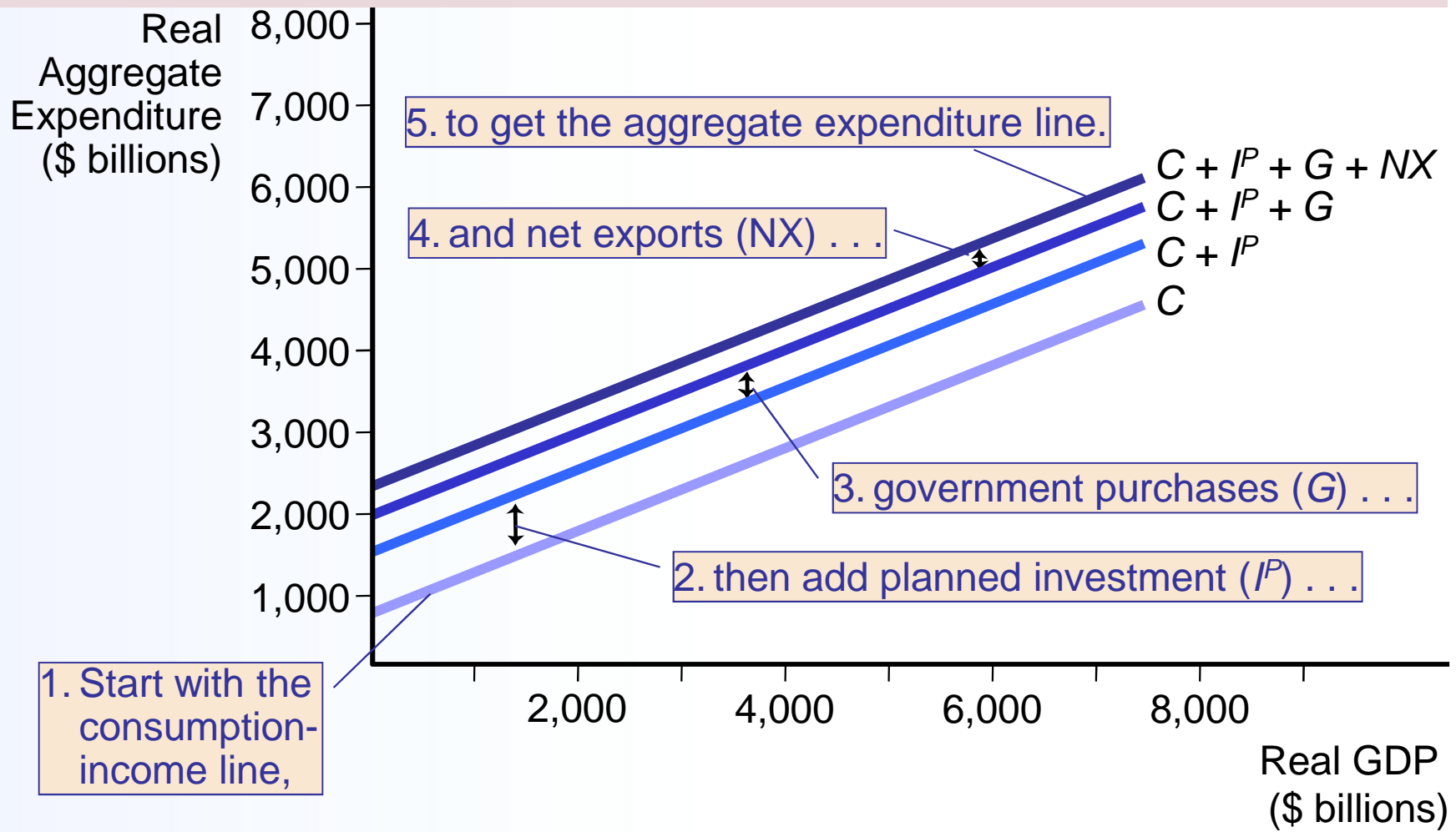
Income and Aggregate Expenditure

- **Table 4** The Relationship Between Income and Aggregate Expenditure

(1) Income or GDP (billions of dollars per year)	(2) Consumption Spending (billions of dollars per year)	(3) Investment Spending (billions of dollars per year)	(4) Government Purchases (billions of dollars per year)	(5) Net Exports (billions of dollars per year)	(6) Aggregate Expenditure (AE) (billions of dollars per year)	(7) Change In Inventories (billions of dollars per year)
4,000	3,200	800	1,000	600	5,600	-1,600
5,000	3,800	800	1,000	600	6,200	-1,200
6,000	4,400	800	1,000	600	6,800	-800
7,000	5,000	800	1,000	600	7,400	-400
8,000	5,600	800	1,000	600	8,000	0
9,000	6,200	800	1,000	600	8,600	400
10,000	6,800	800	1,000	600	9,200	800
11,000	7,400	800	1,000	600	9,800	1,200
12,000	8,000	800	1,000	600	10,400	1,600

