CHAPTER 12

Fiscal Policy

Principles of economics are generalizations about how the economy works. These principles are studied to help devise policies to solve real problems. Over the past 100 years or so, the most serious macroeconomic problems have been those resulting from the swings of the business cycle. Learning what determines the equilibrium level of real output and prices in an economy and what causes them to fluctuate makes it possible to find ways to achieve maximum output, full employment, and stable prices. In short, macroeconomic principles suggest policies to control both recession and inflation in an economy.

As you will discover in Chapter 12, government may use ***fiscal policy*** to influence the economy's output, employment, and price level. These policies use the Federal government's spending and taxing powers to improve economic conditions. The brief first section of this chapter explains how Congress, in the Employment Act of 1946, committed the Federal government to achieving three goals: economic growth, full employment, and stable prices. This act also established the Council of Economic Advisors (CEA) to advise the president and the Joint Economic Committee (JEC) to advise Congress on national economic policies.

The second section of the chapter discusses ***discretionary fiscal policy,*** which can be either *expansionary* or *contractionary.* Here you will learn how these fiscal policies affect aggregate demand and the Federal budget. ***Expansionary fiscal policy*** is used to stimulate the economy and pull it out of a slump or recession. This type of policy can be achieved by increasing government spending, decreasing taxes, or some combination of the two. ***Contractionary fiscal policy*** is enacted to counter inflationary pressure in the economy. The policy actions taken to dampen inflation include cutting government spending, raising taxes, or a combination of the two. As you will learn, each policy may have a significant effect on aggregate demand and the Federal budget. If the government has a ***budget deficit*** or ***budget surplus,*** the way the government finances it may affect the economy's operation as much as the size of the deficit or surplus.

Discretionary fiscal policy requires that Congress take action to change tax rates, transfer payment programs, or purchases of goods and services. ***Nondiscretionary fiscal policy*** does not require Congress to take any action and is a ***built-in stabilizer*** for the economy. You should be sure that you understand *why* net taxes increase when the GDP rises and decrease when the GDP falls and *how* this tends to stabilize the economy.

Nondiscretionary fiscal policy by itself may not be able to eliminate any recessionary or inflationary gap that might develop, and discretionary fiscal policy may be necessary if the economy is to produce its full-employment GDP and avoid inflation. The built-in stabilizers make it more difficult to use discretionary fiscal policy to achieve this goal because they create the illusion that the Federal government's policy is expansionary or contractionary when in fact its policy may be just the opposite.

The need to evaluate the direction of fiscal policy has led economists to develop a ***full-employment budget*** and to distinguish between a ***cyclical deficit*** and a ***full-employment deficit.*** This analysis enables economists to determine whether Federal fiscal policy is expansionary, contractionary, or neutral, and to determine what policy should be enacted to improve the economy's economic performance.

Fiscal policy is not without its problems, criticisms, or complications. There are timing problems in getting it implemented, and there are political problems in getting it accepted. In addition, there are three major criticisms of or complications with fiscal policy. Some economists are concerned that expansionary fiscal policy which requires the Federal government to borrow money will raise interest rates and crowd out investment spending, thus reducing the expansionary effect of the policy. A second complication arises from the connection of the domestic economy to the world economy. Aggregate demand shocks from abroad or a net export effect may increase or decrease the effectiveness of a given fiscal policy. The third concern is whether an expansionary fiscal policy might actually increase the price level and have little effect on real output, especially if the economy is operating near its full-employment level of output.

Most of the discussion of fiscal policy focuses on its effects on aggregate demand. Some economists, however, argue that a reduction in tax rates will not only increase aggregate demand but also expand aggregate supply. ***Supply-side fiscal policy*** can be used to increase real GDP with little or no rise in the price level.

By mastering this chapter on fiscal policy, you will gain an understanding of one of the two major policies used to influence outcomes from the economy. Mastery of this chapter will also prepare you for learning about monetary policy, a topic for Part 3 of the text.

■ CHECKLIST

When you have studied this chapter you should be able to

☐ State the responsibility imposed on the Federal government by the Employment Act of 1946 and the roles of the CEA and JEC in fulfilling this responsibility.
☐ Distinguish between discretionary and nondiscretionary fiscal policy.
☐ Explain expansionary fiscal policy and the effect of different policy options on aggregate demand.
☐ Describe contractionary fiscal policy and the effect of different policy options on aggregate demand.
☐ Explain how the expansionary effect of a budget deficit depends on the method used to finance it.
☐ Describe how the deflationary effect of a budget surplus depends on the method used to finance it.
☐ Assess whether it is preferable to use government spending or taxes to counter recession and reduce inflation.
☐ Define automatic or built-in stabilizers.
☐ Indicate how the built-in stabilizers help to counter recession and inflationary pressures.
☐ Describe the relationship among progressive, proportional, and regressive tax systems and the built-in stability of the economy.
☐ Distinguish between the actual budget and the full-employment budget.
☐ Describe recent U.S. fiscal policy using the full-employment budget.
☐ Use the full-employment budget to evaluate the status of discretionary fiscal policy.
☐ Outline three timing problems that may arise with fiscal policy.
☐ Discuss the possibility of a political business cycle.
☐ Describe how changes in state and local finance may offset fiscal policy at the federal level.
☐ Explain and use a graph to illustrate the crowding-out effect of an expansionary fiscal policy.
☐ State the major criticisms of the crowding-out effect.
☐ Show with a graph how the effects of an expansionary fiscal policy differ across different ranges of the aggregate supply curve.
☐ Describe two ways that the effectiveness of domestic fiscal policy is complicated by the connection of a national economy with the world economy.
☐ Explain how supply-side fiscal policy affects real GDP and the price level.
☐ Cite three factors that may contribute to supply-side effects and evaluate the results.

