Learning Objectives

After you have studied this chapter, you should be able to

1. define fiscal policy, direct expenditure offsets, automatic or built-in stabilizers, crowding out, recognition time lag, action time lag, effect time lag, Ricardian equivalence theorem, and supply-side economics;

2. recognize the proper fiscal policy required to eliminate recessionary gaps and inflationary gaps;

3. distinguish between the effects of fiscal policy when the economy is operating on the LRAS curve and when it is not;

4. recognize how direct and indirect offsets limit the effectiveness of fiscal policy;

5. indicate how an expansionary fiscal policy can cause net exports to fall;

6. distinguish between discretionary fiscal policy and automatic fiscal policy;

7. enumerate the major problems associated with conducting fiscal policy;

8. recognize how changes in marginal tax rates can have supply-side effects;

9. distinguish among the three fiscal policy time lags.

Outline

1. Fiscal policy is the discretionary changing of government expenditures and/or taxes in an attempt to achieve national economic goals such as high employment and price stability.
   a. If a recessionary gap exists, then expansionary fiscal policy is in order. If government expenditures increase (or lump-sum taxes fall) the aggregate demand curve shifts rightward and the recessionary gap can be eliminated, at a higher price level.
   b. If an inflationary gap exists, then contractionary fiscal policy is appropriate. If government expenditures decrease (or lump-sum taxes increase) the aggregate demand curve shifts leftward and the inflationary gap can be eliminated, at a lower price level.
c. If the economy is already operating on the LRAS curve, shifts in the AD curve lead to temporary increases (decreases) in real GDP which are untenable because they are off the LRAS curve. In the long run, input owners revise their expectations upward (downward) and the SRAS curve shifts upward (downward). In the long run, GDP will be at the level along the LRAS curve, and the price level change will be greater than the change in the short run.

2. There are various factors that offset fiscal policy and thereby limit its effectiveness.
   a. Indirect offsets to fiscal policy:
      i. If government expenditures are financed by borrowing (deficit spending), then the interest rate may rise, which will cause a reduction in (a) business investment, and (b) household expenditures on such durable goods as housing and automobiles.
      ii. If households perceive deficit spending as an increase in their future tax liabilities, the Ricardian equivalence theorem predicts that they will save more, and hence, the AD curve may not shift at all: Household current consumption falls by the amount that G rises.
   b. Direct fiscal offsets arise when government expenditures compete with the private sector, so that increases in government spending are offset by decreases in private investment.
   c. Supply-side effects can result from fiscal policy effects of changing tax rates: Changes in marginal tax rates can affect the choice between leisure and labor, thereby affecting how much people work.

3. The recognition, action, and effect time lags reduce the effectiveness of fiscal policy.

4. A progressive income tax and unemployment compensation are two examples of automatic, or built-in, stabilizers. These built-in stabilizers are not discretionary policy instruments, and they move the economy automatically toward high employment levels.

5. During normal times when there is not excessive unemployment or inflation, fiscal policy actions by Congress have proven to be relatively ineffective—usually too little too late to help in minor recessions.

### Key Terms

- Action time lag
- Recognition time lag
- Effect time lag
- Supply-side economics
- Fiscal policy

### Key Concepts

- Automatic, or built-in, stabilizers
- Indirect expenditure offsets
- Crowding-out effect
- Ricardian equivalence theorem
- Direct expenditure offsets

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Completion Questions

Fill in the blank, or circle the correct term.

1. Discretionary fiscal policy is defined as a(n) __________________ change in taxes and/or government spending in order to change equilibrium real GDP and employment.

2. If a recessionary gap exists, it can be offset by (contractionary, expansionary) fiscal policy. Such a policy entails (decreasing, increasing) government expenditures or (decreasing, increasing) taxes, which will cause the aggregate demand curve to shift (leftward, rightward). Real GDP should (fall, rise), and the price level should (fall, rise).

3. If an inflationary gap exists, it can be eliminated if government expenditures (decrease, increase) or if taxes are (decreased, increased). This will cause the AD curve to shift (leftward, rightward), and real GDP will (fall, rise).

4. If the economy is already operating on its long-run aggregate supply curve, then fiscal policy actions that shift the AD curve will cause real GDP to change (temporarily, permanently) and the price level will change (more, less) in the long run, relative to the short run.