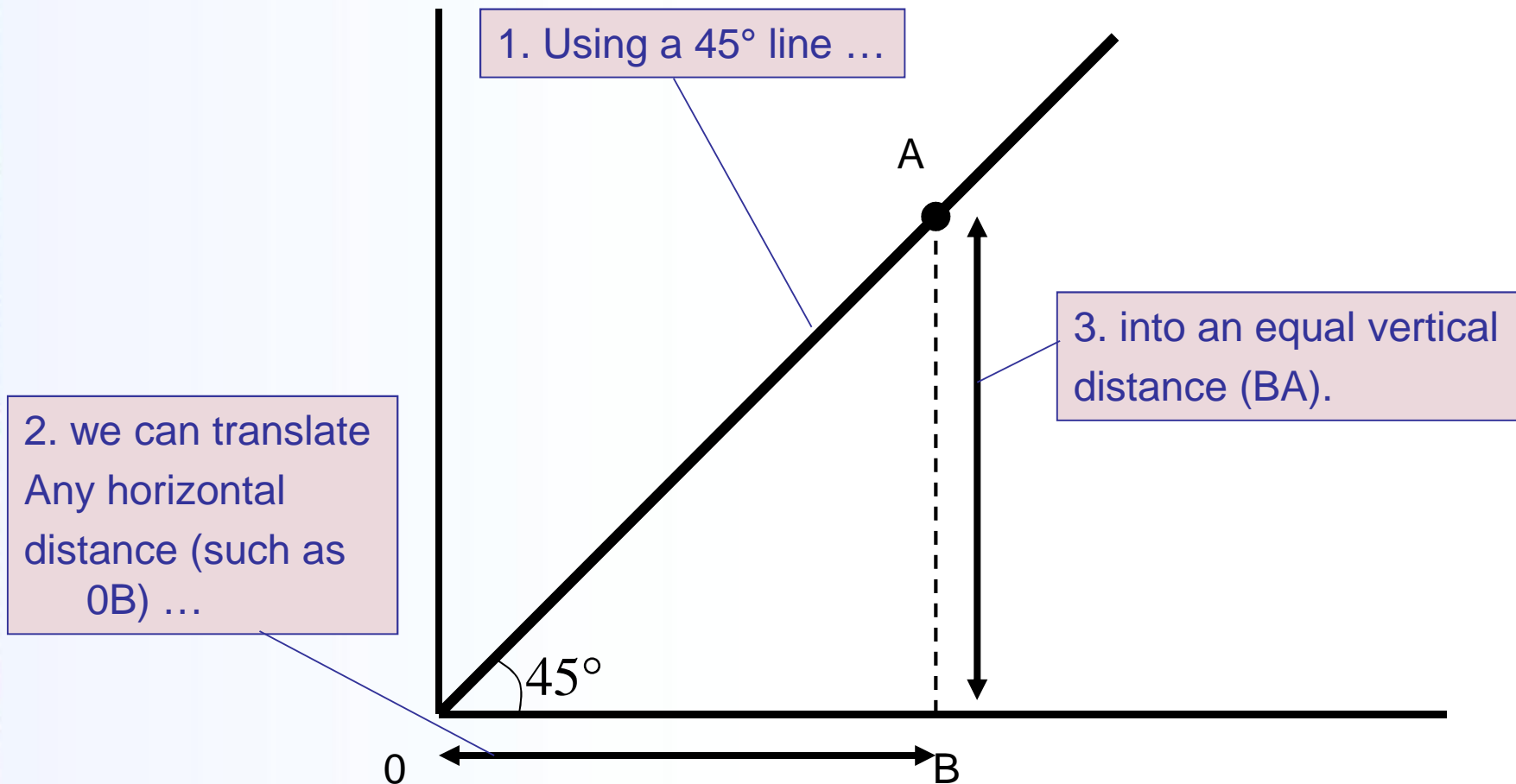
Deriving the Aggregate Expenditure Line

- Figure 5** Deriving the Aggregate Expenditure Line



