

FIGURE 1-1

## Calculating total output: an example

	<u>Sales price</u>	-	<u>Cost of material inputs</u>	=	<u>Value added</u>
Company A (forestry company)	\$1,000		\$0		\$1,000
↓					
Company B (furniture company)	\$2,500		\$1,000		\$1,500
↓					
Company C (retailer, to consumer)	<b>\$3,000</b>		\$2,500		\$500
Total	\$6,500		\$3,500		<b>\$3,000</b>

TABLE 1-1

## GDP and the balance of payments—a hypothetical example

### GDP accounts for Country X, 2010 (millions of \$)

Consumption (C)	1,000
Investment (I)	200
Government (G)	300
Exports (EX)	500
Imports (IM)	550

**GDP (C + I + G + EX – IM) 1,450**

### Balance of payments for Country X, 2010 (millions of \$)

Current account	–50
balance on merchandise	–200
balance on services	150
net investment income	–25
unilateral transfers	25
Financial account	50
net direct investment	–125
net portfolio investment	150
errors and omissions	–25
change in official reserves	50

**Explanation:** In this example, Country X is buying more final output than it produces. We know this because C + I + G (domestic expenditure) is greater than total GDP (1,500 vs. 1,450). For this to be possible, Country X must import more than it exports, as is indeed the case. As shown in the left panel, imports (of goods and services) exceed exports (of goods and services) by 50, which is exactly the amount by which domestic expenditure exceeds domestic output. Clearly the difference between domestic expenditure and domestic output is being imported from abroad. The panel on the right side, the balance of payments, offers a more detailed account of Country X's transactions with the rest of the world. The current account is in deficit, reflecting the fact that Country X buys more from foreigners than it sells to foreigners. (Although the current account on the BOP does not always equal the difference between exports and imports as recorded in the GDP accounts, it is often close.) The surplus on the financial account represents a net capital inflow from abroad, which is necessary to finance the deficit on the current account. The capital inflows that make up the financial account take a variety of forms, including foreign direct investment (FDI), portfolio flows, and so on. For a more detailed treatment of GDP accounting and balance of payments accounting, see chapters 5 and 6.

TABLE 1-2

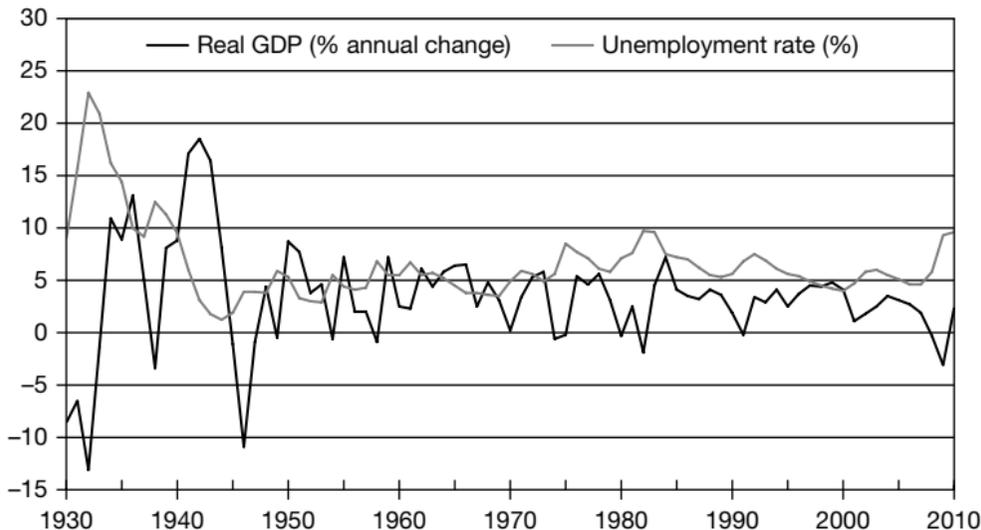
## Comparative advantage and gains from trade: a numeric example

	Wine (gallons)	Cloth (yards)
<b>Portuguese productivity</b> (output per worker per year)	100	100
<b>English productivity</b> (output per worker per year)	66.67	90
<b>Ratio of Portuguese productivity to English productivity</b>	1.5 (Portuguese comparative average)	1.1 (English comparative average)
<b>Portuguese output under autarchy</b> (700 wine workers, 500 cloth workers)	70,000	50,000
<b>English output under autarchy</b> (700 wine workers, 500 cloth workers)	46,667	45,000
<b>Portuguese output under specialization</b> (1,200 wine workers)	120,000	0
<b>English output under specialization</b> (1,200 cloth workers)	0	108,000
<b>Portuguese consumption after trade</b> (e.g., 48,000 gallons of wine for 55,000 yards of cloth)	72,000	55,000
<b>English consumption after trade</b> (e.g., 55,000 yards of cloth for 48,000 gallons of wine)	48,000	53,000

which mutual gains from trade break down, most economists tend to believe that these conditions—these possible exceptions to free trade—occur relatively rarely in practice. Indeed, the Nobel

FIGURE 1-2

## The US business cycle, 1930–2010



Sources: GDP growth: Bureau of Economic Analysis, Table 1.1.1. “Percent Change from Preceding Period in Real Gross Domestic Product,” revised May 30, 2013; unemployment for 1930–1944: *Historical Statistics of the United States, Millennial Edition Online*, edited by Susan B. Carter et al. (New York: Cambridge University Press, 2006), Table Ba470–477, “Labor force, employment, and unemployment: 1890–1990”; unemployment for 1945–2010: Bureau of Labor Statistics, Current Population Survey, “Employment status of the civilian noninstitutional population, 1942 to date,” accessed June 2013.

**FIGURE 1-3**

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**Domestic expenditure, domestic output, and sources of investment in the United States, 2012****Domestic expenditure (uses of output)**

Private and government consumption  
Private and government investment  
Total

**Share of GDP (%)**

84  
19  
103

**Sources of investment**

Domestic savings  
Net borrowing from abroad  
Total

16  
3  
19

**Expenditure versus output**

Total domestic expenditure  
Total domestic output (GDP)  
Difference (= net borrowing from abroad)

103  
100  
3

*Source:* Bureau of Economic Analysis, US Department of Commerce.

