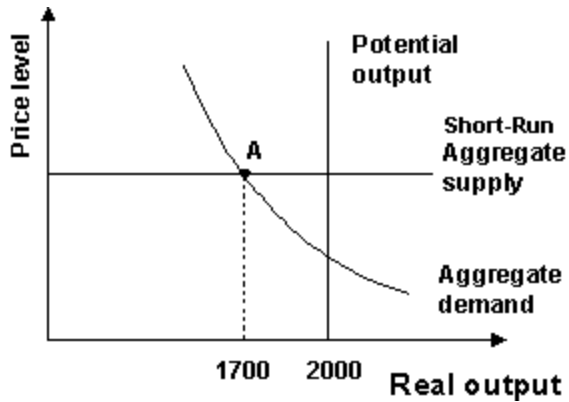


## Assignment 4

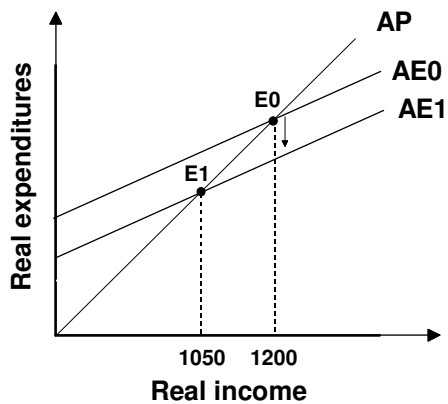
Deadline: July 16, 2005

### Part A Multiple-Choice Questions

1. Contractionary fiscal policy involves:
  - A) an increase in government spending and/or a decrease in taxes.
  - B) a decrease in government spending or taxes.
  - C) a decrease in government spending and/or an increase in taxes.
  - D) an increase in government spending or taxes.
  
2. Which of the following would *not* be an expansionary fiscal policy?
  - A) Increased welfare payments to the poor.
  - B) Decreases in federal taxes on corporations.
  - C) A balanced budget.
  - D) Increased government expenditures on goods and services.
  
3. Suppose the Japanese economy faces a recessionary gap of 120. If the mpc is 0.6 and the price level is constant, the government should:
  - A) increase autonomous expenditures by 20.
  - B) increase autonomous expenditures by 48.
  - C) increase autonomous expenditures by 72.
  - D) increase autonomous expenditures by 120.
  
4. Assume the  $mpc = 0.8$ ,  $GDP = \$2,000$  billion, potential  $GDP = \$2,200$  billion, and the price level is constant. According to the multiplier model, the economy could achieve potential GDP if government spending were:
  - A) decreased by \$50 billion.
  - B) decreased by \$40 billion.
  - C) increased by \$50 billion.
  - D) increased by \$40 billion.

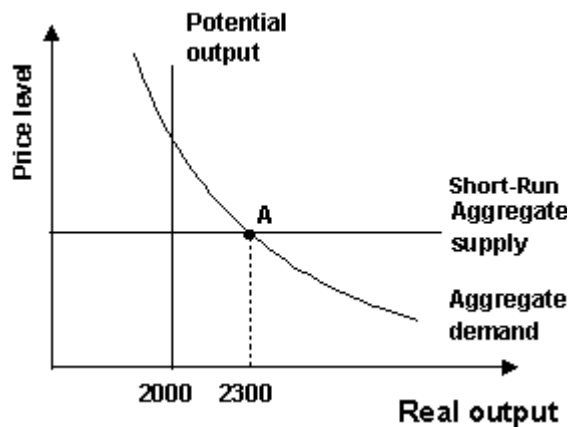


5. Refer to the graph above. If the economy in the graph is at point A and the mpc is  $\frac{2}{3}$ , then the most appropriate fiscal policy would be:
- A) an increase in government expenditures of 100.
  - B) a decrease in government expenditures of 100.
  - C) an increase in government expenditures of 300.
  - D) a cut in taxes of 300.



6. Refer to the graph above. If the mpc is  $\frac{2}{3}$ , the shift from AE0 to AE1 could be explained by a:
- A) \$50 increase in government spending.
  - B) \$50 decrease in government spending.
  - C) \$100 decrease in government spending.
  - D) \$150 decrease in government spending.
7. The multiplier model assumes all of the following *except*:
- A) financing the deficit has offsetting effects.
  - B) the government knows what the mpc is.
  - C) the government knows the level of potential income.
  - D) the government can quickly change its spending and taxes.