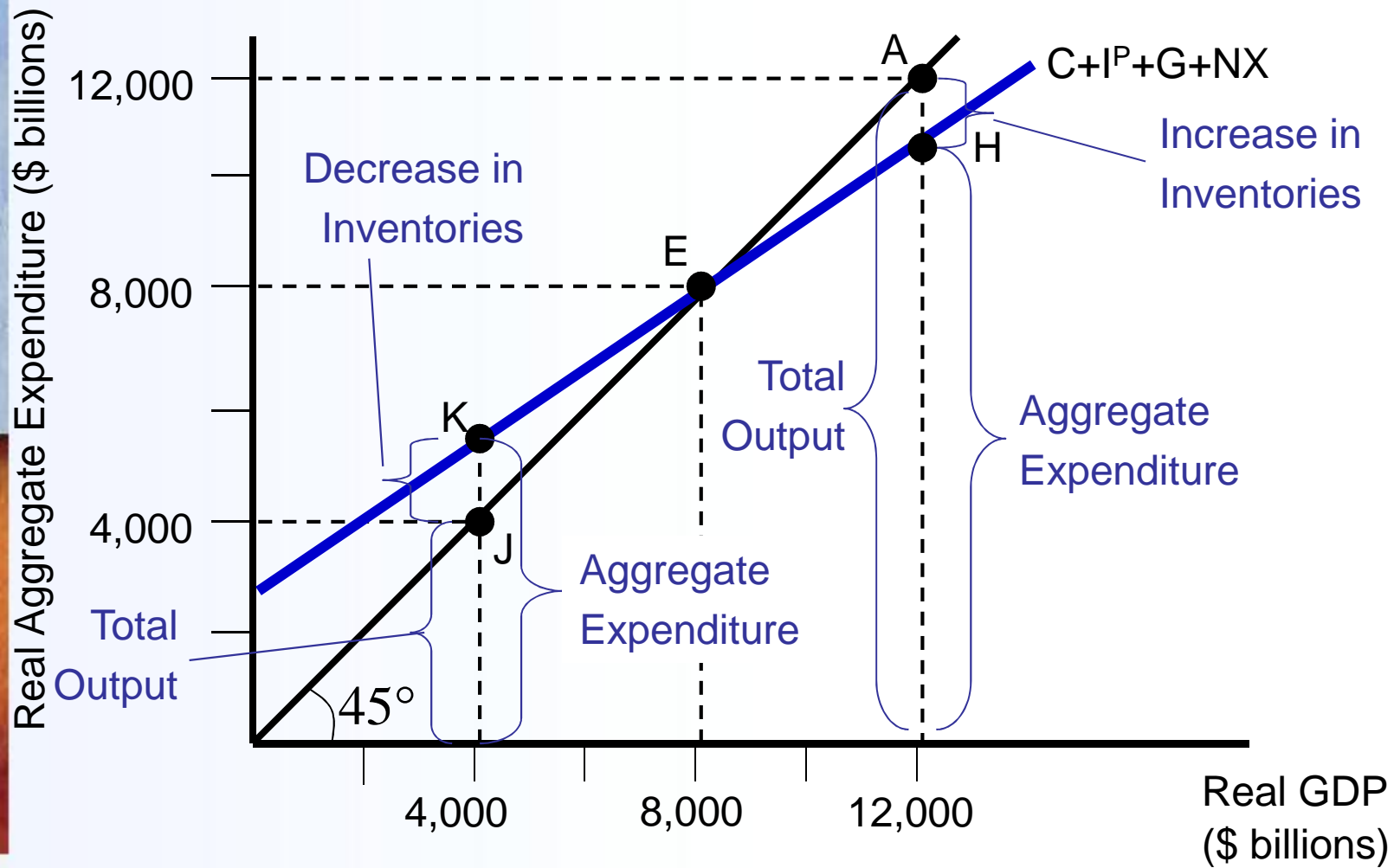
Using a 45° to Translate Distances

- **Figure 6** Using a 45° to Translate Distances



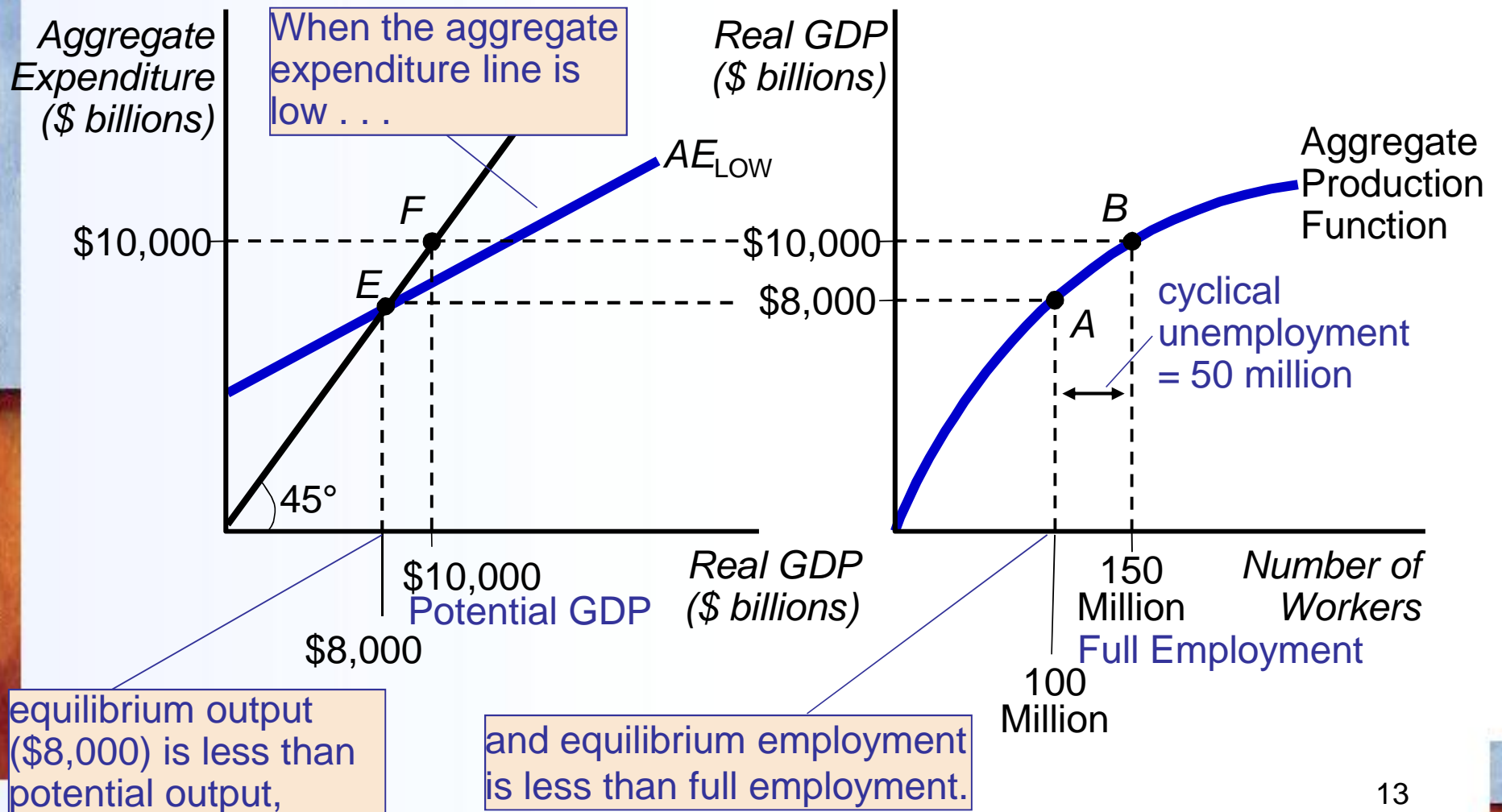