*Note:* In the United States in 2012, domestic expenditures (uses of output) exceeded domestic production of output (GDP) by about 3%. Similarly, total domestic investment exceeded total domestic savings—again by about 3% (19% investment minus 16% savings). In both cases, the difference was made up by “borrowing” 3% of output from abroad (as expressed in the current account deficit).

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**FIGURE 2-1**

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## **The three “prices” of money**

1. Price relative to *time* (or, more precisely, bonds) —————▶ **Interest rate**
  2. Price relative to *foreign currency* —————▶ **Exchange rate**
  3. Price relative to all *goods and services* —————▶ **Aggregate price level  
(price deflator)**
-

FIGURE 2-2

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## Money: standard “textbook” relationships

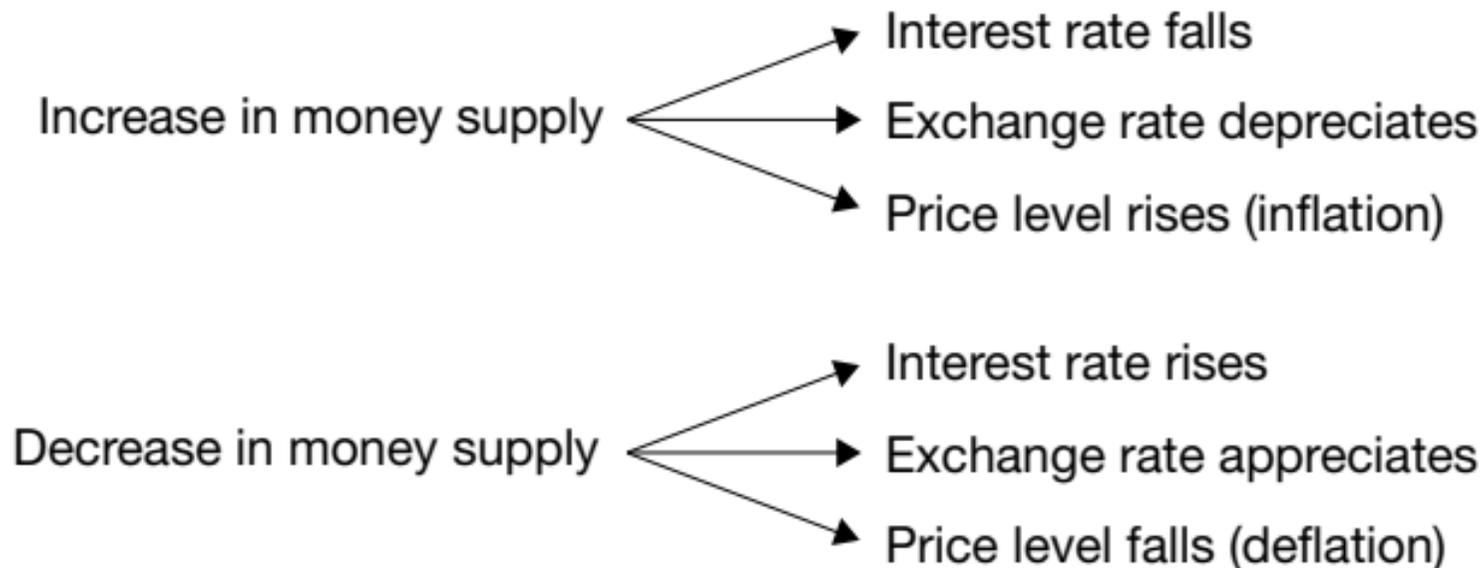


TABLE 2-1

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**Final output of island economy, 2010 (in current island \$)**

<b>Output</b>	<b>Quantity</b>	<b>Price</b>	<b>Value of final output</b>
Coconut milk	1 million gallons	\$10/gallon	\$10 million
Rice	2 million pounds	\$4/pound	\$8 million
			<b>\$18 million (= 2010 GDP)</b>

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TABLE 2-2

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**Final output of island economy, 2011 (in current island \$)**

<b>Output</b>	<b>Quantity</b>	<b>Price</b>	<b>Value of final output</b>
Coconut milk	1 million gallons	\$20/gallon	\$20 million
Rice	2 million pounds	\$8/pound	\$16 million
			<b>\$36 million (= 2011 GDP)</b>

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**TABLE 2-3**

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**Island economy: nominal versus real GDP, 2010–2011**

<b>Year</b>	<b>Nominal GDP</b>	<b>=</b>	<b>Price deflator (P)</b>	<b>×</b>	<b>Real GDP (Q)</b>
2010	\$18 million		1.00		\$18 million <sub>2010 \$</sub>
2011	\$36 million		2.00		\$18 million <sub>2010 \$</sub>

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**TABLE 2-4****US economic performance, 1980–2010**

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	<b>1980</b>	<b>2010</b>	<b>1980–2010 CAGR<sup>a</sup></b>
Nominal GDP (P × Q)	\$2,862 billion	\$14,958 billion	5.7%
Real GDP, 2009 \$ (Q)	\$6,443 billion	\$14,779 billion	2.8%
GDP deflator, 2010 = 100 (P)	43.9	100.0	2.8%

<sup>a</sup> CAGR stands for “compound annual growth rate.” The formula for calculating a CAGR is as follows:  $CAGR = [(Final\ value/Starting\ value)^{1/(final\ year - starting\ year)} - 1] \times 100\%$ . This formula is derived from the following growth equation:  $Final\ value = Starting\ value \times (1 + r)^{(number\ of\ years)}$ , where  $r$  is the average annual growth rate of the variable in question.