■ CHAPTER OUTLINE

1. ***Fiscal policy*** consists of the changes made by the Federal government in its expenditures and tax receipts to expand or contract the economy. In making these changes, the Federal government may seek to either increase the economy's real output (and employment) or control its rate of inflation.

2. ***The Employment Act of 1946*** set the goals of fiscal policy in the United States and provided for a ***Council of Economic Advisers*** to the president and the Joint Economic Committee.

3. Fiscal policy is ***discretionary*** when changes in government spending or taxation by Congress are designed to change the level of real GDP, employment, incomes, or the price level. Specific action needs to be taken by Congress to initiate this discretionary policy, in contrast to nondiscretionary fiscal policy that occurs automatically (see item 4 below).

a. ***Expansionary fiscal policy*** is generally used to counteract the negative economic effects of a recession or cyclical downturn in the economy (a decline in real GDP and rising unemployment). The purpose of the policy is to stimulate the economy by increasing aggregate demand. The policy will create a ***budget deficit*** if the budget was in balance before the policy was enacted. The stimulative effect on the economy from the initial increase in spending from the policy change will be increased by the multiplier effect. Three policy options are used:
(1) an increase in government spending;
(2) a reduction in taxes (which increases consumer spending); or
(3) a combination of an increase in government spending and a tax reduction.

b. ***Contractionary fiscal policy*** is a restrictive form of fiscal policy generally used to control demand-pull inflation. The purpose of this policy is to reduce aggregate demand pressures that increase the price level. If the government budget is balanced before the policy is enacted, it will create a ***budget surplus.*** The contractionary effect on the economy from the initial reduction in spending from the policy will be reinforced by the multiplier effect. Three policy options are used:
(1) a decrease in government spending;
(2) an increase in taxes (which reduces consumer spending); or
(3) a combination of a reduction in government spending and a tax increase.

c. In addition to the size of the budget deficit or surplus, the manner in which government finances its deficit or disposes of its surplus affects the level of total spending in the economy.
(1) To finance a deficit, the government can either borrow money from the public or issue new money to creditors, with the latter action being more expansionary.
(2) Budget surpluses may be used for debt reduction, or the funds may be impounded, with the latter action being more contractionary.

d. Whether government purchases or taxes should be altered to reduce recession and inflation depends on whether an expansion or a contraction of the public sector is desired.

4. In the U.S. economy there are automatic or ***built-in stabilizers.*** Net taxes revenues (tax revenues minus government transfer payments) are not a fixed amount or lump sum; they automatically increase as the GDP rises and automatically decrease as the GDP falls.

a. The economic importance of this net tax system is that it serves as a built-in stabilizer of the economy.

It reduces purchasing power during periods of inflation and expands purchasing during periods of recession.

b. As GDP increases, the average tax rates will increase in a ***progressive tax system,*** remain constant in a ***proportional tax system,*** and decrease in a ***regressive tax system;*** there is more built-in stability for the economy in progressive tax systems. Built-in stabilizers can only reduce and cannot eliminate economic fluctuations.

5. To evaluate the direction of fiscal policy, adjustments need to be made to the actual budget deficits or surpluses.

a. The ***full-employment budget*** is a better index than the actual budget of the direction of government fiscal policy because it indicates what the Federal budget deficit or surplus would be if the economy were to operate at full employment. In the case of a budget deficit, the full-employment budget

(1) removes the ***cyclical deficit*** that is produced by swings in the business cycle, and

(2) reveals the size of the ***full-employment deficit,*** indicating how expansionary the fiscal policy was that year.

b. U.S. data from the past decade show the years in which fiscal policy was expansionary or contractionary. There were full-employment budget deficits in the early 1990s and full-employment budget surpluses in later years.

