

Macro final exam study guide – True/False questions - Solutions
Case, Fair, Oster

Chapter 8 – Aggregate Expenditure and Equilibrium Output

1. Firms react to unplanned inventory investment by reducing output. **TRUE.**
2. If actual investment is greater than planned investment, inventories increase more than planned. **TRUE.**
3. Interest rates are the major determinant of consumption spending in classical thought (for example, in the economics of Jean-Baptiste Say). **TRUE.**
4. The marginal propensity to consume is the change in consumption expenditure divided by the percentage change in income. **FALSE -- change in C divided by change in income.**
5. If the MPC is 0.8, the marginal propensity to save will be 0.2. **TRUE.**
6. In a Keynesian macroeconomic model, private savings will equal the sum of private investment, the government budget deficit, and the international current account deficit.
FALSE -- Private savings also funds the current account surplus.
7. When the economy is in Keynesian macroeconomic equilibrium, planned investment is greater than actual investment. **FALSE. If planned is greater than actual, inventories are running down, and output will expand.**
8. The larger the MPC, the smaller the Keynesian government spending multiplier.
FALSE. A larger MPC means a larger multiplier = $1 / (1 - MPC)$
9. If the MPC is 0.75, the Keynesian government spending multiplier will be 4. **TRUE.**
10. If the MPC is 0.75, the lump-sum tax multiplier will be -3. **TRUE.**
The lump-sum tax multiplier is $(1 / (1 - .75)) * -.75 T = -3 T$.
11. If an economy shifts from lump-sum taxes to income taxes, an increase in government spending will result in a greater increase in GDP. **FALSE. An income tax is an automatic stabilizer which reduces the multiplier.**
12. If the marginal propensity to save increases, the multiplier will decrease. **TRUE.**
Multiplier = $1 / 1 - MPC = 1 / MPS$, so if $MPS = .2$, multiplier = 5, and if $MPS = .5$, multiplier = 2
13. If everyone increases their marginal propensity to save, the Keynesian model predicts that total saving will not increase. **TRUE. This is the paradox of thrift.**

Chapter 9 – The Government and Fiscal Policy

1. Disposable income is income minus taxes plus transfer payments. **TRUE.**
2. When actual investment is greater than planned investment, the economy will grow.
FALSE. If Actual investment is greater than planned, inventories are building up, so firms will cut back on production, and the economy will contract.
3. When $G - T$ is positive, the government budget is in surplus.
FALSE. If $G > T$, government spending exceeds tax revenues, and the budget is in deficit.
4. If investment increases, the planned aggregate expenditure line on the Keynesian cross diagram becomes steeper. **FALSE. It shifts up, but does not become steeper.**
5. If the MPC increases, the planned aggregate expenditure line on the Keynesian cross diagram becomes steeper.
TRUE.
6. In a simple Keynesian model (with lump-sum taxes and a MPC of 0.8), if the government increases spending by \$400 billion and increases taxes by \$400 billion, output will increase by \$400 billion.
TRUE. The balanced budget multiplier is one.
7. In a simple Keynesian model (with lump-sum taxes and a MPC of 0.8), a tax cut of \$ 20 billion will have less of an impact on GDP than an increase in government spending of \$ 10 billion.
FALSE. The tax multiplier would be -4, so a tax cut of \$ 20 billion would lead to GDP increasing by \$ 80 billion. The government spending multiplier is 5, so an increase in G of \$ 10 would lead to GDP increasing by \$ 50 billion.
8. When taxes are given as a percentage of income, a higher tax rate implies a higher government spending multiplier. **FALSE - higher income taxes will lead to a lower multiplier.**
9. In an open economy, the government spending multiplier will be lower than in an economy without international trade. **TRUE.**