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**TABLE 2-5**

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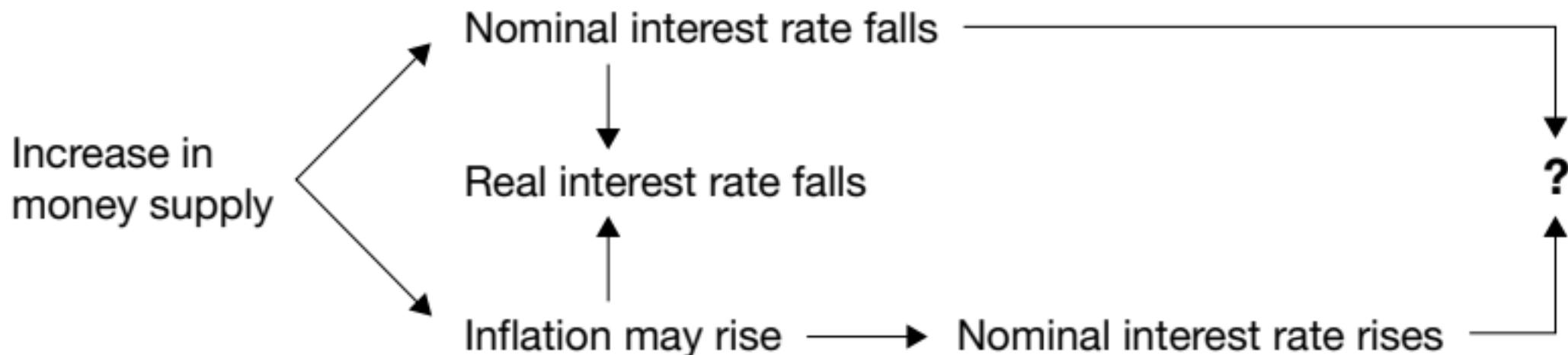
**Example: real versus nominal interest rates**

	<b>Nominal (posted) interest rate on loan</b>	<b>Rate of inflation</b>	<b>Real interest rate</b>	<b>Effective cost of borrowing</b>
Scenario 1:	1,000%	0%	1,000%	Very high
Scenario 2:	1,000%	1,000%	0%	Very low

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FIGURE 2-3

## Money growth, inflation, and interest rates (nominal versus real)



**TABLE 2-6****Cost of calculators, in \$ and ¥, before and after nominal depreciation of the dollar**

	<b>¥/\$ ER</b>	<b>Cost of US-made calculator</b>	<b>Cost of US-made calculator</b>	<b>Cost of Japanese-made calculator</b>	<b>Cost of Japanese-made calculator</b>	<b>Country from which calculators bought</b>
Before	100	\$10	¥1,000	¥900	\$9.00	Japan
After	80	\$10	¥800	¥900	\$11.25	US

TABLE 2-7

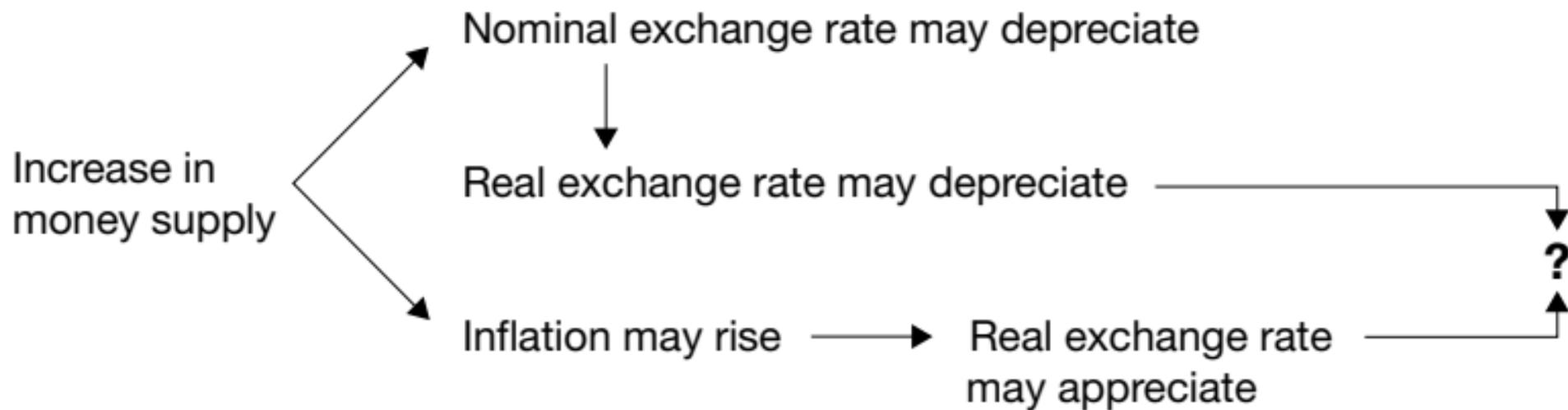
## Nominal versus real exchange rates—four scenarios

