

CB2402 Macroeconomics

1) The _____ shows the relationship between the price level and quantity of real GDP demanded.

- A) consumer price index
- B) aggregate expenditure line
- C) 45-degree line
- D) aggregate demand curve

Answer: D

Chapter 24, p.874 – 875, Figure 24.1.

2) If workers leave a country to seek out better opportunities in another country, then this will

- A) shift the short-run aggregate supply curve of the original country to the left.
- B) shift the short-run aggregate supply curve of the original country to the right.
- C) move the original economy up along a stationary short-run aggregate supply curve.
- D) move the original economy down along a stationary short-run aggregate supply curve.

Answer: A

Chapter 24, p.886 - 888, variables that shift the short-run aggregate supply curve. In this case, the labor force of the original country goes down, less output can be produced at each and every price level, so that SRAS shifts to the left.

3) Which of the following is considered a negative supply shock?

- A) increasing investment in the economy causes the capital stock to rise
- B) an unexpected increase in the price of natural gas
- C) a decline in wages
- D) an improvement in technology

Answer: B

Chapter 24, p.892 – 893; see Figure 24.7. The unexpected increase in the price of natural gas will increase production costs across the board. Firms respond by cutting back production and aggregate output declines. This is represented by a leftward shift of SRAS.

4) Why does the short-run aggregate supply curve shift to the left in the long run, following an increase in aggregate demand?

- A) Workers and firms adjust their expectations of wages and prices downward and they accept lower wages and prices.
- B) Workers and firms adjust their expectations of wages and prices downward and they push for higher wages and prices.
- C) Workers and firms adjust their expectations of wages and prices upward and they push for higher wages and prices.
- D) Workers and firms adjust their expectations of wages and prices upward and they

accept lower wages and prices.

Answer: C

Chapter 24, p.892; see Figure 24.6, self-adjustment mechanism. Each SRAS curve is associated with a certain level of inflationary expectations (just like the short-run Phillips curve in Chapter 28). When GDP is beyond the potential level and prices are rising, workers and firms will adjust upward their inflationary expectations, negotiating for higher wages and prices, and SRAS shifts to the left. The automatic adjustment will continue until GDP is back to the potential level.

5) When people became _____ concerned with the underlying value of their houses and became _____ concerned with the expectations of the prices of their houses increasing, a housing bubble occurred.

- A) less; less
- B) less; more
- C) more; less
- D) more; more

Answer: B

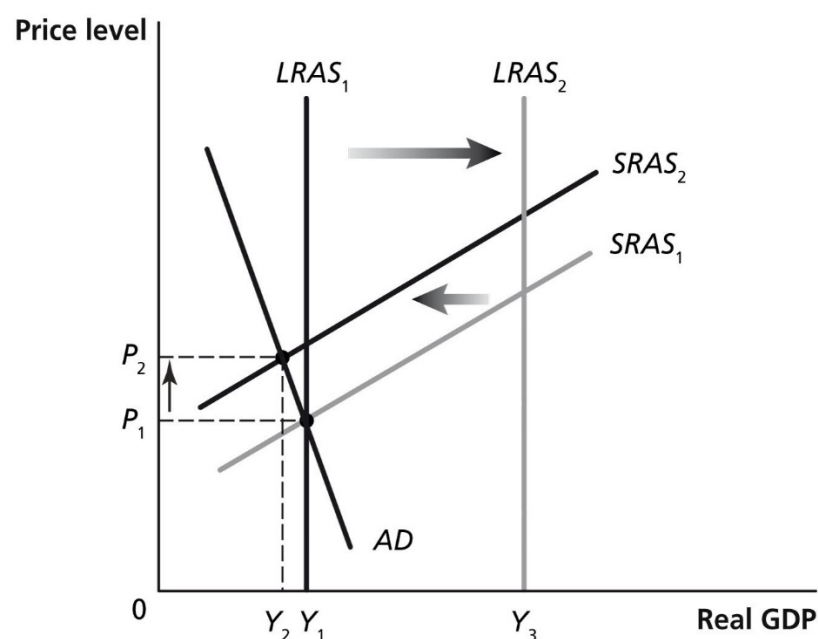
6) An increase in aggregate demand in the economy will have what effect on macroeconomic equilibrium in the long run?