Chapter 10. The Money Supply and the Federal Reserve System

- 1.The most important role of money is to serve as a store of value.
FALSE. The most important role for money is as a means of exchange.
- 2.Only items defined by the government as legal tender count as M2.
FALSE. Savings accounts are part of M2, but not in themselves legal tender.
- 3.The major problem of barter is the need for a double coincidence of wants. **TRUE**
- 4.When you take \$ 100 from your savings account and deposit it in your checking account, M1 increases.
TRUE. Savings is not a part of M1.
- 5.When you take \$ 100 from your savings account and deposit it in your checking account, M2 decreases.
FALSE. M2 does not decrease because it also includes M1.
- 6.If a bank sells a \$ 10,000 Treasury bill to the Federal Reserve, and receives a credit in its account with the Fed, the money supply will increase by \$ 10,000.
FALSE. The money supply will increase by more than \$ 10,000 due to the money multiplier. If the reserve requirement were 10 percent, the money multiplier would be 10, and the money supply would increase by \$ 100,000 in the simple money multiplier model.
- 7.If a bank sells a \$ 10,000 Treasury bill to the Federal Reserve, and receives a credit in its account with the Fed, the money supply will decrease by \$ 10,000.
FALSE; the money supply increases by more than \$ 10,000, as in the previous question.
- 8.If a bank has liabilities of \$ 3 million and a net worth of \$ 1 million, its assets will be \$ 2 million. **TRUE.**
- 9.A bank will list the mortgage loans it makes as liabilities. **FALSE. They are assets to the bank.**
- 10.A bank is said to have a “liquidity problem” when its capital is too low to cover likely losses on bad loans.
FALSE. This is a solvency problem. A liquidity problem would arise if reserves were insufficient to cover withdrawals.
- 11.The Federal Reserve will act as a “lender of last resort” if a bank runs into liquidity problems. **TRUE.**
- 12.The required reserve ratio is 0.25 (twenty-five percent) and a bank has \$ 800 in deposits. Its actual reserves are \$ 300, so it will have excess reserves of 100 . **With a reserve ratio of 25 %, required reserves would be \$ 200.**
- 13.The policy making body of the Federal Reserve System is known as the Federal Open Market Committee
- 14.The one Federal Reserve Bank that is automatically a member of the policy making body of the Fed is the Washington, DC bank. **FALSE. The New York Fed is th only automatic member of the FOMC.**
- 15.Most \$ 100 dollar bills issued in the US are issued by the Federal Reserve Bank of Atlanta. **TRUE.**
- 16.The Federal Reserve is headed by the Secretary of the Treasury. **FALSE. The Secretary of the Treasury (Tim Geithner) is not the same as the Chairman of the Board of Governors of the Fed (Ben Bernanke)**
- 17.A decrease in the required reserve ratio will normally increase the money supply. **TRUE.**

18. The most commonly used tool of monetary policy by the Federal Reserve system is to change the discount rate. **FALSE - Open market operations are the most frequently used tool.**

19. An open market purchase of government securities (such as Treasury Bills) by the Fed will decrease the money supply and raise the interest rate. **FALSE - the purchase adds to bank reserves, and they will use the reserves to increase the supply of loans (lowering the interest rate) and to expand the money supply as they create checking deposits in the process of making loans.**

20. The most commonly used tool of monetary policy by the Fed is to change the reserve ratio.

FALSE. Open market operations are much more frequently used, as changing the reserve ratio can be very disruptive.

Chapter 11. The Demand for Money

1. The rate of interest is the opportunity cost of holding money. **TRUE.**

2. More frequent switching from bonds to money will result in a higher opportunity cost of holding money and lower money management costs. **FALSE. The money management costs will increase; in return, you get a lower opportunity cost as a result of holding smaller amounts of money.**

3. The optimal money balance desired will be higher if the CPI is higher. **TRUE. A higher price level means that you need more money for a trip to the store.**

4. The optimal money balance desired will be higher if the inflation rate is higher. **FALSE. Inflation will erode the value of the money held, so it is best to hold less money if inflation is higher.**

5. The optimal money balance desired will be higher if the interest rate is higher. **FALSE. The interest rate is the opportunity cost of holding money, and if this increases, less will be held.**

6. The optimal money balance desired will be higher if the level of real income is higher. **TRUE.**

7. If people think that interest rates are above normal levels, they will want to hold bonds in anticipation of a rise in bond prices. **TRUE, as falling interest rates mean rising bond prices.**

8. Investors will probably wish to hold bonds when interest rates are low in the hope of selling them at higher prices when interest rates increase. **FALSE. When interest rates increase, bond prices will fall.**

9. If the money supply increases, and the price level is unchanged, interest rates will fall. **TRUE.**

10. If the money supply and the price level both increase by 10 percent, interest rates will not change. **TRUE, if we assume $M_d = k * P * Y / r$, so $\% \Delta M = \% \Delta k + \% \Delta P + \% \Delta Y - \% \Delta r$**

11. The Fed has more control over long-term interest rates than short-term interest rates.

FALSE. Federal Funds is well controlled by the Fed; long run mortgage or corporate bond rates are not.

12. "Federal funds" are the interest rates charged by the Fed on its loans to commercial banks.

FALSE. Federal funds are the rates charged on interbank loans (often requested to meet the Fed reserve requirement).

Chapter 12. Aggregate Demand in the Goods and the Money Markets.