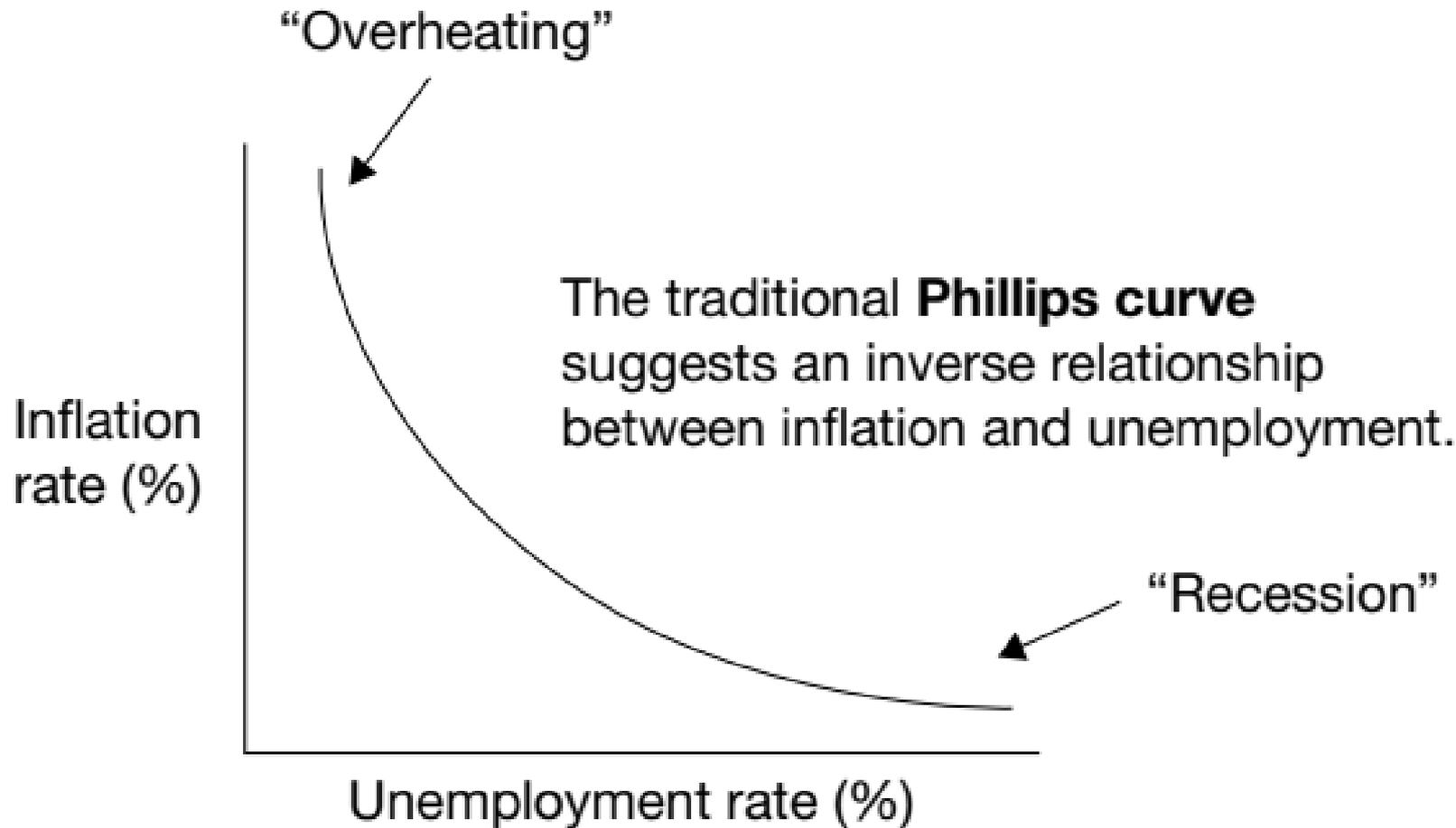
	<b>% change in nominal ¥/\$ exchange rate</b>	<b>Inflation rate (Japan)</b>	<b>Inflation rate (US)</b>	<b>Approx. % change in real ¥/\$ exchange rate</b>	<b>Expected effect on US balance of trade</b>
Scenario 1:	-20% (deprecia- tion of \$)	0%	30%	10% (apprecia- tion of \$)	Unfavorable (↓ BOT)
Scenario 2:	-20% (deprecia- tion of \$)	0%	20%	0%	Neutral
Scenario 3:	-20% (deprecia- tion of \$)	0%	10%	-10% (deprecia- tion of \$)	Favorable (↑ BOT)
Scenario 4:	-20% (deprecia- tion of \$)	30%	30%	-20% (deprecia- tion of \$)	Favorable (↑ BOT)

FIGURE 2-4

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## Money growth, inflation, and exchange rates (nominal versus real)





**FIGURE 2-5**

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## **The three tools of monetary policy**

### **Discount rate**

$\uparrow$  Discount rate  $\rightarrow$   $\downarrow$  Borrowing by commercial banks  $\rightarrow$   $\downarrow$  Monetary base  $\rightarrow$   $\downarrow$  Money supply

$\downarrow$  Discount rate  $\rightarrow$   $\uparrow$  Borrowing by commercial banks  $\rightarrow$   $\uparrow$  Monetary base  $\rightarrow$   $\uparrow$  Money supply

### **Reserve requirement**

$\uparrow$  Reserve requirement  $\rightarrow$   $\uparrow$  Leakage  $\rightarrow$   $\downarrow$  Money multiplier  $\rightarrow$   $\downarrow$  Money supply

$\downarrow$  Reserve requirement  $\rightarrow$   $\downarrow$  Leakage  $\rightarrow$   $\uparrow$  Money multiplier  $\rightarrow$   $\uparrow$  Money supply

### **Open market operations**

Open market purchases  $\rightarrow$  Injection of liquidity  $\rightarrow$   $\uparrow$  Monetary base  $\rightarrow$   $\uparrow$  Money supply

Open market sales  $\rightarrow$  Withdrawal of liquidity  $\rightarrow$   $\downarrow$  Monetary base  $\rightarrow$   $\downarrow$  Money supply

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FIGURE 3-1

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## Illustration of Keynesian income multiplier

*Illustration is based on \$100 increase in government deficit spending and leakage of 20%.*

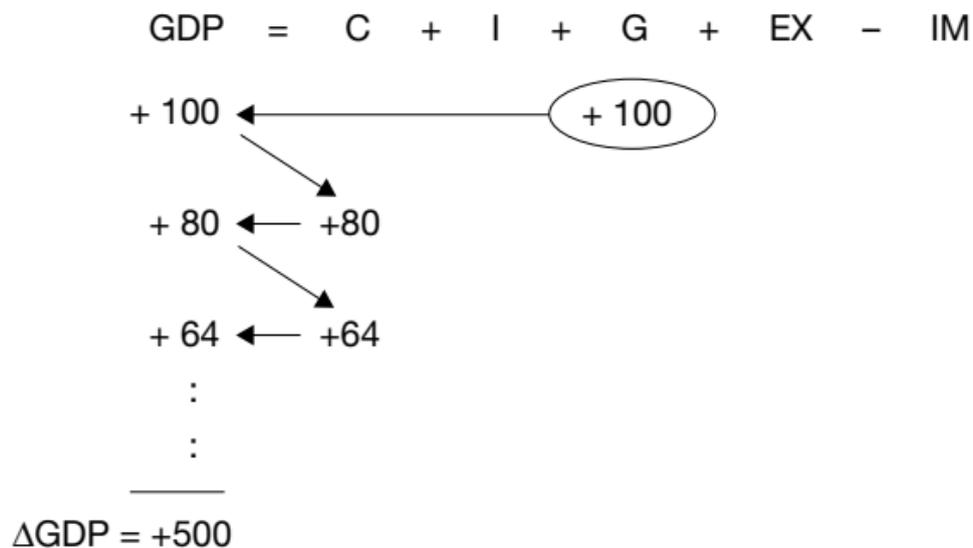


FIGURE 3-2

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## Keynesian fiscal stimulus, in good times and bad