- A) The price level will fall, and the level of GDP will rise.
- B) The price level will fall, and the level of GDP will fall.
- C) The price level will rise, and the level of GDP will fall.
- D) The price level will rise, and the level of GDP will be unaffected.

Answer: D

Chapter 24, p.892, Figure 24.6.

Figure 1



7) **Refer to Figure 1.** The economy began at the point (Y_1 , P_1) on the aggregate demand curve in 2017. The loss in supply of oil and natural gas were supply shocks which shifted the SRAS curve to the _____. The economy ended up at the short-run equilibrium in 2018 with the price level at _____ and real GDP at _____.

- A. left; P_1 ; Y_1
- B. left; P_2 ; Y_2
- C. right; P_1 ; Y_1
- D. right; P_2 ; Y_2

Answer : B

Chapter 24, p.899 – 900, Solved problem 24.4.

8) Refer to Figure 1. The economy ended up at a real GDP level Y_2 which was _____ the potential level of GDP for 2018 which was at Y_3 . Unemployment _____ in the economy as a result.

- A. above; increased
- B. above; decreased
- C. below; increased
- D. below; decreased

Answer : C

Chapter 24, p.899 – 900, Solved problem 24.4. Output $Y_2 < Y_1 < Y_3$. Lower output means fewer workers are employed, therefore the unemployment rate must be higher.

9) Commodity money

- A) has value independent of its use as money.
- B) has little to no value independent of its use as money.
- C) is backed by a valuable commodity such as gold.
- D) can be used to purchase commodities, but not services.

Answer: A

Chapter 25, p.918, commodity money and fiat money.

10) You earn \$500 a month, currently have \$200 in currency, \$100 in your checking account, \$2,000 in your savings accounts, \$3,000 worth of illiquid assets and \$1,000 of debt. You have

- A) money = \$2,300, annual income = \$6,000, and wealth = \$5,000.
- B) money = \$300, annual income = \$6,000, and wealth = \$4,300.
- C) money = \$200, annual income = \$500, and wealth = \$4,300.
- D) money = \$300, annual income = \$6,000, and wealth = \$5,000.

Answer: B

Chapter 25, p.921, Box case “Don’t confuse money with income and wealth”. Here money means M1 which is widely accepted as a medium of exchange.

11) The most liquid measure of money supply is

- A) M1.
- B) M2.
- C) M3.
- D) M4.

Answer: A

Chapter 25. Liquidity is the ease with which an asset can be converted to the medium of exchange. Cash and checks (M1) are readily accepted in exchange for goods and services.

12) Credit card balances are

- A) part of M1.
- B) part of M2.
- C) part of M3.
- D) not part of the money supply.

Answer: D

Chapter 25. When you buy something with a credit card, you are in effect taking out a loan from the bank that issued the credit card.

Table 1

Assets	Liabilities
Reserves +\$7,500	Deposits +\$50,000
Loans +\$46,000	Net Worth +\$3,500

13) **Refer to Table 1.** Consider the above simplified balance sheet for a bank. If the required reserve ratio is 10 percent, the bank can make a maximum loan of

- A) \$2,500.
- B) \$5,500.
- C) \$6,300.
- D) \$45,000.

Answer: A

Chapter 25. In this case, required reserve = $(50,000)(0.1) = 5,000$, so that the bank has an excess reserve of $\$7,500 - \$5,000 = \$2,500$ which the bank can loan out.

14) If banks do *not* loan out all their excess reserves, then the real world multiplier is (RR means reserve ratio)

- A) smaller than $1/RR$.
- B) larger than $1/RR$.
- C) equal to $1/RR$.
- D) not related to $1/RR$.