Determining Equilibrium Real GDP

• **Figure 7** Determining Equilibrium Real GDP



Equilibrium GDP and Employment

- Figure 8 Equilibrium GDP Can Be Less Than Full Employment GDP



Equilibrium GDP and Employment

- Figure 9 Equilibrium GDP Can Be Greater Than Full-Employment

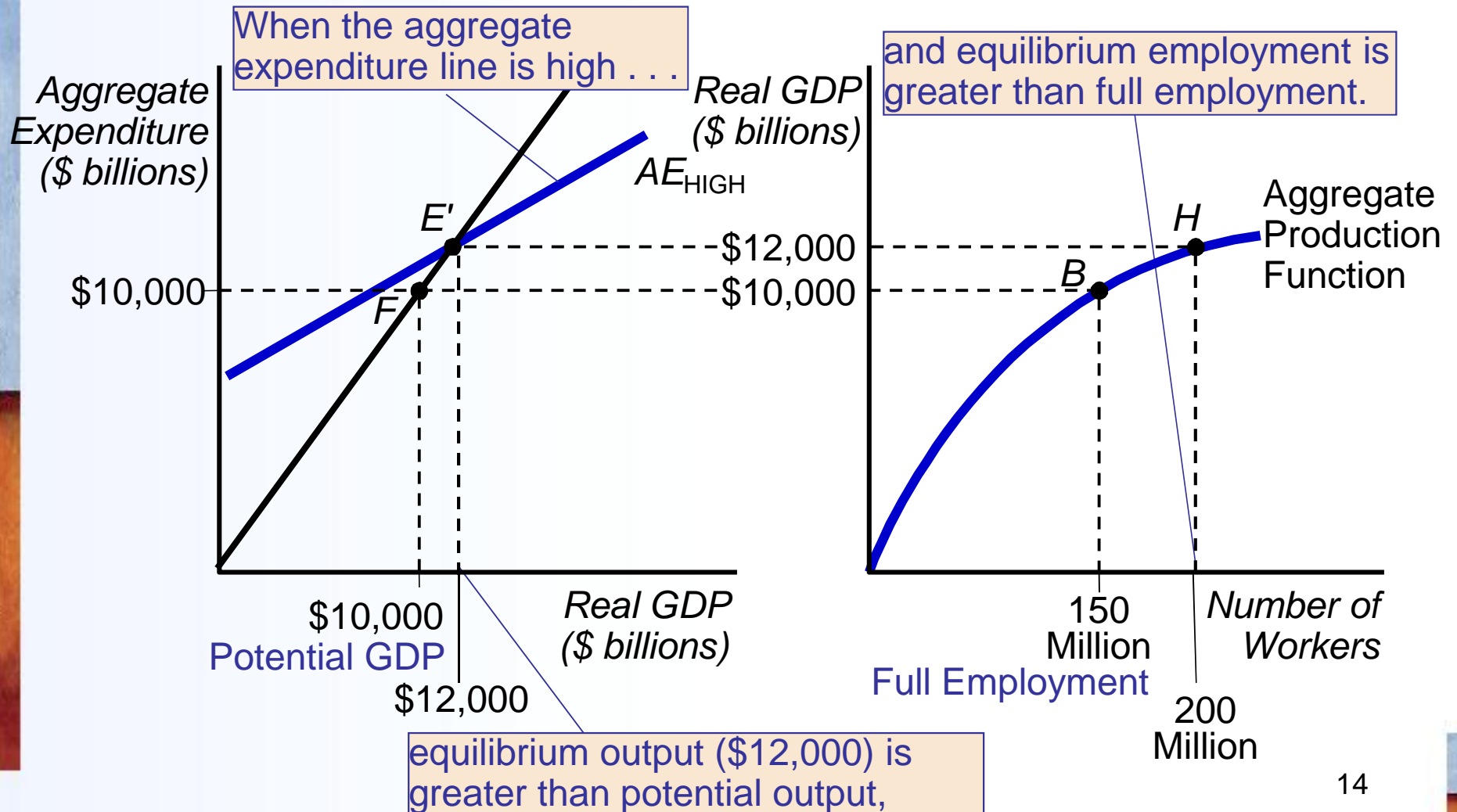