8. Expansionary fiscal policy:
- A) has no effect on the trade deficit.
  - B) tends to worsen the trade deficit.
  - C) tends to improve the trade deficit.
  - D) can improve or worsen the trade deficit depending on the nature of the particular policy.
9. Crowding out is associated with:
- A) a reduction in business investment resulting from an increase in government borrowing and higher interest rates.
  - B) an increase in business investment resulting from an increase in government borrowing and higher interest rates.
  - C) an increase in private savings caused by higher future tax liabilities when government increases borrowing.
  - D) a decrease in government spending caused by a shortage of available credit.
10. Contractionary fiscal policy that reduces the budget deficit may:
- A) reduce business investment by increasing interest rates.
  - B) reduce business investment by reducing interest rates.
  - C) increase business investment by increasing interest rates.
  - D) increase business investment by reducing interest rates.
11. Suppose government spending increases by 50. If equilibrium real output rises by 100 and prices rise as well, then:
- A) it can be inferred that the mpc is .5
  - B) it can be inferred that the mpc is less than .5
  - C) it can be inferred that the mpc is greater than .5
  - D) no inference can be made about the value of the mpc
12. Automatic stabilizers:
- A) counteract the business cycle.
  - B) reinforce the business cycle.
  - C) do not affect the business cycle.
  - D) require government approval before they can counteract the business cycle.
13. Export-led growth policies:
- A) benefit all countries.
  - B) benefit the countries that adopt them at the expense of other countries.
  - C) harm the countries that adopt them but benefit other countries.
  - D) harm all countries.



14. Refer to the graph above. If the economy in the graph is operating at point A and the mpc is  $\frac{3}{4}$ , then the most appropriate fiscal policy would be:
- A) an increase in government expenditures of 75.
  - B) a decrease in government expenditures of 75.
  - C) an decrease in government expenditures of 300.
  - D) a cut in taxes of 300.
15. Which of the following statements is *true*?
- A) The debt is a flow and the deficit or surplus is a stock.
  - B) Both the debt and the deficit or surplus are flows.
  - C) Both the debt and the deficit or surplus are stocks.
  - D) The debt is a stock and the deficit or surplus is a flow.
16. If the debt of the federal government increases by \$10 billion in one year:
- A) the budget deficit in that year must be \$10 billion.
  - B) the budget surplus in that year must be \$10 billion.
  - C) the budget deficit in that year increased by \$10 billion.
  - D) the budget surplus in that year decreased by \$10 billion.
17. Holding the nominal deficit and total debt constant, an increase in the inflation rate will:
- A) not affect the real deficit.
  - B) raise the real deficit.
  - C) lower the real deficit.
  - D) either raise or lower the real deficit depending on the real interest rate.

18. If the nominal deficit is \$100 billion, inflation is 10 percent, and total debt is \$2 trillion, then the real deficit is:
- A) -\$20 billion (a surplus).
  - B) -\$100 billion (a surplus).
  - C) \$20 billion.
  - D) \$100 billion.
19. If the real deficit is \$200 billion, the inflation rate is 2.5 percent, and total debt is \$2 trillion, then the nominal deficit is:
- A) \$100 billion.
  - B) \$250 billion.
  - C) \$300 billion.
  - D) \$350 billion.
20. If inflation is correctly anticipated, lenders:
- A) will suffer losses as inflation reduces the value of the debt.
  - B) will not suffer losses because inflation will not reduce the value of the debt.
  - C) will suffer losses because the nominal deficit will not rise to offset the effect that inflation has on the debt.
  - D) will not suffer losses because the nominal deficit will rise to offset the effect that inflation has on the debt.
21. If actual income is \$300 billion, potential income is \$350 billion, and the total deficit is \$20 billion, then the structural deficit can be any of the following *except*:
- A) zero.
  - B) \$1 billion.
  - C) \$10 billion.
  - D) \$20 billion.
22. Suppose that the economy has a structural deficit of \$100 billion and a budget deficit of \$100 billion. It follows that:
- A) output must equal potential output.
  - B) output must be above potential output.
  - C) output must be below its potential output.
  - D) output could be at, above, or below potential output.

23. Suppose that the economy has a structural deficit of \$200 billion but is running a budget surplus. It follows that:
- A) there is no passive deficit or surplus.
  - B) there is a passive surplus.
  - C) there is a passive deficit.
  - D) the passive deficit cannot be determined without more information.
24. To properly assess a country's debt, it is important to view the debt in relation to:
- A) the budget deficit or surplus.
  - B) interest rates.
  - C) the country's assets.
  - D) the inflation rate.
25. If high levels of government spending generate an appreciation of the Canadian currency, then:
- A) net exports will tend to decline.
  - B) net exports will tend to increase.
  - C) exports will tend to increase.
  - D) imports will tend to decrease.
26. Which of the following is *not* one of the functions of money?
- A) medium of exchange.
  - B) unit of account.
  - C) standard of economic well-being.
  - D) store of wealth.
27. M1 consists primarily of cash in the hands of the public and:
- A) savings account balances.
  - B) commercial paper.
  - C) chequing account balances.
  - D) certificates of deposit.
28. The chief difference between the M1 and M2 measures of the money supply is:
- A) the supply of M1 exceeds the supply of M2.
  - B) M2 excludes traveler's cheques.
  - C) M1 is a broader, more comprehensive measure.
  - D) M2 includes personal savings deposits and non-personal notice deposits.