5. If government expenditures are financed by borrowing, a federal budget (deficit, surplus) will result, which may cause the interest rate to (fall, rise), which in turn will cause business investment and household consumption on (durable, nondurable) goods to (fall, rise). Hence, fiscal policy effects will be (reduced, increased).

6. If households perceive government deficit spending as an increase in their future tax liabilities, they may save (less, more) according to the __________________ theorem. Thus, fiscal policy effects will be (reduced, increased).

7. To the extent that government expenditures compete with the private sector, then such expenditures will (induce more, discourage) business investment expenditures. Hence, fiscal policy effects of an increase in government spending will be (reduced, enlarged).

8. If U.S. government deficit spending causes market interest rates to rise, businesses will want to (increase, decrease) investment spending, and households will desire to (increase, decrease) spending on durable goods. Consequently, the expansionary effects of an increase in government spending will be (reduced, enlarged) by this indirect expenditure offset.

9. Supply-side effects can result from fiscal policy tax changes. If marginal tax rates rise, this can induce laborers to substitute __________________ for __________________.

10. The __________ curve indicates that tax revenues initially (fall, rise) with a higher tax rate as the tax rate is increased above a rate of 0 percent, but eventually tax revenues (fall, rise) as the tax rate is increased further.
11. If government expenditures or taxes change over the business cycle without deliberate action taken by Congress, this is referred to as automatic fiscal policy, or built-in _____________________. Examples of automatic fiscal policy include __________________ and __________________. Automatic fiscal policy (increases, decreases) the magnitude of business cycle fluctuations.

12. Discretionary fiscal policy is (easy, difficult) to conduct because it usually takes (little, much) time for Congress to enact such policy.

13. If the public perceives that deficit spending creates future tax liabilities, and if people wish to leave money to their heirs, then current saving may well (decrease, increase). Thus, the net effect of deficit spending on interest rates is (to lower them, to raise them, uncertain).

14. There are three time lags that hamper fiscal policy: ________________, ________________, and ________________. The existence of time lags makes conducting fiscal policy (easier, harder) for policymakers.

15. Because of automatic stabilizers, when the economy is in an expansion phase government transfers (rise, fall) and tax revenues (rise, fall). Hence, expansions (other things constant) generate government budget (surpluses, deficits).

16. The existence of automatic stabilizers makes our economy (less, more) stable. Their existence also makes it (difficult, easy) to distinguish discretionary from automatic fiscal policy.

True-False Questions

Circle the T if the statement is true, the F if it is false. Explain to yourself why a statement is false.

T F 1. Fiscal policy may involve changes in taxes and/or government spending.

T F 2. If an inflationary gap exists, fiscal policy calls for increased government spending and/or reduced taxes.

T F 3. If a recessionary gap exists, proper fiscal policy requires a federal government budget surplus—or a larger surplus if one already exists.

T F 4. If an economy is already operating on its LRAS curve, an expansionary fiscal policy will, eventually, cause the price level to rise by less than it would if the economy had been operating on an SRAS curve.

T F 5. If government expenditures are financed by borrowing, a federal deficit is created, which could cause interest rates to rise.

T F 6. If interest rates rise as a result of deficit spending, expansionary fiscal policy effects will be magnified.

T F 7. If interest rates rise as a result of deficit spending, then businesses and households may choose to cut back on purchases of investment goods and durable goods.
T F 8. If households perceive an increase in federal deficit spending as an increase in their future tax liabilities they may save more now, which would reduce the effects of expansionary fiscal policy.

T F 9. If government expenditures directly compete with the spending of the private sector, then business investment will fall and tend to offset the effects of such a fiscal policy.

T F 10. Crowding out implies that if federal deficits cause interest rates to rise, businesses will reduce investments, and this will tend to offset fiscal policy effects.

T F 11. Because of the time lags involved in fiscal policy, policymakers can more easily achieve national economic goals because they have more time to solve the problem.

T F 12. If federal deficit spending causes interest rates to rise, households will purchase more consumer durables, and businesses will invest more.

T F 13. If fiscal policy is pursued by raising marginal tax rates, laborers may choose to work less, and businesses might choose to make fewer investments.

Multiple Choice Questions

Circle the letter that corresponds to the best answer.