↑ Government budget deficit → ↑ Demand → ↑ Nominal GDP ( $P \times Q$ ),  
via income multiplier

In periods of **high unemployment**:

↑ Government budget deficit → ↑ Demand → ↑ **Q (increase in real GDP)** [recovery]

In periods of **full employment**:

↑ Government budget deficit → ↑ Demand → ↑ **P (inflation)** [overheating]

In **normal times** (modest unemployment):

↑ Government budget deficit → ↑ Demand → ↑ **Q & ↑ P (both real GDP and inflation rise)**

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TABLE 5-1

## Expenditure approach to GDP accounting, United States (2012)

Components of GDP (types of expenditure)		Billions \$	% of GDP
<b>Personal consumption</b>	<b>C</b>	<b>\$11,150</b>	<b>68.6%</b>
Goods		7,380	45.4%
Services		3,770	23.2%
<b>Gross private domestic investment</b>	<b>I</b>	<b>\$2,475</b>	<b>15.2%</b>
Fixed investment		2,409	14.8%
Nonresidential		1,970	12.1%
Structures		437	2.7%
Equipment		908	5.6%
Intellectual property products		625	3.8%
Residential		439	2.7%
Change in private inventories		66	0.4%
<b>Government consumption and gross investment</b>	<b>G</b>	<b>\$3,167</b>	<b>19.5%</b>
Government consumption ( $G_c$ )		2,548	15.7%
Federal		1,012	6.2%
State and local		1,536	9.5%
Gross government investment ( $G_i$ )		619	3.8%
Federal		284	1.7%
State and local		335	2.1%
<b>Exports</b>	<b>EX</b>	<b>\$2,196</b>	<b>13.5%</b>
Goods		1,536	9.5%
Services		660	4.1%
<b>Imports</b>	<b>IM</b>	<b>\$2,743</b>	<b>16.9%</b>
Goods		2,295	14.1%
Services		448	2.8%
<b>Gross domestic product = C + I + G + (EX - IM)</b>	<b>GDP</b>	<b>\$16,245</b>	<b>100.0%</b>

Source: Data drawn from US Bureau of Economic Analysis.

TABLE 5-2

## GDP per capita, exchange rate versus purchasing power parity (assorted countries, 2012)

	GDP per capita, US\$ (market exchange rate)	GDP per capita, PPP (purchasing power parity)	PPP/ER ratio
Argentina	\$11,560	\$18,020	1.6
Brazil	\$11,570	\$12,100	1.0
Burundi	\$281	\$627	2.2
Cambodia	\$993	\$2,530	2.5
Canada	\$52,152	\$42,580	0.8
China	\$6,290	\$9,460	1.5
Egypt	\$3,020	\$6,420	2.1
Ethiopia	\$434	\$1,190	2.7
France	\$41,060	\$36,720	0.9
Germany	\$41,620	\$40,640	1.0
India	\$1,538	\$3,920	2.5
Indonesia	\$3,540	\$4,900	1.4
Iraq	\$6,190	\$5,060	0.8
Ireland	\$45,920	\$42,520	0.9
Israel	\$30,497	\$31,430	1.0
Japan	\$47,300	\$36,230	0.8
Malaysia	\$10,387	\$17,050	1.6
Mexico	\$10,238	\$17,908	1.7
Nigeria	\$1,640	\$1,920	1.2
Norway	\$99,760	\$64,790	0.6
Philippines	\$2,410	\$4,090	1.7
Russia	\$14,212	\$17,610	1.2
Saudi Arabia	\$25,160	\$31,380	1.2
Singapore	\$51,400	\$47,520	0.9
South Africa	\$7,880	\$11,930	1.5
Turkey	\$10,560	\$15,010	1.4
United States	\$49,959	\$49,959	1.0

Source: Economist Intelligence Unit (EIU) Country Data, including EIU estimates.

TABLE 5-3

## Investment, savings, and foreign borrowing (United States, 2012)

	Billions \$	% of GDP
<b>Private investment (I)</b> [ = Private savings + Government savings + Net foreign borrowing]	<b>\$2,475.2</b>	<b>15.2%</b>
<b>Private saving, gross (S<sub>p</sub>)</b>	<b>\$,3540.9</b>	<b>21.8%</b>
Personal saving	687.4	4.2%
Undistributed corporate profits (with inventory valuation and capital consumption adjustment)	804.3	5.0%
Private consumption of fixed capital (depreciation)	2,049.3	12.6%
<b>Government saving (S<sub>G</sub>)</b> [ = Government receipts – Government expenditure = Budget surplus]	<b>–\$1,487.7</b>	<b>–9.2%</b>
Total government receipts (taxes), all levels of government <sup>a</sup> (T)	4,259.2	26.2%
Total government expenditures, all levels of government, including income transfers <sup>b</sup> (G + Tr)	5,746.9	35.4%
<b>Net foreign borrowing (IM – EX)</b> [ = Net imports = Imports – Exports] <sup>c</sup>	<b>\$439</b>	<b>2.7%</b>
<b>Statistical discrepancy</b>	<b>–\$17</b>	<b>–0.1%</b>

Source: Data drawn from US Bureau of Economic Analysis.

a. Less capital transfer receipts.

b. Less capital transfer payments and net purchases of nonproduced assets.

c. Less net income receipts, net transfers in, and net capital account inflows.