6. Certain ***problems, criticisms, and complications*** arise in enacting and applying fiscal policy.

a. There will be problems of timing because it requires time to recognize the need for fiscal policy, to take the appropriate steps in Congress, and for the action taken there to affect output, employment, and the rate of inflation in the economy.

b. There may be a ***political business cycle*** (if politicians lower taxes and increase expenditures before and then do the opposite after elections).

c. The fiscal policies of state and local governments can run counter to Federal fiscal policy and offset it.

d. An expansionary fiscal policy may, by raising the level of interest rates in the economy, reduce (or *crowd out*) investment spending and weaken the effect of the policy on real GDP, but this ***crowding-out effect*** may be small and can be offset by an expansion in the nation's money supply.

e. The effect of an expansionary fiscal policy on the real GDP will also be weakened to the extent that it results in a rise in the price level (inflation). Aggregate demand and aggregate supply curves can be used to show how crowding out and inflation weaken the effects of an expansionary fiscal policy on real GDP.

f. The connection of the domestic economy to a world economy means that fiscal policy may be inappropriate or less effective because of aggregate demand shocks from the world economy or a ***net export effect*** that can counteract domestic fiscal policy.

g. A ***supply-side fiscal policy*** that includes a reduction in taxes (tax rates) may stimulate more saving and investment, more work effort, and more risk-taking. As a consequence it may increase aggregate supply in the economy, expand real GDP (and employment), and reduce inflation. Many economists, however, are skeptical about these supply-side effects.

■ HINTS AND TIPS

1. Fiscal policy is a broad concept that covers various taxation and spending policies of the Federal government; it is not limited to one policy. You will need to know the distinctions between the several kinds of fiscal policies. The main difference is between discretionary and nondiscretionary fiscal policies. ***Discretionary*** fiscal policy is ***active*** and means that Congress has taken specific actions to change taxes or government spending to influence the economy. It can be ***expansionary*** or ***contractionary. Nondiscretionary*** fiscal policy is ***passive,*** or ***automatic,*** because changes in tax revenues will occur without specific actions by Congress.

2. An increase in government spending that is equal to a cut in taxes will not have an equal effect on real GDP. To understand this point, assume that the MPC is .75, the increase in government spending is $8 billion, and the decrease in taxes is $8 billion. The multiplier would be 4 because it equals $1/(1 - .75)$. The increase in government spending will increase real GDP by $32 billion ($8 billion × 4). Of the $8 billion decrease in taxes, however, one-quarter of it will be saved ($6 billion × .25 = $2 billion) and just three-quarters will be spent ($8 billion × .75 = $6 billion). Thus, the tax cut results in an increase in *initial* spending in the economy of $6 billion, not $8 billion as was the case with the increase in government spending. The tax cut effect on real GDP is $24 billion ($6 billion × 4), not $32 billion.

3. A large part of the chapter deals with the problems, criticisms, and complications of fiscal policy. Do not miss the big picture and get lost in the details of each problem.

■ IMPORTANT TERMS

fiscal policy
Employment Act of 1946
Council of Economic Advisers
expansionary fiscal policy
budget deficit
contractionary fiscal policy
budget surplus
built-in stabilizers
progressive tax system
proportional tax system
regressive tax system
full-employment budget
cyclical deficit
political business cycle
crowding-out effect
net export effect
supply-side fiscal policy

SELF-TEST

■ FILL-IN QUESTIONS

1. The use of fiscal policy to reduce inflation and recession became national economic policy in the (Employment, Unemployment) ______________ Act of 1946. To assist and advise the president, the act

established the (Joint Economic Committee, Council of Economic Advisers) ______________, and to aid Congress in investigating economic matters, the act establishes the ______________.

2. Policy actions taken by Congress designed to change government spending or taxation are (discretionary, nondiscretionary) ______________ fiscal policy, but when the policy takes effect automatically or indepedently of Congress, then it is ______________ fiscal policy.

3. Expansionary fiscal policy is generally designed to (increase, decrease) ______________ aggregate demand and thus ______________ real GDP and employment in the economy. Contractionary fiscal policy is generally used to (increase, decrease) ______________ aggregate demand and ______________ the level of prices.

4. Expansionary fiscal policy can be achieved with an increase in (government spending, taxes) ______________, a decrease in ______________, or a combination of the two; contractionary fiscal policy can be achieved by a decrease in (government spending, taxes) ______________, an increase in ______________, or a combination of the two.

5. An increase of government spending of $5 billion from an expansionary fiscal policy for an economy might ultimately produce an increase in real GDP of $20 billion. This magnified effect occurs because of the (multiplier, crowding-out) ______________ effect.

6. If the Federal budget is balanced and Congress passes legislation supporting an expansionary fiscal policy, then this action is likely to produce a budget (deficit, surplus) ______________, but if Congress passes legislation supporting a contractionary fiscal policy, then the action will result in a budget ______________.

7. If fiscal policy is to have a countercyclical effect, it probably will be necessary for the Federal government to incur a budget (surplus, deficit) ______________ during a recession and a budget ______________ during inflation.

8. Of the two principal means available to the Federal government for financing budget deficits, the one that is more expansionary is (borrowing money from the public, creating new money) ______________.
Of the two principal means available to the Federal government for using funds from a budget surplus, the one that is more contractionary is (impounding funds, debt reduction) ______________.

9. Net taxes equal taxes (plus, minus) ______________ transfer payments and are called "taxes" in this chapter. In the United States, as GDP increases, tax revenue will (increase, decrease) ______________, and as the GDP decreases, tax revenues will ______________.