1. Discretionary fiscal policy
   a. deals with automatic stabilizers.
   b. is relatively easy to conduct.
   c. deals with actions by Congress and the president intended to affect economic performance.
   d. calls for stabilizing changes in the money supply via changes in government spending or taxes.

2. If a recessionary gap exists, proper fiscal policy could entail
   a. increased government spending.
   b. decreased taxes.
   c. deficit spending.
   d. All of the above.

3. If government expenditures rise to counteract a recessionary gap,
   a. the $AD$ curve shifts rightward.
   b. the $AD$ curve shifts leftward.
   c. taxes must rise to finance such expenditures.
   d. the price level will fall.
4. If an inflationary gap exists,
   a. contractionary fiscal policy is appropriate.
   b. government spending should rise to cause the price level to fall.
   c. expansionary fiscal policy is appropriate.
   d. taxes should fall to stimulate the economy.

5. If a recessionary gap exists, then
   a. equilibrium real GDP exceeds the full-employment level of real GDP.
   b. it can be filled by increases in government spending, decreases in taxes, or some combination of both.
   c. it can be filled by decreases in government spending, increases in taxes, or some combination of both.
   d. the economy is in an expansion phase.

6. If the economy is operating on its short-run aggregate supply curve and an inflationary gap exists,
   a. a contractionary fiscal policy is appropriate.
   b. leftward shifts in $AD$ that cause some unemployment will be helpful.
   c. a contractionary fiscal policy will eventually change only the price level.
   d. All of the above.

7. If an inflationary gap exists, it can most efficiently be eliminated by some combination of
   a. increases in government spending and decreases in taxes.
   b. decreases in government spending and decreases in taxes.
   c. decreases in government spending and increases in taxes.
   d. increases in government spending and increases in taxes.

8. Which one of the following will not offset fiscal policy?
   a. the multiplier effect
   b. government spending financed by increased taxes
   c. government spending financed by borrowing (deficit spending)
   d. automatic stabilizers

9. Which one of the following can offset an expansionary fiscal policy?
   a. higher interest rates resulting from deficit spending
   b. private investment falling in areas competing with government expenditures
   c. perceptions by households that larger deficits imply increased future tax liabilities
   d. All of the above
10. Which one of the following may well result from increased government borrowing resulting from deficit spending?
   a. increased purchases of consumer durable goods
   b. increased business investment
   c. higher interest rates
   d. All of the above

11. If taxes fall, then
   a. the planned expenditures curve shifts downward.
   b. the aggregate demand curve shifts to the right.
   c. the aggregate supply curve shifts to the left.
   d. real GDP will fall.

12. If government expenditures exceed tax receipts then, other things being constant,
   a. a surplus exists.
   b. a balanced budget exists.
   c. a deficit exists.
   d. the economy must contract.

13. If marginal tax rates rise,
   a. laborers may choose less income (work), which is taxed, and more leisure, which is not taxed.
   b. the tax base could shrink.
   c. productivity could fall eventually, as business investment falls.
   d. All of the above.

14. Fiscal policy
   a. only involves changing taxes if discretionary.
   b. is difficult to implement because of time lag problems.
   c. is destabilizing, if automatic.
   d. All of the above.

15. Choose the statement that is not true.
   a. Time lags make fiscal policy difficult.
   b. Fiscal policy is conducted solely by the executive branch of the U.S. government.
   c. Crowding out reduces the impact of an expansionary fiscal policy.
   d. The Ricardian equivalence theorem implies that fiscal policy may be quite ineffective.
Matching

Choose an item in Column (2) that best matches an item in Column (1).

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) stabilization policy</td>
<td>(h) recognition, action, effect</td>
</tr>
<tr>
<td>(b) discretionary fiscal policy</td>
<td>(i) change in tax law</td>
</tr>
<tr>
<td>(c) automatic stabilizer</td>
<td>(j) tax receipts less than government spending</td>
</tr>
<tr>
<td>(d) recessionary gap</td>
<td>(k) unemployment compensation</td>
</tr>
<tr>
<td>(e) inflationary gap</td>
<td>(l) recession period</td>
</tr>
<tr>
<td>(f) time lags</td>
<td>(m) inflationsary period</td>
</tr>
<tr>
<td>(g) deficit spending</td>
<td>(n) conscious attempt to achieve high employment and price stability</td>
</tr>
</tbody>
</table>

Working with Graphs

1. Consider the graph below, and then answer the questions that follow.

![Graph Image]

a. What is the short-run equilibrium level of real GDP? What type of gap exists? Is this real GDP sustainable? Why or why not?

b. What type of fiscal policy would you recommend? Be specific.

c. Under your fiscal policy, through what point will the new AD curve cross?

d. The long-run result of your fiscal policy is to cause what to happen to real GDP? To the price index?
2. Consider the graph below, and then answer the questions that follow.