## Debits and credits on a balance of payments statement

### Debits (-)

Examples:

- **Imports**
- **Income payments** (such as interest and dividends paid to foreigners)
- **Unilateral transfers to foreigners** (such as foreign aid or charitable assistance given to foreigners)
- **Capital outflows** (such as an increase in domestic deposits in foreign banks or domestic purchases of foreign companies, stocks, or bonds)
- **Increase in official reserves** (government stocks of gold or foreign exchange)

Rules (regarding BOP debits):

- **Uses of foreign exchange**
- **Increase in an asset** (i.e., an increase in a domestic claim on a foreign entity)
- **Decrease in a liability** (i.e., a decrease in a domestic obligation to foreigners)

### Credits (+)

Examples:

- **Exports**
- **Income receipts** (such as interest and dividends earned on foreign investments)
- **Unilateral transfers from abroad** (such as foreign aid or charitable assistance received from foreigners)
- **Capital inflows** (such as an increase in foreign deposits in domestic banks or foreign purchases of domestic companies, stocks, or bonds)
- **Decrease in official reserves** (government stocks of gold or foreign exchange)

Rules (regarding BOP credits):

- **Sources of foreign exchange**
- **Increase in a liability** (i.e., an increase in a domestic obligation to foreigners)
- **Decrease in an asset** (i.e., a decrease in a domestic claim on a foreign entity)

TABLE 6-1

## US balance of payments, 1970–2010 (billions of dollars)

	1970	1980	1990	2000	2005	2010
(1) <b>Current account</b>	<b>2.3</b>	<b>2.3</b>	<b>-79.0</b>	<b>-416.3</b>	<b>-739.8</b>	<b>-449.5</b>
(2) <b>Exports</b>	<b>56.6</b>	<b>271.8</b>	<b>535.2</b>	<b>1,072.8</b>	<b>1,288.3</b>	<b>1,844.5</b>
(3) Goods	42.5	224.3	387.4	784.8	911.7	1,288.8
(4) Services	14.2	47.6	147.8	288.0	376.6	555.7
(5) <b>Imports</b>	<b>-54.4</b>	<b>-291.2</b>	<b>-616.1</b>	<b>-1,450.1</b>	<b>-1,996.2</b>	<b>-2,343.8</b>
(6) Goods	-39.9	-249.8	-498.4	-1,231.7	-1,695.8	-1,939.0
(7) Services	-14.5	-41.5	-117.7	-218.4	-300.4	-404.9
(8) Income receipts	11.7	72.6	171.7	352.5	537.3	678.1
(9) Income payments	-5.5	-42.5	-143.2	-333.3	-469.7	-500.4
(10) Unilateral transfers, net	-6.2	-8.3	-26.7	-58.2	-99.5	-127.8
(11) <b>Capital and financial account</b>	<b>-2.1</b>	<b>-24.9</b>	<b>50.9</b>	<b>477.7</b>	<b>713.8</b>	<b>437.9</b>
(12) Capital account, net	0.0	0.0	-7.2	0.0	13.1	-0.2
(13) <b>Assets, net</b> (excluding financial derivatives)	<b>-9.3</b>	<b>-87.0</b>	<b>-81.2</b>	<b>-560.5</b>	<b>-546.6</b>	<b>-910.0</b>
(14) US official reserve assets, net	2.5	-8.2	-2.2	-0.3	14.1	-1.8
(15) US government (nonreserve) assets, net	-1.6	-5.2	2.3	-0.9	5.5	7.5
(16) US private assets, net	-10.2	-73.7	-81.4	-559.3	-566.3	-915.7
<i>Of which:</i>						
(17) direct investment	-7.6	-19.2	-37.2	-159.2	-36.2	-301.1
(18) foreign securities	-1.1	-3.6	-28.8	-127.9	-251.2	-139.1
(19) <b>Liabilities, net</b> (excluding financial derivatives)	<b>7.2</b>	<b>62.0</b>	<b>139.4</b>	<b>1,038.2</b>	<b>1,247.3</b>	<b>1,333.9</b>
(20) To foreign official agencies	7.8	16.6	33.9	42.8	259.3	398.3
(21) US government securities	9.4	11.9	30.2	35.7	213.3	353.3
(22) Other liabilities, net	-0.6	45.4	105.4	995.5	988.1	935.6
<i>Of which:</i>						
(23) direct investment	1.5	16.9	48.5	321.3	112.6	205.9
(24) US Treasury securities	0.1	2.6	-2.5	-70.0	132.3	298.3
(25) other securities	2.2	5.5	1.6	459.9	450.4	140.9

(continued)

TABLE 6-1 (continued)

## US balance of payments, 1970–2010 (billions of dollars)

	1970	1980	1990	2000	2005	2010
(26) Financial derivatives, net	n/a	n/a	n/a	n/a	n/a	14.1
(27) <b>Statistical discrepancy</b>	-0.2	22.6	28.1	-61.4	26.0	11.6

Source: Adapted from the Bureau of Economic Analysis.

Note that on a BOP statement, the terms “assets” and “liabilities” always refer to *changes* in assets and *changes* in liabilities in the year or quarter indicated, not to total assets or total liabilities held as of that year or quarter. On the US BOP statement shown in table 6-1, for example, American holdings of foreign assets *increased* by \$910.0 billion in the year 2010 (recall that an increase in an asset is recorded as a debit in this accounting system), and American obligations to foreigners *increased* by \$1,333.9 billion (recall that an increase in a liability is recorded as a credit). Although total American holdings of foreign assets and total foreign holdings of American assets are naturally much larger, they are not recorded on the BOP statement.