1. The axes of the goods market-money market graph in Chapter 12 (the IS-LM graph) are real GDP or income on the horizontal axis and the interest rate on the vertical axis. **TRUE**
2. An increase in the money supply will lead to a shift down and to the right of the money-market (LM) curve. **TRUE**
3. The study by Gilchrist, Natalucci and Zakrajsek finds that investment spending is highly responsive to interest rates, and will drop by more than one percent when interest rates increase by one percent. **TRUE**
4. The tendency for increases in government spending to cause decreases in private saving is known as the crowding out effect. **FALSE - causes decreases in private investment due to increase in interest rates**
5. If investment is more responsive to changes in interest rates, the crowding-out effect will be greater, and therefore fiscal policy will be less effective in increasing GDP. **TRUE**
6. An increase in government spending and an increase in investment will, unambiguously, lead to higher interest rates, according to the goods-money-market graph (IS-LM graph).
TRUE - both shift the IS curve to the left and up.
7. A policy mix of a contractionary fiscal policy and a contractionary monetary policy will, unambiguously, result in a higher interest rate.
FALSE -- the contractionary fiscal policy will tend to reduce the interest rate, since the government is borrowing less. While the contractionary monetary policy will tend to increase the interest rate, the outcome in terms of the interest rate is ambiguous -- the interest rate may increase or decrease.
8. A policy mix of a contractionary fiscal policy and an expansionary monetary policy, will, unambiguously, result in a lower interest rate. **TRUE. But the impact on GDP will be ambiguous.**
9. GDP will decrease due to a movement along the aggregate demand curve when the price level rises because the increase in price level causes the demand for money to increase and hence the interest rate to rise. **TRUE.**
10. Each point along the aggregate demand curve represents a point at which the goods market and money market are in equilibrium, given the money supply, the level of government spending, taxes and investment demand.
TRUE.
11. Only the goods market is in equilibrium at any point along the AD curve; the money market may or may not be in equilibrium.
FALSE. Along the AD curve, both the goods market (IS) and the money market (LM) are in equilibrium.
12. An increase in the money supply will shift the AD curve upwards and to the right.
TRUE.
13. When the overall price level rises, consumption falls due to the real wealth effect.
TRUE. The real value of checking accounts or ownership of bonds falls.
14. A cut in taxes will shift the AD curve upwards and to the right.
TRUE.
15. An increase in the overall price level causes the AD curve to shift down and to the left.
FALSE -- it causes a movement upwards along the AD curve, meaning lower GDP.

Chapter 13. Aggregate Supply and the Equilibrium Price Level

1. An increase in prices will cause an increase in the amount supplied, according to the AD-AS graph of chapter 13. **TRUE.**
2. An increase in the price of a key input in production, such as oil, will cause the AS curve to shift down and to the right. **FALSE -- the AS curve will shift up and to the right.**
3. The long-run aggregate supply curve is vertical because wages and other input prices do not fully adjust to changes in prices. **FALSE. It is vertical because they do so adjust.**
4. The short-run aggregate supply curve is not vertical because wages and other input prices do not fully adjust to changes in prices. **TRUE.**
5. Rising output coupled with falling prices is called stagflation.
FALSE. Stagflation is stagnant output with inflation (rising prices).
6. Expansionary monetary policy when the economy is operating with little or no excess capacity will likely result in more inflation than increase in GDP. **TRUE.**
7. The Fed is said to be “leaning against the wind” when it raises its discount rate in response to inflation.
TRUE. Leaning against the wind means slowing any move toward inflation or deflation.

Chapter 15. Policy Timing, Deficit Targeting, and Stock Market Effects.

1. Monetary policy has a longer “implementation lag” than does fiscal policy.
FALSE. The implementation lag of monetary policy is much shorter than fiscal policy. To implement a monetary policy, only the FOMC has to act; to implement fiscal policy, the Congress must.
2. The time it takes policymakers to realize that the economy is going into a recession is known as the “recognition lag” **TRUE.**
3. The NBER sometimes does not declare the official end of a contraction for more than a year. **TRUE.**
The official dates of a recession are not usually established until well after the recession is over.
4. Fiscal policy has a longer implementation lag than monetary policy, but a shorter response lag. **TRUE.**
5. Milton Friedman thought that monetary and fiscal policy could often be counter-productive because of the time lags involved in recognition, implementation and response. **TRUE.**
6. The deficit will increase during recessions and decrease during expansions. **TRUE.**
7. The federal debt is the total of all accumulated deficits (minus surpluses) over time. **TRUE.**