10. Because tax revenues are (directly, indirectly) ______________ related to the GDP, the economy has some (artificial, built-in) ______________ stability. If the GDP increases, then tax revenue will increase, and the budget surplus will (increase, decrease) ______________, thus (stimulating, restraining) ______________ the economy when it is needed. When GDP decreases, tax revenues decrease, and the budget deficit (increases, decreases) ______________, thus (stimulating, restraining) ______________ the economy when it is needed.

11. As GDP increases, the average tax rates will increase with a (progressive, proportional, regressive) ______________ tax system, remain constant with a ______________ tax system, and decrease with a ______________ tax system. With a progressive tax system, there is (more, less) ______________ built-in stability for the economy.

12. If there is a deficit in the full-employment budget, then fiscal policy is (contractionary, expansionary) ______________ and when there is a surplus in the full-employment budget, then fiscal policy is ______________.

13. A deficit produced by swings in the business cycle is (actual, cyclical) ______________. When there is a cyclical deficit, the full-employment budget deficit will be (greater, less) ______________ than the actual budget deficit.

14. There is a problem of timing in the use of discretionary fiscal policy because of the time between the beginning of a recession or inflation and awareness of it, or (an administrative, an operational, a recognition) ______________ lag; the time needed for Congress to adjust fiscal policy, or ______________ lag; and the time needed for fiscal policy to take effect, or ______________ lag.

15. Political problems arise in the application of discretionary fiscal policy to stabilize the economy because government has (one, several) ______________ economic goals, state and local fiscal policies may (reinforce, counter) ______________ Federal fiscal policy, and politicians may use fiscal policies in a way that creates (an international, a political) ______________ business cycle.

16. When the Federal government employs an expansionary fiscal policy to increase real GDP and employment in the economy, it usually has a budget (surplus, deficit)

_______________ and (lends, borrows) _______________ in the money market. These actions will (raise, lower) _______________ interest rates in the economy and (contract, expand) _______________ investment spending. This change in investment spending is the (net export, crowding-out) _______________ effect of the expansionary fiscal policy, and it tends to (weaken, strengthen) _______________ the influence of the expansionary fiscal policy on real GDP and employment.

17. An expansionary fiscal policy when the economy is operating in the intermediate range of the aggregate supply curve will increase the real GDP and employment in the economy and (raise, lower) _______________ the price level. This change in the price level will (weaken, strengthen) _______________ the impact of the expansionary fiscal policy on output and employment in the economy.

18. Fiscal policy is subject to further complications from (independence from, interdependency with) _______________ the world economy. For example, the domestic economy can be influenced by aggregate demand (inflation, shocks) _______________ from abroad that alter GDP and might reinforce or offset fiscal policy.

19. International trade can also produce a (crowding-out, net export) _______________ effect that influences aggregate demand and partially offsets fiscal policy.

a. When fiscal policy is expansionary, it tends to (increase, decrease) _______________ interest rates, which in turn tends to _______________ the value of the dollar, (increase, decrease) _______________ net exports, and _______________ aggregate demand.

b. When fiscal policy is contractionary, it tends to (increase, decrease) _______________ interest rates, which in turn tends to _______________ the value of the dollar, (increase, decrease) _______________ net exports, and _______________ aggregate demand.

20. If an expansionary fiscal policy is the result of a reduction in taxes, the supply-side effects of the policy may be to (increase, decrease) _______________ aggregate supply, to _______________ productivity capacity of the economy, to (increase, decrease) _______________ real GDP and employment, to _______________ the rate of inflation, and to (weaken, strengthen) _______________ the impact of the fiscal policy on output and employment.

■ TRUE–FALSE QUESTIONS

Circle T if the statement is true, F if it is false.

1. The Council of Economic Advisers was established to give economic advice to Congress. **T F**

2. Discretionary fiscal policy is independent of Congress and left to the discretion of state and local governments. **T F**

3. Expansionary fiscal policy during a recession or depression will create a budget deficit or add to an existing budget deficit. **T F**

4. A decrease in taxes is one of the options that can be used to pursue a contractionary fiscal policy. **T F**

5. To increase initial consumption by a specific amount, government must reduce taxes by more than that amount because some of the tax cut will be saved by households. **T F**

6. A reduction in taxes and an increase in government spending would be characteristic of a contractionary fiscal policy. **T F**

7. Borrowing from the public is the way a budget surplus is financed. **T F**

8. The creation of new money is more expansionary than borrowing from the public as a way of financing deficit spending. **T F**

9. Using a budget surplus to pay off a large public debt may reduce the anti-inflationary impact of the surplus. **T F**

10. The impounding of a budget surplus means that it is used for tax cuts. **T F**

11. Built-in stabilizers are not sufficiently strong to prevent recession or inflation, but they can reduce the severity of a recesssion or inflation. **T F**

12. The less progressive the tax system, the greater the economy's built-in stability. **T F**

13. The full-employment budget indicates how much government must spend and tax if there is to be full employment in the economy. **T F**