TABLE 6-2

**Prototype of planned presentation of the US balance of payments under the new method, 2006–2010**  
(billions of dollars)

	2006	2007	2008	2009	2010
<b>Current account balance</b>	<b>-800.6</b>	<b>-710.3</b>	<b>-677.1</b>	<b>-376.5</b>	<b>-470.9</b>
<b>Goods balance</b>	<b>-832.9</b>	<b>-814.6</b>	<b>-825</b>	<b>-502.5</b>	<b>-642.2</b>
Exports	1,042.2	1,168.2	1,312.7	1,072.9	1,292.4
Imports	1,875.1	1,982.8	2,137.6	1,575.4	1,934.6
<b>Services balance</b>	<b>79.6</b>	<b>118</b>	<b>126.6</b>	<b>121.3</b>	<b>142.2</b>
Exports	418.5	488.2	532.5	504.8	546.8
Imports	338.9	370.2	405.9	383.6	404.7
<b>Primary income balance</b>	<b>44.2</b>	<b>101.5</b>	<b>147.1</b>	<b>128</b>	<b>165.2</b>
Receipts	693	843.9	823.5	607.2	670.7
Payments	648.9	742.4	676.4	479.2	505.5
<b>Secondary income (transfers) balance</b>	<b>-91.5</b>	<b>-115.1</b>	<b>-125.9</b>	<b>-123.3</b>	<b>-136.1</b>
Receipts	67.9	70.3	83.5	84.7	83.7
Payments	159.5	185.4	209.3	208	219.8
<b>Capital account balance, net</b>	<b>-1.8</b>	<b>0.4</b>	<b>6</b>	<b>-0.1</b>	<b>-0.2</b>
<b>Financial account, net</b>	<b>-809.1</b>	<b>-617.3</b>	<b>-730.6</b>	<b>-245.9</b>	<b>-254.2</b>
<b>Financial derivatives, net</b>	<b>-29.7</b>	<b>-6.2</b>	<b>32.9</b>	<b>-49.5</b>	<b>-13.7</b>
<b>Direct investment, net</b>	<b>1.8</b>	<b>192.9</b>	<b>19</b>	<b>145</b>	<b>115.1</b>
Assets	296.1	532.9	351.7	303.6	393.7
Liabilities	294.3	340.1	332.7	158.6	278.6

(continued)

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Portfolio investment, net</b>	<b>-633</b>	<b>-776.9</b>	<b>-809.4</b>	<b>9.9</b>	<b>-520.8</b>
Assets	493.7	379.7	-285.7	369.8	186.1
Liabilities	1,126.7	1,156.6	523.7	359.9	706.9
<b>Other investment, net</b>	<b>-145.8</b>	<b>-27.1</b>	<b>22</b>	<b>-403.6</b>	<b>163.3</b>
Assets	549.5	659.8	-380.3	-586.3	465.9
Liabilities	695.3	686.9	-402.4	-182.7	302.6
<b>Reserve assets</b>	<b>-2.4</b>	<b>0.1</b>	<b>4.8</b>	<b>52.3</b>	<b>1.8</b>
<b><i>Net errors and omissions</i></b>	<b>-6.7</b>	<b>92.7</b>	<b>-59.5</b>	<b>130.8</b>	<b>216.8</b>

Source: Adapted from Bureau of Economic Analysis, "Table A. U.S. International Transactions (Prototype)," <http://www.bea.gov/international/modern.htm>. Based on data released in June 2011.