29. If the reserve ratio is 0.25, the simple money multiplier is:
- A) 4.
  - B) 5.
  - C) 20.
  - D) 25.
30. If the total reserves of the banking system are \$400 billion, these reserves could support \_\_\_\_\_ of checkable deposits if the desired reserve ratio is 0.20, the bank is fully loaned out, and no cash is held by individuals.
- A) \$ 400 billion.
  - B) \$1200 billion.
  - C) \$1600 billion.
  - D) \$2000 billion.
31. If the cash-to-deposit ratio is 0.25 and the reserve ratio is 0.15, then the amount of money created per dollar deposited in the banking system is approximately:
- A) \$2.50
  - B) \$4.
  - C) \$5.125.
  - D) \$6.667.
32. If the desired reserve ratio is 0.20 and individuals hold no cash, what is the maximum amount of money that can be created from a \$5 million deposit in the banking system?
- A) \$ 5 million.
  - B) \$20 million.
  - C) \$25 million.
  - D) \$50 million.
33. Money can take any form as long as it:
- A) does not serve as a store of value.
  - B) is backed by real assets such as gold.
  - C) is widely accepted in exchange for goods and services.
  - D) does not supersede barter as the primary form of exchange.
34. Money is a good store of wealth when:
- A) prices are rising predictably.
  - B) prices are rising unpredictably.
  - C) prices are stable.
  - D) severe inflation occurs.

35. Use the following table to determine which statement is *true*.

Year	Surplus or deficit (-) billions of dollars
1946	-15.9
1947	4.0
1948	11.8
1949	.9
1950	-3.1

- A) The budget deficit in 1950 was \$2.3 billion.
- B) From 1946 to 1950, the debt was \$2.3 billion.
- C) From 1945 to 1950, the debt rose by \$2.3 billion.
- D) In 1950, the debt was \$2.3 billion.



## **Part B**                      **True/ False/ Uncertain Questions**

*Explain why the following statement is True, False, or Uncertain according to economic principles. Use diagrams and / or numerical examples where appropriate. Unsupported answers will receive no marks. It is the explanation that is important*

- B-1.** The net export effect strengthens the effects of an expansionary fiscal policy.
- B-2.** The crowding in of private investment makes a contractionary fiscal policy less effective.
- B-3.** An increase in real growth rate of a country reduces the debt of nominal GDP ratio.

## Part C

## Problem Solving Questions

Answer all parts of the following question.

### C-1

Consider the same simple, fixed price, open economy model of Canadian economy with excess capacity as given in Assignment 3 Part C:

$$C = 60 + .6Y_d$$

$$T = 40 + 0.25Y$$

$$R = 20$$

$$I = 60$$

$$G = 70$$

$$X = 44$$

$$IM = 10 + 0.15Y$$

where,  $C$  is consumption,  $Y_d$  is disposable income,  $T$  is taxes,  $R$  is government transfers,  $Y$  is real GDP,  $I$  is investment,  $G$  is government expenditures on goods and services,  $X$  is exports and  $IM$  is imports.

In addition, assume that the potential income is 350.

- (a) Calculate the equilibrium level of real GDP, actual budget deficit, structural budget deficit and passive or cyclical budget deficit. [Hint: Budget Deficit =  $G+R-T$ ].
- (b) Calculate the inflationary or recessionary gap, if any, at the equilibrium level of real GDP you found in part (a). How should the government adjust its spending ( $G$ ) to completely remove this gap?
- (c) Assume that government successfully changed its spending ( $G$ ). What is the new equilibrium level of real GDP with this new level of  $G$ ? Find the new actual budget deficit, structural budget deficit and passive or cyclical budget deficit.
- (d) Solve for the initial budget surplus function ( $BS = T-G-R$ ) and plot it in a diagram. Show the actual budget deficit and structural budget deficit you found in part (a). Show how the initial budget surplus function would respond to the change you prescribed in part (b). Show the new actual budget deficit and structural budget deficit you found in part (c).

- (e) In this model, which budget deficit concept is a good measure of the stance of fiscal policy and why?

**C-2.**

Assume a country's nominal GDP is \$600 billion, government expenditures (including transfer payments) less debt service ( $G^*$ ) are \$145 billion, and tax revenue is \$160 billion. The nominal debt is \$360 billion. Inflation is 3 percent, interest rates are 6 percent and the real GDP growth rate is 3 percent.

- (a) Calculate the debt service payments.
- (b) Calculate the nominal deficit.
- (c) Calculate the real deficit.
- (d) Calculate the debt to nominal GDP ratio. Calculate the percentage change in this ratio.
- (e) Other things remaining constant, if the real GDP growth increases to 4% what will happen to the percentage change in the debt to nominal GDP ratio?

**C-3.** Chapter 13 Problems and Exercises Question No. 2