14. The key to assessing discretionary fiscal policy is to observe the change in the full-employment budget. **T F**

15. A full-employment budget surplus is expansionary. **T F**

16. Recognition, administrative, and operational lags in the timing of Federal fiscal policy make fiscal policies more effective in reducing the rate of inflation and decreasing unemployment in the economy. **T F**

17. State and local governments' fiscal policies have tended to assist and reinforce the efforts of the Federal government to counter recession and inflation. **T F**

18. Economists who see evidence of a political business cycle argue that members of Congress tend to increase taxes and reduce expenditures before elections and to reduce taxes and increase expenditures after elections. **T F**

19. The fiscal policies of state and local governments are frequently procyclical. **T F**

20. The crowding-out effect occurs when an expansionary fiscal policy decreases the interest rate, increases investment spending, and strengthens fiscal policy. **T F**

21. Critics contend that the crowding-out effect will be greatest when the economy is in a recession. **T F**

22. With an upsloping aggregate supply curve, some portion of the potential effect of an expansionary fiscal policy on real GDP may be lost because of an increase in the price level. **T F**

23. For a domestic economy, there are gains for specialization and trade but also complications from the interdependency with the world economy. **T F**

24. A net export effect may partially offset an expansionary fiscal policy. **T F**

25. Supply-side economists maintain that reductions in tax rates decrease aggregate supply and are, therefore, inflationary. **T F**

■ MULTIPLE-CHOICE QUESTIONS

Circle the letter that corresponds to the best answer.

1. Which of the following was instrumental in assigning to the Federal government the basic responsibility for promoting economic stability in the U.S. economy?
(a) the Employment Act of 1946
(b) the Tax Reform Act of 1986
(c) the Ricardian equivalence theorem
(d) the balanced-budget multiplier

2. If the government wishes to increase the level of real GDP, it might reduce
(a) taxes
(b) its purchases of goods and services
(c) transfer payments
(d) the size of the budget deficit

3. If Congress passes legislation to make a substantial increase in government spending to counter the effects of a severe recession, this would be an example of a
(a) supply-side fiscal policy
(b) contractionary fiscal policy
(c) discretionary fiscal policy
(d) nondiscretionary fiscal policy

4. Which combination of policies would be the most expansionary?
(a) an increase in government spending and taxes
(b) a decrease in government spending and taxes
(c) an increase in government spending and a decrease in taxes
(d) a decrease in government spending and an increase in taxes

5. An economy is in a recession and the government decides to increase spending by $4 billion. The MPC is .8. What would be the full increase in real GDP from the change in government spending assuming the increase would be in the horizontal range of the aggregate supply curve?
(a) $3.2 billion
(b) $4 billion
(c) $16 billion
(d) $20 billion

6. Which combination of fiscal policies would be the most contractionary?
(a) an increase in government spending and taxes
(b) a decrease in government spending and taxes
(c) an increase in government spending and a decrease in taxes
(d) a decrease in government spending and an increase in taxes

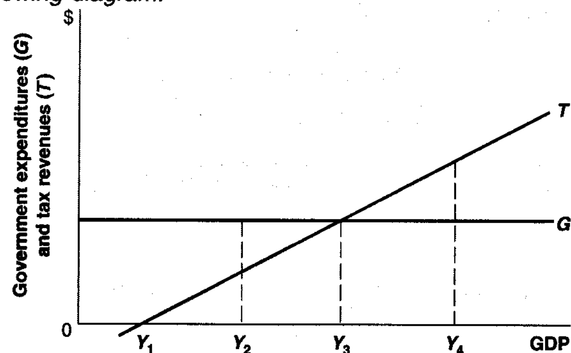
7. Which is a more expansionary way for government to finance a budget deficit?
(a) borrowing money in the money market
(b) decreasing government spending
(c) creating new money
(d) increasing taxes

8. Which would be the most contractionary use of funds from a budget surplus?
(a) cutting tax rates
(b) impounding the funds
(c) using the funds to retire outstanding government debt
(d) increasing government spending on social programs

9. When government tax revenues change automatically and in a countercyclical direction over the course of the business cycle, this is an example of
(a) the political business cycle
(b) nondiscretionary fiscal policy
(c) the full-employment budget
(d) crowding out

10. If the economy is to have built-in stability, when real GDP falls,
(a) tax revenues and government transfer payments both should fall
(b) tax revenues and government transfer payments both should rise
(c) tax revenues should fall and government transfer payments should rise
(d) tax revenues should rise and government transfer payments should fall

Answer Questions 11, 12, and 13 on the basis of the following diagram.