Answer: A

Chapter 25, p.931, simple deposit multiplier versus the real world deposit

multiplier. Suppose $RR = 10\%$, the simple deposit multiplier is $1/0.1 = 10$. Consider the extreme case that banks don't make loans at all even though they have excess reserve. The deposit multiplier process will simply stop at step 1 because bank B, bank C, ..., will never receive any new reserve. In this case the deposit multiplier is 1, small than 10.

15) Which of the following is *not* a major function of the Federal Reserve System?

- A) lender of last resort
- B) clearing checks between banks
- C) setting income tax rates
- D) controlling the money supply

Answer: C

16) To decrease the money supply, the Federal Reserve could

- A) lower the discount rate.
- B) raise income taxes.
- C) raise the required reserve ratio.
- D) conduct an open market purchase of Treasury securities.

Answer: C

Chapter 25. A lower discount rate encourages banks to borrow more from the Fed and thereby increase their reserves. An open market purchase by the Fed will also increase the reserves of banks. With more reserves, banks will make more loans, which will increase checking account deposits and the money supply.

17) Suppose a bank has \$100 million in checking account deposits with no excess reserves and the required reserve ratio is 10 percent. If the Federal Reserve reduces the required reserve ratio to 6 percent, then the bank can make a maximum loan of

- A) \$0.
- B) \$4 million.
- C) \$6 million.
- D) \$10 million.

Answer: B

Chapter 25. When the required reserve ratio is 10%, the bank must hold $(100)(0.1) = 10$ million as required reserves. As the bank has no excess reserves, it follows that the actual reserves held by the bank is 10 million. After the required reserve ratio drops to 6%, the bank is required to hold $(100)(0.06) = 6$ million as reserves, so that there will be an excess reserve of $10 - 6 = 4$ million, which the bank can loan out.

18) The quantity equation states that the

- A) money supply divided by the velocity of money equals the price level divided by real output.
- B) money supply times the velocity of money equals the price level times real output.
- C) money supply times the price level equals real output divided by the velocity of

money.

D) money supply times the price level equals real output times the velocity of money.

Answer: B

Chapter 25, p.939. Quantity equation $M \times V = P \times Y$.

19) The quantity theory of money was derived from the quantity equation by asserting that

A) real output was fixed.

B) the money supply was fixed.

C) the velocity of money was fixed.

D) the velocity of money was zero.

Answer: C

Chapter 25, p.940. The quantity equation $M \times V = P \times Y$ can be rewritten in terms of growth rates:

$$\text{growth rate of } M + \text{growth rate of } V = \text{growth rate of } P + \text{growth rate of } Y \quad (1)$$

The quantity theory of money assumes V is constant, i.e. *growth rate of* $V = 0$.

Growth rate of P is nothing but the inflation rate. Therefore, (1) can be rearranged as

$$\text{inflation rate} = \text{growth rate of } M - \text{growth rate of } Y \quad (2)$$

which provides a very simple theory to explain inflation.

20) Hyperinflation is caused by

A) a constant increase in the money supply.

B) a high rate of growth in the money supply.

C) Real GDP growing more rapidly than the money supply.

D) the money supply growing more slowly than GDP.

Answer: B

See eq. (2) above, the quantity theory of money in terms of growth rates. A huge growth rate of M , way above the growth rate of Y , implies a huge inflation rate.

21) Monetary policy refers to the actions the Central Bank takes to manage

A) the money supply and income tax rates to pursue its economic objectives.

B) the money supply and interest rates to pursue its economic objectives.

C) income tax rates and interest rates to pursue its economic objectives.

D) government spending and income tax rates to pursue its economic objectives.

Answer: B

Chapters 26 and 27. Government spending and tax rates are instruments of fiscal policy. Money supply and interest rates are instruments of monetary policy.

22) Rising prices erode the value of money as a _____ and as a _____.