FIGURE C-1

## The macro “M”

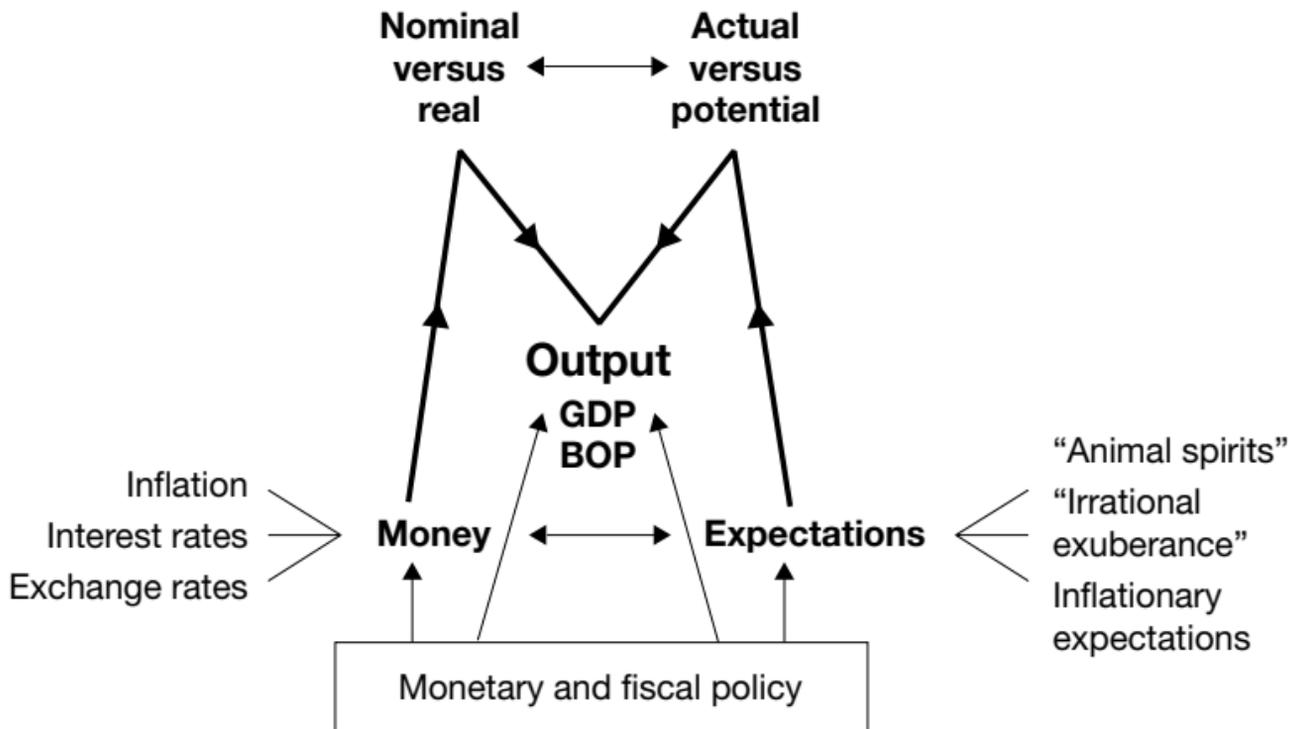


TABLE E-1

## Financial crisis: response and recovery in the United States, 2006–2013

	Federal surplus (+) or deficit (-), on-budget (% GDP) <sup>a</sup>	Federal funds rate (%) <sup>a</sup>	Total assets of the Federal Reserve (\$ billions) <sup>a</sup>	Total deposits of failed or assisted banks (\$ billions) <sup>b</sup>	Real GDP growth (annual % change) <sup>b</sup>	Unemployment rate (%) <sup>a</sup>	Inflation rate (% change CPI) <sup>b</sup>	S&P500 Index <sup>a</sup>
2006	-3.2	5.17	871	0	2.7	4.4	3.2	1,418.30
2007	-2.4	3.06	891	2	1.8	5.0	2.8	1,468.36
2008	-4.4	0.14	2,240	515	-0.3	7.3	3.8	903.25
2009	-10.8	0.05	2,234	1,227	-2.8	9.9	-0.4	1,115.10
2010	-9.3	0.13	2,421	80	2.5	9.4	1.6	1,257.64
2011	-8.9	0.04	2,926	31	1.8	8.5	3.2	1,257.60
2012	-7.1	0.09	2,926	11	2.8	7.9	2.1	1,426.19
2013	-4.3	0.07	4,033	5	1.9	6.7	1.5	1,848.36

Sources: *Federal deficit*: Historical Budget Data, February 2014, Congressional Budget Office, <http://www.cbo.gov/publication/45067>; *federal funds rate*: "Selected Interest Rates (Daily)," Federal Reserve Statistics Release H.15, <http://www.federalreserve.gov/releases/h15/data.htm>; *total assets of the Federal Reserve*: "Factors Affecting Reserve Balances," Federal Reserve Statistical Release H.4.1, <http://www.federalreserve.gov/releases/H41/default.htm>; *total deposits of failed or assisted banks*: "Federal Deposit Insurance Corporation Failures and Assistance Transactions United States and Other Areas," Table BF01, FDIC website, <http://www2.fdic.gov/hsob>; *real GDP growth*: National Income and Product Account Tables: Percent Change From Preceding Period in Real Gross Domestic Product (Table 1.1.1), Bureau of Economic Analysis, [http://www.bea.gov/iTable/index\\_nipa.cfm](http://www.bea.gov/iTable/index_nipa.cfm); *unemployment rate*: "Labor Force Statistics from the Current Population Survey: Unemployment Rate," Bureau of Labor Statistics, <http://data.bls.gov/timeseries/LNS14000000>; *inflation rate (CPI)*: Consumer Price index, All Urban Consumers (CPI-U), Avg-Avg, Percent Change, Bureau of Labor Statistics, <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt>; *S&P500 index*: S&P500 Historical Prices, Yahoo Finance, <http://finance.yahoo.com/q/hp?s=^GSPC+Historical+Prices>.

a. At end of year.

b. For full calendar year.

TABLE E-2

## Macroeconomic policy and performance in the United States, United Kingdom, and euro area, 2006–2013

	General government surplus/deficit (% GDP)			Central bank: benchmark interest rate (end of year)			Real GDP growth (annual % change)			Consumer price inflation (annual % change)			Unemployment rate (annual average, %)		
	US <sup>a</sup>	UK	euro area	Fed <sup>b</sup>	UK	ECB	US	UK	euro area	US	UK	euro area	US	UK	euro area
2006	-3.1	-2.9	-1.4	5.17	5.00	3.50	2.7	2.8	3.4	3.2	2.3	2.2	4.6	5.5	8.3
2007	-3.7	-3.0	-0.7	3.06	5.50	4.00	1.8	3.4	3.0	2.9	2.3	2.1	4.6	5.4	7.5
2008	-7.2	-5.1	-2.1	0.14	2.00	2.50	-0.3	-0.8	0.2	3.8	3.6	3.3	5.8	5.7	7.5
2009	-12.8	-11.2	-6.4	0.05	0.50	1.00	-2.8	-5.2	-4.4	-0.3	2.2	0.3	9.3	7.6	9.5
2010	-12.2	-10.0	-6.2	0.13	0.50	1.00	2.5	1.7	1.9	1.6	3.3	1.6	9.6	7.9	10.0
2011	-10.7	-7.9	-4.1	0.04	0.50	1.00	1.8	1.1	1.6	3.1	4.5	2.7	8.9	8.1	10.1
2012	-9.3	-6.2	-3.7	0.09	0.50	0.75	2.8	0.1	-0.6	2.1	2.8	2.5	8.1	7.9	11.3
2013	-6.5	-6.9	-2.9	0.07	0.50	0.25	1.7	1.4	-0.4	1.5	2.6	1.4	7.5	7.8	12.0

Sources: OECD Economic Outlook 94 Database, Annex Table 27 (General government financial balances), Annex Table 1 (Real GDP), Annex Table 18 (Consumer price indices), Annex Table 13 (Unemployment rates: commonly used definitions), <http://www.oecd.org/eco/outlook/economicoutlookannextables.htm>; "Selected Interest Rates (Daily)," Federal Reserve Statistics Release H.15, <http://www.federalreserve.gov/releases/h15/data.htm>; Key ECB Interest Rates, European Central Bank <http://www.ecb.europa.eu/stats/monetary/rates/html/index.en.html>; Monetary Policy Committee Decisions, Bank of England, <http://www.bankofengland.co.uk/monetarypolicy/Pages/decisions.aspx>.

a. Figures differ from table E-1 because the data here reflects general government deficits (federal and state), whereas table E-1 presents federal deficits only.

b. The rates shown here reflect the actual federal funds rate, not the targeted rate.

General notes: US figures presented in this table may differ from figures in table E-1 because most columns are drawn from a different data source (OECD) for ease of comparison to the United Kingdom and the euro area. Also, data drawn from the OECD includes partial estimates for 2013.