11. If the slope of the line T were steeper, there would be
- **(a)** more built-in stability for the economy
- **(b)** less built-in stability for the economy
- **(c)** no change in the built-in stability for the economy
- **(d)** the need for more emphasis on discretionary fiscal policy

12. If the slope of the line T were flatter, there would be
- **(a)** larger cyclical deficits produced as GDP moved from Y_3 to Y_2
- **(b)** smaller cyclical deficits produced as GDP moved from Y_3 to Y_2
- **(c)** larger full-employment deficits produced as GDP moved from Y_3 to Y_2
- **(d)** smaller full-employment deficits produced as GDP moved from Y_3 to Y_2

13. Actions by the Federal government to increase the progressivity of the tax system
- **(a)** flatten the slope of line T and increase built-in stability
- **(b)** flatten the slope of line T and decrease built-in stability
- **(c)** steepen the slope of line T and increase built-in stability
- **(d)** steepen the slope of line T and decrease built-in stability

14. With a proportional tax system, as the level of income increases in an economy, the average tax rate will
- **(a)** increase
- **(b)** decrease
- **(c)** remain the same
- **(d)** either increase or decrease

Use the following table to answer question 15. The table shows the full-employment budget deficit or surplus as a percentage of GDP over a five-year period.

Year	Deficit (−) Surplus (+)
1	−2.1%
2	−3.0
3	−1.5
4	+0.5
5	+1.0

15. In which year was the fiscal policy expansionary?
- **(a)** Year 2
- **(b)** Year 3
- **(c)** Year 4
- **(d)** Year 5

16. If the full-employment budget shows a deficit of about $200 billion and the actual budget shows a deficit of about $250 billion over a several-year period, it can be concluded that there is a
- **(a)** cyclical deficit
- **(b)** political business deficit
- **(c)** recognition lag
- **(d)** net export effect

17. When the actual budget deficit is greater than the full-employment deficit, it can be concluded that
- **(a)** discretionary fiscal policy is contractionary
- **(b)** the economy is at less than full employment
- **(c)** the tax system for the economy is regressive
- **(d)** the budget surplus has increased

18. If the full-employment deficit as a percentage of GDP is zero one year, and there is a full-employment budget surplus the next year, it can be concluded that
- **(a)** fiscal policy is expansionary
- **(b)** fiscal policy is contractionary
- **(c)** the federal government is borrowing money
- **(d)** the federal government is lending money

19. The length of time involved for the fiscal action taken by Congress to affect output, employment, or the price level is referred to as the
- **(a)** administrative lag
- **(b)** operational lag
- **(c)** recognition lag
- **(d)** fiscal lag

20. The crowding-out effect of an expansionary (deficit) fiscal policy is the result of government borrowing in the money market which
- **(a)** increases interest rates and net investment spending in the economy
- **(b)** increases interest rates and decreases net investment spending
- **(c)** decreases interest rates and increases net investment spending
- **(d)** decreases interest rates and net investment spending

21. The effect of an expansionary fiscal policy on the real GDP of an economy operating in the vertical range of the aggregate supply curve is
- **(a)** reinforced by the crowding-out effect
- **(b)** offset by the crowding-out effect
- **(c)** reinforced by raising tax rates
- **(d)** offset by lowering tax rates

22. The effect of an expansionary fiscal policy on the real GDP of an economy operating in the upsloping portion of the aggregate supply curve is
- **(a)** increased by the net export effect
- **(b)** decreased by the creation of new money
- **(c)** increased by the crowding-out effect
- **(d)** decreased by a rise in the price level

23. Suppose the United States pursued an expansionary fiscal policy to stimulate its economy and eliminate a recession. The net export effect suggests that net exports would
- **(a)** decrease, thus decreasing aggregate demand and partially offsetting the fiscal policy
- **(b)** decrease, thus increasing aggregate demand and partially offsetting the fiscal policy
- **(c)** increase, thus decreasing aggregate demand and partially offsetting fiscal policy
- **(d)** increase, thus increasing aggregate demand and partially reinforcing the fiscal policy

24. Suppose the United States pursued a contractionary fiscal policy to reduce the level of inflation. The net export effect suggests that net exports would

(a) decrease, thus decreasing aggregate demand and partially reinforcing the fiscal policy
(b) decrease, thus increasing aggregate demand and partially offsetting the fiscal policy
(c) increase, thus decreasing aggregate demand and partially reinforcing the fiscal policy
(d) increase, thus increasing aggregate demand and partially offsetting the fiscal policy

25. Supply-side fiscal policy is generally enacted through
(a) a decrease in tax rates
(b) a decrease in investment spending
(c) an increase in government spending
(d) an increase in automatic stabilizers

■ PROBLEMS

1. Columns 1 and 2 in the following table are an aggregate supply schedule. Columns 1 and 3 are an aggregate demand schedule.

(1) Price level	(2) Real GDP$_1$	(3) AD$_1$	(4) AD$_2$	(5) Real GDP$_2$
220	$ 2390	$ 2100	$ 2200	$ 2490
200	2390	2200	2340	2490
190	2350	2250	2350	2450
180	2300	2300	2400	2400
160	2200	2400	2500	2300

a. The equilibrium real GDP is $________ and the price level is ________.
b. Suppose the expansionary fiscal policy increases aggregate demand from that shown in columns 1 and 3 to that shown in columns 1 and 4. The price level will increase to ________, and this rise in the price level will result in real GDP increasing to $________.
c. If the expansionary fiscal policy that increased aggregate demand also has supply-side effects and increased aggregate supply from that shown in columns 1 and 2 to that shown in columns 1 and 5, the equilibrium real GDP would increase to $________ and the price level would ________.