A) unit of barter; unit of account

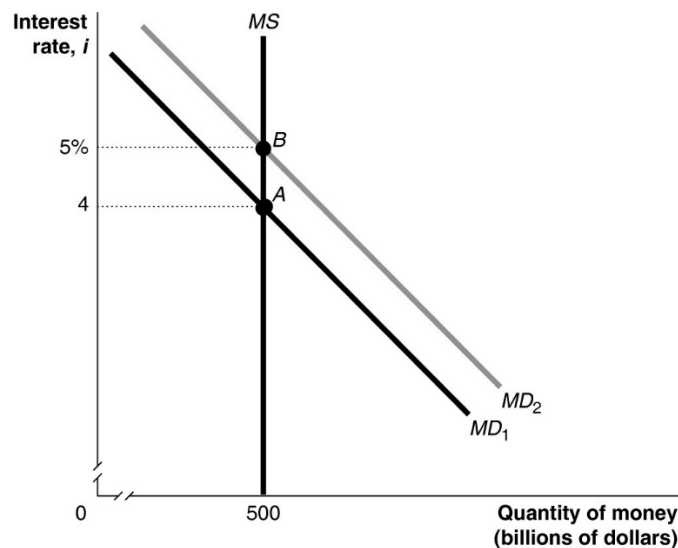
B) store of value; unit of liquidity

C) medium of exchange; store of value

D) store of value; unit of barter

Answer: C

Figure 26-1



23) **Refer to Figure 26-1.** In the figure, the movement from point A to point B in the money market would be caused by

A) an increase in the price level.

B) a decrease in real GDP.

C) an open market sale of Treasury securities by the Federal Reserve.

D) an increase in the required reserve ratio by the Federal Reserve.

Answer: A

Chapter 26, Figure 26.3. A higher price level increases the quantity of money required for a given amount of buying and selling. Graphically, for each and every interest rate, money demand increases (rightward shift of MD curve). At the original interest rate level of 4% and a money supply of 500, households and firms will be holding less money than they would like, relative to other financial assets. To increase their money holdings, people will sell financial assets or withdraw funds from interest-bearing saving account. Banks will have to offer higher interest rates to retain depositors, and sellers of bonds and other securities will have to offer higher interest rates to find buyers. The adjustment will continue until the interest rate rises to 5% at which money demand equals money supply.

24) **Refer to Figure 26-1.** The money demand curve MD is downward sloping because an increase in the interest rate _____ the opportunity cost of holding money, which motivates households and firms to switch from _____ to _____.

A) decreases; financial assets; money.

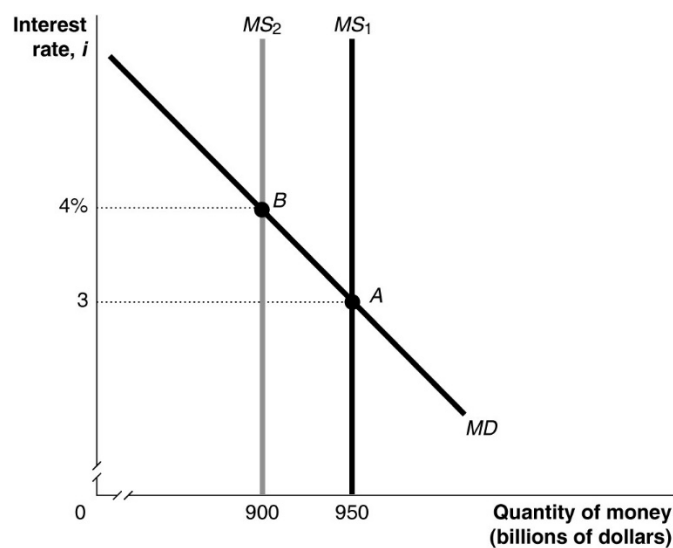
B) increases; money; financial assets.

- C) decreases; investment; money
- D) increases; money; consumption.