![Graph showing short-run and long-run equilibrium levels of real GDP and price level.](image)

a. What is the short-run equilibrium level of real GDP? The long-run equilibrium level of real GDP? The short-run equilibrium price level?

b. Assume that it is desirable to get the short-run equilibrium price level to 110. What type of fiscal policy would you suggest? (Be specific.) (Through what point will the new AD curve cross?) What will be the new short-run level of real GDP? Is this level sustainable? Why or why not?

c. Continuing (b) above, what will happen to the short-run aggregate supply curve? Why?

d. What will be the long-run level of real GDP?
Answers

Completion Questions
1. deliberate, or conscious
2. expansionary; increasing; decreasing; rightward; rise; rise
3. decrease; increased; leftward; fall
4. temporarily; more
5. deficit; rise; durable; fall; reduced
6. more; Ricardian equivalence; reduced
7. discourage; reduced
8. decrease; decrease; reduced
9. leisure; income resulting from working
10. Laffer; rise; fall
11. stabilizers; progressive tax structure; unemployment compensation; decreases
12. difficult; much
13. increase; uncertain
14. recognition, action, effect; harder
15. fall; rise; surpluses
16. more; difficult

True-False Questions
1. T
2. F An inflationary gap calls for a decrease in government spending and/or an increase in taxes.
3. F A recessionary gap calls for deficit spending.
4. F No, the price level will change by more because real GDP will not change.
5. T
6. F No, higher interest rates will cause offsetting expenditure reductions in the private sector.
7. T
8. T
9. T
10. T
11. F Time lags make fiscal policy more difficult because of the uncertainty they generate.
12. F No, less of such expenditures will occur in response to a higher interest rate.
13. T

Multiple Choice Questions
1. (c)
2. (d)
3. (a)
4. (a)
5. (b)
6. (d)
7. (c)
8. (a)
9. (d)
10. (c)
11. (b)
12. (c)
13. (d)
14. (b)
15. (b)

Matching
(a) and (n)  (e) and (m)
(b) and (i)  (f) and (h)
(c) and (k)  (g) and (j)
(d) and (l)

Working with Graphs
1. a. 15 trillion base-year dollars; inflationary gap; no, because it is above the full-employment level of real GDP.
   b. Contractionary; reduce government spending and/or increase taxes.
   c. $E'$.  
   d. Fall to 14 trillion base-year dollars; fall to 100.

2. a. 15 trillion base-year dollars; 15 trillion base-year dollars; 120.
   b. Contractionary; reduce government spending, increase taxes; $E'$; 13.5 trillion base-year dollars; No; because it is below the real GDP consistent with LRAS.
   c. It will shift downward (rightward) as factors of production become accustomed to the lower price level.
   d. GDP$_1$.  

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Glossary

Action time lag  The time between recognizing an economic problem and implementing policy to solve it. The action time lag is quite long for fiscal policy, which requires congressional approval.

Automatic, or built-in, stabilizers  Special provisions of certain federal programs that cause changes in desired aggregate expenditures without the action of Congress and the president. Examples are the federal progressive tax system and unemployment compensation.

Crowding-out effect  The tendency of expansionary fiscal policy to cause a decrease in planned investment or planned consumption in the private sector. This decrease normally results from the rise in interest rates.

Direct expenditure offsets  Actions on the part of the private sector in spending income that offset government fiscal policy actions. Any increase in government spending in an area that competes with the private sector will have some direct expenditure offset.

Effect time lag  The time that elapses between the implementation of a policy and the results of that policy.

Fiscal policy  The discretionary changing of government expenditures or taxes to achieve national economic goals, such as high employment with price stability.

Recognition time lag  The time required to gather information about the current state of the economy.

Ricardian equivalence theorem  The proposition that an increase in the government budget deficit has no effect on aggregate demand.

Supply-side economics  The suggestion that creating incentives for individuals and firms to increase productivity will cause the aggregate supply curve to shift outward.