2. The following table shows seven real GDPs and the net tax revenues of government at each real GDP.

Real GDP	Net tax revenues	Government purchases	Government deficit/surplus
$ 850	$170	$____	$____
900	180	____	____
950	190	____	____
1000	200	____	____
1050	210	____	____
1100	220	____	____
1150	230	____	____

a. Looking at the two columns on the left side of the table, it can be seen that
(1) when real GDP increases by $50, net tax revenues (increase, decrease) ________ by $________.
(2) when real GDP decreases by $100, net tax revenues (increase, decrease) ________ by $________.
(3) the relationship between real GDP and net tax revenues is (direct, inverse) ________.
b. Assume the simple multiplier has a value of 10 and that investment spending in the economy decreases by $10.
(1) *If* net tax revenues remained constant, the equilibrium real GDP would decrease by $________.
(2) But when real GDP decreases, net tax revenues also decrease; and this decrease in net tax revenues will tend to (increase, decrease) ________ the equilibrium real GDP.
(3) And, therefore, the decrease in real GDP brought about by the $10 decrease in investment spending will be (more, less) ________ than $100.
(4) The direct relationship between net tax revenues and real GDP has (lessened, expanded) ________ the impact of the $10 decrease in investment spending on real GDP.
c. Suppose the simple multiplier is also 10 and government wishes to increase the equilibrium real GDP by $50.
(1) *If* net tax revenues remained constant, government would have to increase its purchases of goods and services by $________.
(2) But when real GDP rises, net tax revenues also rise, and this rise in net tax revenues will tend to (increase, decrease) ________ the equilibrium real GDP.
(3) The effect, therefore, of the $5 increase in government purchases will also be to increase the equilibrium real GDP by (more, less) ________ than $50.
(4) The direct relationship between net tax revenues and real GDP has (lessened, expanded) ________ the effect of the $5 increase in government purchases, and to raise the equilibrium real GDP by $50, the government will have to increase its purchases by (more, less) ________ than $5.
d. Imagine that the full-employment real GDP of the economy is $1150 and that government purchases of goods and services are $200.
(1) Complete the previous table by entering the government purchases and computing the budget deficit or surplus at each of the real GDPs. (Show a government deficit by placing a minus sign in front of the amount by which expenditures exceed net tax revenues.)

(2) The full-employment surplus equals $__________.
(3) If the economy were in a recession and producing a real GDP of $900, the budget would show a (surplus, deficit) ____________ of $____________.
(4) This budget deficit or surplus makes it appear that government is pursuing (an expansionary, a contractionary) ______________ fiscal policy, but this deficit or surplus is not the result of a countercyclical fiscal policy but the result of the ____________.
(5) If government did not change its net tax *rates,* it could increase the equilibrium real GDP from $900 to the full-employment real GDP of $1150 by increasing its purchases by (approximately) $70. At the full-employment real GDP the budget would show a (surplus, deficit) ________________ of $____________.
(6) If government did not change its purchases, it would increase the equilibrium real GDP from $900 to the full-employment real GDP of $1150 by decreasing net tax revenues at all real GDPs by a lump sum of (approximately) $80. The full-employment budget would have a (surplus, deficit) ______________ of $______________.

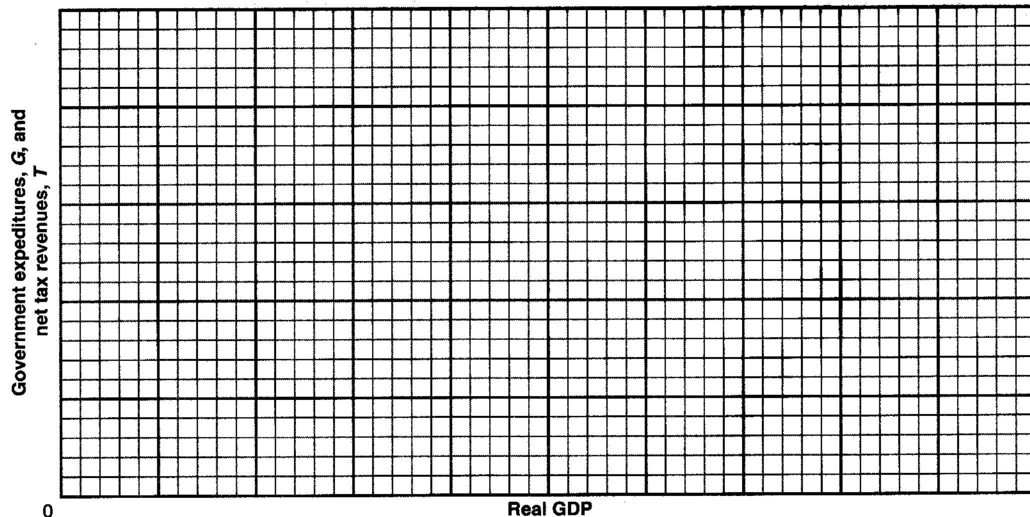
3. a. Complete the table below by computing the average tax rates, given the net tax revenue data in columns 2, 4, and 6. Calculate the average tax rate in percentage to one decimal place (for example, 5.4%).