Answer: B

Chapter 26, p.957, the demand for money. Money means M1 (cash + checking account balance) which is liquid but earns no interest. If you are willing to sacrifice liquidity, you can put your money into interest-bearing assets which earn interest. In other words, interest is the opportunity cost of holding money. The higher the interest rate, the higher the cost of holding money, and the less money (and more financial assets) people would like to hold.

Figure 26-2



25) **Refer to Figure 26-2.** In the figure, the movement from point A to point B in the money market would be caused by

- A) an open market purchase of stocks by the Central Bank.
- B) a decrease in real GDP.
- C) an open market sale of government bonds by the Central Bank.
- D) a decrease in the required reserve ratio by the Central Bank.

Answer: C

Chapter 26, Figure 26.5. An open market sale by the central bank decreases banks reserves, reducing the money supply.

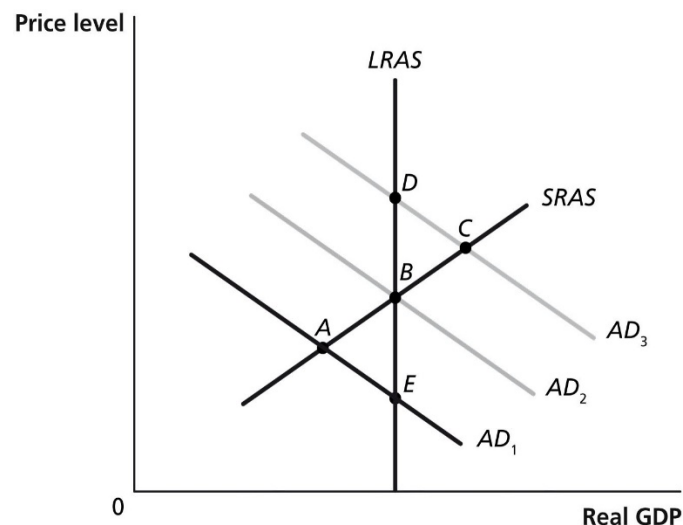
26) The money market model (chapter 26) is concerned with _____ and the loanable funds market model (chapter 21) is concerned with _____.

- A) short-term real interest rates; long-term nominal interest rates
- B) short-term nominal interest rates; long-term nominal interest rates
- C) short-term real interest rates; long-term real interest rates
- D) short-term nominal interest rates; long-term real interest rates

Answer: D

Chapter 26, p.959, a tale of two interest rates.

Figure 26-3



27) **Refer to Figure 26-3.** Suppose the Central Bank sells government bonds in pursuit of contractionary monetary policy. Using the static *AD-AS* model in the figure above, this situation would be depicted as a movement from

- A) A to B.
- B) B to D.
- C) C to B.
- D) C to D.

Answer: C

Chapter 26, Figure 26.7. A contractionary monetary policy raises the interest rate, *AD* goes down because of lower durable goods consumption, investment and net exports. This is represented in the graph as a leftward shift of the *AD* curve.

28) **Refer to Figure 26-3.** Suppose the economy is in a recession and no intervention policy is pursued. Using the static *AD-AS* model in the figure above, the self-correction mechanism of the economy would be depicted as a movement from

- A) A to B.
- B) C to B.
- C) A to E.
- D) C to D.

Answer: C

Refer to Chapter 24, Figure 24.5. A recession means GDP is below the potential level, so point A must be the initial equilibrium. When GDP is below the potential level and prices are falling, workers and firms will adjust downward their inflationary expectations, willing to accept lower wages and prices, and *SRAS* shifts to the right. The automatic adjustment will continue until GDP is back to the potential level at point E.

29) Using the Taylor rule, if the current inflation rate equals the target inflation rate and real GDP is less than potential GDP, then the federal funds target rate _____ the sum of the current inflation rate plus the real equilibrium federal funds rate.