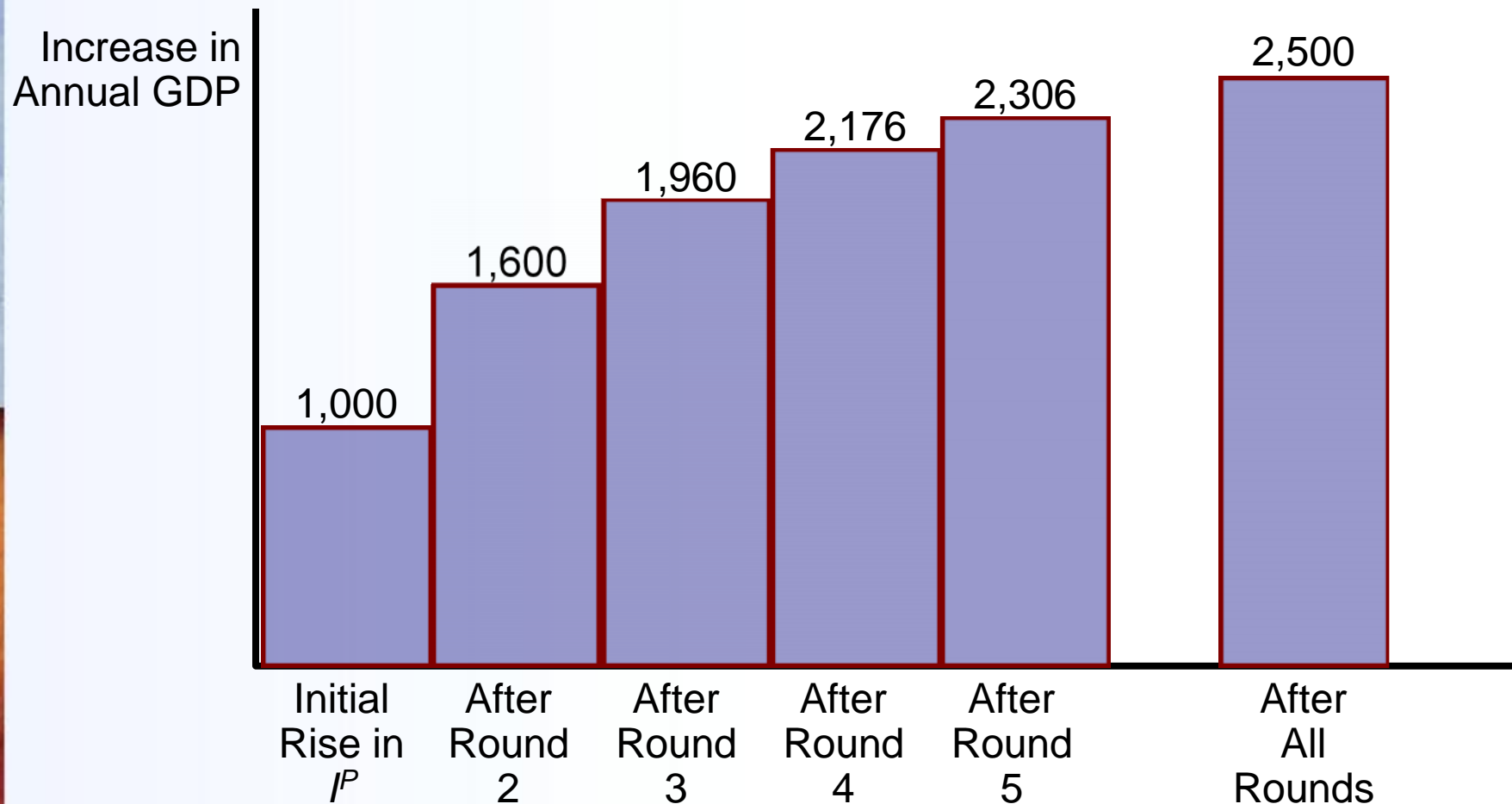


Table 5: Cumulative Increases in Spending When Investment Spending Increases by \$1,000 Billion