b. As real GDP increases in column 1, the average tax rate (increases, decreases, remains the same) ____________ in column 3, ____________ in column 5, and __________ in column 7. The tax system is (progressive, proportional, regressive) __________ in column 2, ______________ in column 4, and __________ in column 6.

c. On the following graph, plot the real GDP, net tax revenue, and government spending data given in columns 1, 2, 4, 6, and 8. The tax revenue system with the steepest slope is found in column _______, and it is (progressive, proportional, regressive) ___________ while the one with the flattest slope is found in column ___________, and it is___________.

4. a. Complete the table on the next page by stating whether the direction of discretionary fiscal policy was contractionary (**C**), expansionary (**E**), or neither (**N**) given the hypothetical budget data for an economy.
b. The best gauge of the direction of fiscal policy is the (actual, full-employment) ____________ budget deficit or surplus because it removes the (cyclical, actual) ____________ component from the discussion of the budget situation.

(1) Real GDP	(2) Net tax revenue	(3) Average tax rate	(4) Net tax revenue	(5) Average tax rate	(6) Net tax revenue	(7) Average tax rate	(8) Government spending
$1000	$100	_____%	$100	_____%	$100	_____%	$120
$1100	120	_____	110	_____	108	_____	120
$1200	145	_____	120	_____	115	_____	120
$1300	175	_____	130	_____	120	_____	120
$1400	210	_____	140	_____	123	_____	120



(1) Year	(2) Actual budget deficit (−) or surplus (+)	(3) Full-employment budget deficit (−) or surplus (+)	(4) Direction of fiscal policy
1	−$170 billion	−$130 billion	
2	− 120 billion	− 90 billion	________
3	+ 40 billion	+ 20 billion	________
4	− 60 billion	− 50 billion	________
5	− 120 billion	− 100 billion	________

c. (1) In what years were there cyclical deficits, and what was the amount of the cyclical deficit in each of those years? ____________________

____

(2) In what year was the actual budget surplus greater than the full-employment budget surplus, and by what amount greater? ____________________

____

■ SHORT ANSWER AND ESSAY QUESTIONS

1. In the Employment Act of 1946, (*a*) what responsibility was given to the Federal government, (*b*) what tasks were assigned to the Council of Economic Advisers and the Joint Economic Committee?

2. What is the difference between discretionary fiscal policy and nondiscretionary fiscal policy?

3. What are the Federal government's three options for conducting expansionary or contractionary fiscal policy?

4. Under what economic conditions would expansionary or contractionary fiscal policy be used? What would be the effect on the Federal budget?

5. Compare and contrast the effect of expansionary and contractionary fiscal policy on aggregate demand. Draw a graph to illustrate the likely effects.

6. What is the effect of the simple multiplier on the initial change in spending from fiscal policy? When the government wants to increase initial consumption by a specific amount, why must the government reduce taxes by more than that amount?

7. In the real world, is the purpose of contractionary fiscal policy to restore a previously lower price level? How do "sticky" prices affect events?

8. What are the alternative means of financing deficits and disposing of surpluses available to the Federal government? What is the difference between these methods insofar as their expansionary and contractionary effects are concerned?

9. Explain the fiscal policies that would be advocated during a recession and during a period of inflation by those who (*a*) wish to expand the public sector and (*b*) wish to contract the size of government.

10. What is a built-in stabilizer? How do the built-in stabilizers work to reduce rises and falls in the level of nominal GDP?

11. What is the economic importance of the direct relationship between tax receipts and GDP?

12. Supply definitions of progressive, proportional, and regressive tax systems. What are the implications of each type of tax system for the built-in stability of the economy?

13. What is the full-employment budget? What was the problem that the use of the full-employment budget was designed to solve?

14. Explain the distinction between a cyclical deficit and full-employment deficit. Which type of deficit provides the best indication of the direction of fiscal policy? Why?

15. Explain the three kinds of time lags that make it difficult to use fiscal policy to stabilize the economy.

16. What is the political business cycle? Explain how it works. Evaluate the likelihood of such a cycle.

17. How might the direction of fiscal policy at the Federal level be countered by the actions of state and local governments?

18. How do (*a*) crowding out and (*b*) inflation reduce the effect of an expansionary (deficit) fiscal policy on real GDP and employment?

19. What complications for fiscal policy arise from interdependency with the world economy? Explain how aggregate demand shocks from abroad and the net export effect influence fiscal policy.

20. What might be the supply-side effects of a reduction in tax rates on the capacity output of the economy, the equilibrium levels of real GDP and employment, and the price level?