- A) will be greater than
- B) will be less than
- C) will be the same as
- D) may be greater than or less than

Answer: B

Chapter 26, p.976 – 978, the Taylor rule. In general terms, the Taylor rule is

$$\text{Target nominal interest rate} = \text{Current inflation rate} + \text{Equilibrium real interest rate} + \frac{1}{2} \times \text{inflation gap} + \frac{1}{2} \times \text{output gap}$$

where

inflation gap = current inflation rate - target inflation rate

output gap = percentage difference between real GDP and potential GDP

In the United States, the “interest rate” in the Taylor rule equation is the federal funds rate, the interest rate banks charge each other for overnight loans for bank reserves (see textbook p.961).

In this problem, inflation gap = 0 (“current inflation rate equals target inflation rate”) and output gap < 0 (“real GDP below potential GDP”). From the Taylor rule equation, we see that

$$\text{Target nominal interest rate} = \text{Current inflation rate} + \text{Equilibrium real interest rate} + 0 + \text{something negative}$$

Thus,

$$\text{Target nominal interest rate} < \text{Current inflation rate} + \text{Equilibrium real interest rate}$$

That is, the Taylor rule suggests that the central bank should pursue an expansionary monetary policy by targeting a lower nominal interest rate.

30) Suppose the equilibrium real federal funds rate is 5 percent, the target rate of inflation is 3 percent, the current inflation rate is 5 percent, and real GDP is 4 percent above potential real GDP. If the weights for the inflation gap and the output gap are both 1/2, then according to the Taylor rule the federal funds target rate equals

- A) 1 percent.
- B) 9 percent.
- C) 13 percent.
- D) 17 percent.

Answer: C

Target nominal interest rate = Current inflation rate + Equilibrium real interest rate

$$\begin{aligned}
 &+ \frac{1}{2} \times \text{inflation gap} + \frac{1}{2} \times \text{output gap} \\
 &= 5 + 5 + \frac{1}{2}(5 - 3) + \frac{1}{2}(4) \\
 &= 13
 \end{aligned}$$

31) Which of the following would be classified as fiscal policy?

- A) The government provides tax concessions to encourage firms to adopt environment-friendly technology.
- B) The Central Bank raises interest rates to combat inflation.
- C) The government cuts taxes during a recession to encourage consumption and investment.
- D) The government increases taxes to fund education.

Answer: C

By fiscal policy, macroeconomists usually means the policy of changing government purchases and taxes to offset the effects of business cycle on the economy. (A) and (D) are usually referred to as growth or environment policy rather than fiscal policy, as they have nothing to do with business cycle.

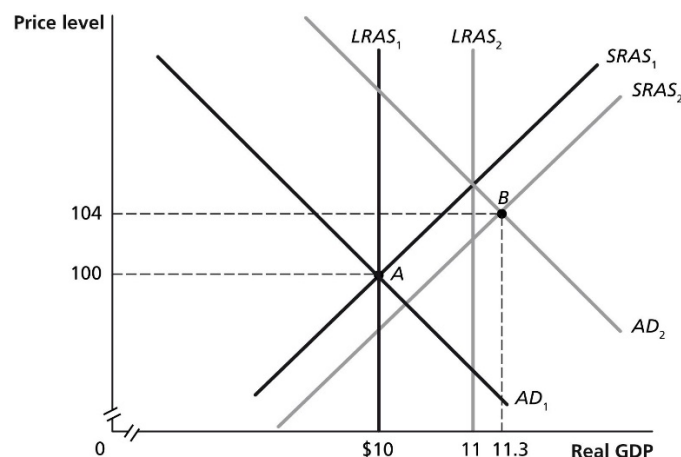
32) Which of the following would *not* be considered an automatic stabilizer?

- A) legislation increasing funding for job retraining passed during a recession
- B) decreasing unemployment insurance payments during an expansion
- C) rising income tax collections due to rising incomes during an expansion
- D) rising welfare payments due to more persons losing jobs during a recession

Answer: A

Chapter 27. (A) is not automatic. On the other hand, (B) – (C) are all automatic, without passing new laws or approval from the Congress.