Round	Additional Spending in Each Round (billions of dollars per year)	Total Additional Spending (billions of dollars per year)
Initial increase in investment spending	1,000	1,000
Round 2	600	1,600
Round 3	360	1,960
Round 4	216	2,176
Round 5	130	2,306
Round 6	78	2,384
Round 7	47	2,431
Round 8	28	2,459
Round 9	17	2,476
Round 10	10	2,486
...
Round 20	0.06	Very close to 2,500

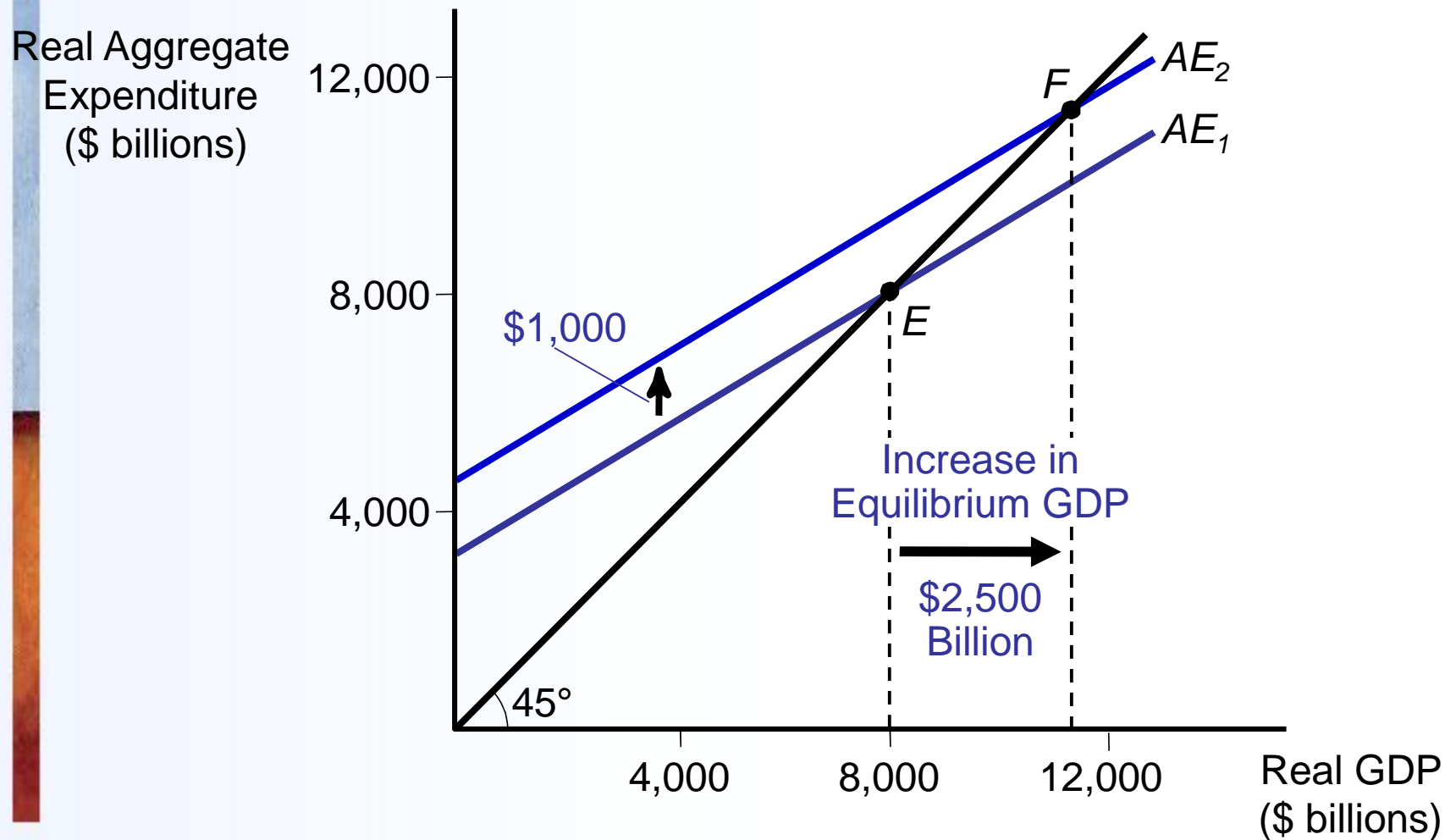
A Change in Investment Spending

- **Figure 10** The Effect of a Change in Investment Spending



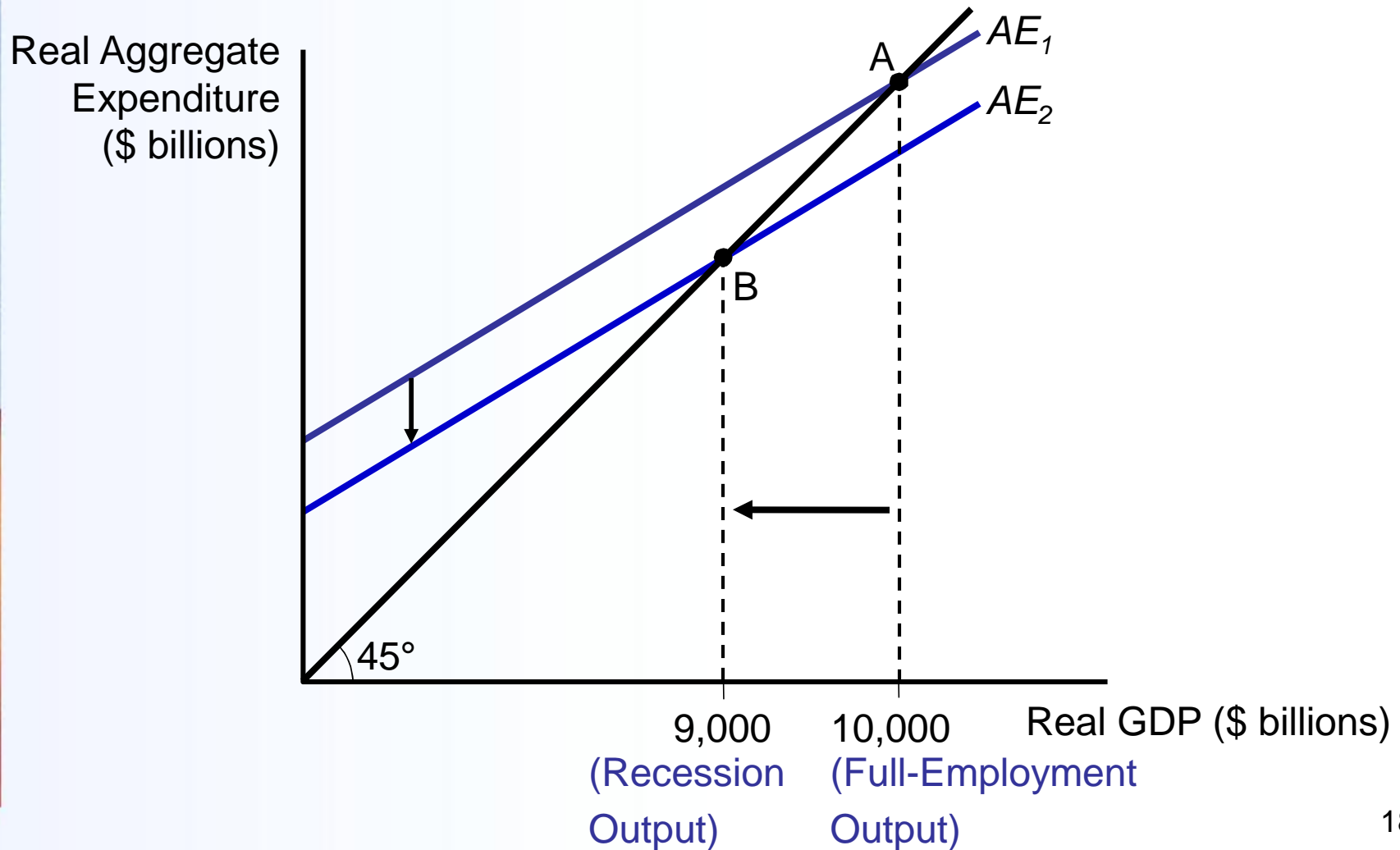
A Graphical View of the Multiplier

- **Figure 11** A Graphical View of the Multiplier



Countercyclical Fiscal Policy

• **Figure 12** Countercyclical Fiscal Policy



The Recession of 2001

- **Figure 13** The Recession of 2001