Figure 27-1



33) **Refer to Figure 27-1.** In the dynamic model of AD-AS in the figure, if the economy is at point A in year 1 and is expected to go to point B in year 2, and no fiscal or monetary policy is pursued, then at point B

- A) firms are operating below capacity.
- B) the unemployment rate is below the natural rate of unemployment.
- C) the economy is below full employment.
- D) there is pressure on wages and prices to fall.

Answer: B

In year 2, potential GDP is 11 and actual GDP is 11.3. The unemployment rate that corresponds to the potential GDP is the natural rate of unemployment. To produce higher output requires more workers, implying lower unemployment. Thus, if actual GDP is higher than potential GDP, it must be true that the actual unemployment rate is lower than the natural rate of unemployment.

34) **Refer to Figure 27-1.** Given that the economy has moved from A to B in the figure, which of the following policies could the government use to achieve potential GDP?

- A) increase taxes
- B) increase government spending
- C) increase the money supply
- D) decrease interest rates

Answer: A

GDP at point B is above the potential level. The government needs to use contractionary monetary or fiscal policy. (B) – (D) are expansionary; only (A) is contractionary.

35) The multiplier effect is the series of _____ increases in _____ expenditures that result from an initial increase in _____ expenditures.

- A) induced; investment; autonomous
- B) induced; consumption; autonomous

- C) autonomous; consumption; induced
- D) autonomous; investment; induced

Answer: B

Chapter 27, Figure 27.9, the mechanism underlying the multiplier effect.

36) Which of the following would increase the size of the government purchases multiplier?

- A) an increase in the tax rate
- B) an increase in the quantity of imports purchased by households from an increase in income
- C) a decrease in the amount of consumption spending by households from an increase in income
- D) a decrease in the amount saved by households from an increase in income

Answer: D

Chapter 27, Figure 27.9. The more induced increases in consumption expenditure, the larger is the multiplier effect. Less saving means more consumption. If households save less when income goes up, it means more induced increases in consumption, resulting in a bigger multiplier effect. Another approach is to make use of the formula: Government purchases multiplier = $\frac{1}{1 - MPC} = \frac{1}{MPS}$. A smaller marginal propensity to save MPS (“A decrease in the amount saved by households from an increase in income”) means a bigger government purchases multiplier.

37) It is _____ difficult to effectively time fiscal policy than monetary policy because _____.

- A) more; fiscal policy can be quickly decided and changed
- B) more; fiscal policy takes longer to implement
- C) less; monetary policy takes longer to decide and change
- D) less; monetary policy takes longer to implement

Answer: B

Chapter 27, p.1011 - 1012, the limits to using fiscal policy to stabilize the economy.

38) Crowding out refers to a decline in _____ as a result of an increase in _____.

- A) tax revenues; unemployment
- B) government purchases; tax rates
- C) government purchases; private expenditures
- D) private expenditures; government purchases

Answer: D

39) Crowding out will be greater

- A) the less sensitive consumption spending is to changes in the interest rate.
- B) the further equilibrium GDP is below potential GDP.

- C) the more sensitive investment spending is to changes in the interest rate.
- D) if the economy is in recession, rather than at full employment.

Answer: C

Chapter 27, p.1013 - 1015. Pay attention to how crowding out works. Crowding out works through its effect on private expenditures via the interest rate. That is why the more sensitive investment spending (and also durable goods consumption and net exports) is to changes in the interest rate, the bigger will be the crowding out effect.

40) Tax reduction and simplification should _____ long-run aggregate supply because of _____ .

- A) increase; more labor supply and investment.
- B) increase; less investment labor supply and investment.
- C) decrease; more consumption and net exports.
- D) decrease; less consumption and net exports.

Answer: A

Chapter 27, Figure 27.17, the supply-side effects of a tax change. If tax reduction and simplification are effective, the economy will experience increases in labor supply, saving, investment, and the formation of new firms. All of these boost the productive capacity of the economy, thereby increasing the long-run aggregate supply.