Answer Key

Economics 1012B
Introduction to Macroeconomics
Spring 2006
Dr. R. E. Mueller
Third Midterm Examination
March 30, 2006

Answer all of the following questions by selecting the most appropriate answer on your bubble sheet. Be sure to read each question carefully. Each question is worth 2 points (100 points total) and will count as 20 per cent of your final course grade.

NOTE: The use of calculators and electronic translators is prohibited.

1. The aggregate expenditure model assumes:
A) the aggregate supply curve is flat.
B) the aggregate supply curve is vertical.
C) the aggregate demand curve is flat.
D) the aggregate demand curve is vertical.

Ans: A
Feedback: This question requires students to draw on material from both chapters 8 and 9. The multiplier model assumes that the price level does not change. In other words, the SAS curve is in the Keynesian range.

2. If the AE curve is represented by AE = 300 + 0.5Y, a shift in the AE curve of 50 will be depicted as a shift in the AD curve of:
A) 50.
B) 100.
C) 300.
D) 600.

Ans: B
Feedback: This question requires students to draw on material from both chapters 8 and 9. Multiply the multiplier (2) by the change in autonomous expenditures (50) to find the shift in the AD curve.

3. The reason why the AS/AD model does not depend upon the concepts of substitution and opportunity cost is that:
A) in groups, people do not make the same choices as when they are alone.
B) the AS/AD model considers total output. There are no goods to substitute.
C) the AS/AD model considers the effects of other countries' decisions.
D) other things remain constant in the AS/AD model.

Ans: B
Feedback: Since the AS/AD model is describing the economy in aggregate, the principle of substitution and opportunity cost are not applicable.

4. The ______ ______ occurs because as prices fall, people become richer, so they buy more.
A) international effect
B) multiplier effect
C) interest rate effect
D) wealth effect

Ans: D
Feedback: As the price level falls, the dollars people hold can buy more, making people wealthier.

5. The interest rate effect exists because changes in the price level affect:
A) the multiplier.
B) exchange rates.
C) real wealth.
D) real cash balances.

Ans: D
Feedback: As the price level falls, real cash balances rise. People adjust their holdings of cash accordingly and this affects the interest rate.

6. A rise in the Canadian price level will cause:
A) both exports and imports to increase.
B) both exports and imports to decrease.
C) exports to increase and imports to decrease.
D) exports to decrease and imports to increase.

Ans: D
Feedback: As the price level rises, Canadian goods become more expensive than foreign goods and foreigners substitute foreign goods for Canadian goods. Canadian citizens, also substitute foreign goods for domestic goods.

7. All of the following effects cause the AD curve to slope downward except the:
A) international effect.
B) interest rate effect.
C) substitution effect.
D) wealth effect.

Ans: C
Feedback: The substitution effect is not relevant for the discussion of the aggregate economy.

8. The multiplier effect exists because:
A) production and expenditures are interdependent.
B) when one person increases expenditures, everyone increases expenditures.

C) production and expenditures are independent.
D) production causes expenditures.

Ans: A
Feedback: The multiplier effect takes into account the fact that an increase in expenditure raises production which in turn leads to higher levels of expenditure, making the two interdependent.

9. A fall in a foreign country's income will most likely cause:
A) a reduction in Canadian exports, so the Canadian aggregate demand curve shifts left.
B) a reduction in Canadian exports, so the Canadian aggregate demand curve shifts right.
C) an increase in Canadian exports, so the Canadian aggregate demand curve shifts left.
D) an increase in Canadian exports, so the Canadian aggregate demand curve shifts right.

Ans: A
Feedback: A fall in foreign income reduces Canadian aggregate demand, shifting its AD curve left.

10.. If the government increases its expenditures (without any change in taxes) and at the same time the Bank of Canada increases the money supply, the AD curve would:
A) shift to the left.
B) shift to the right.
C) become flatter.
D) become steeper.

Ans: B
Feedback: An increase in government expenditures increases economic activity and shifts the AD curve to the right. An increase in the money supply lowers interest rates and increases economic activity; this also shifts the AD curve to the right.

11. The short-run aggregate supply curve assumes that firms adjust:
A) prices, not quantities, in the short-run.
B) quantities, not prices, in the short-run.
C) prices and quantities in the short-run.
D) neither prices nor quantities in the short-run.

Ans: C
Feedback: The short-run aggregate supply curve is upward sloping and shows how firms adjust quantity and price in the short-run in response to changes in aggregate demand.

12. Consider the case where firms have long-term collective agreements with their employees which establish future nominal wage rates. If there is an unexpected increase in the price level, such firms would tend to:
A) decrease output in the short run.
B) increase output in the short run.
C) decrease output but only in the long run.

D) increase output but only in the long run.

Ans: B
Feedback: An unexpected increase in the price level will reduce the real cost of hiring workers and firms will tend to expand production.

13. If productivity increases by 3% but wages also increase by 3%, then it is most likely that:
A) the SAS curve will shift to the left.
B) the SAS curve will shift to the right.
C) the SAS curve will not shift.
D) the AD curve will shift left.

Ans: C
Feedback: This combination does not affect production costs since wages are growing as fast as productivity. As a consequence, the SAS curve will not shift.

14. A change in the following will shift the long-run aggregate supply curve:
A) the price level.
B) government fiscal policy.
C) aggregate demand.
D) technology.

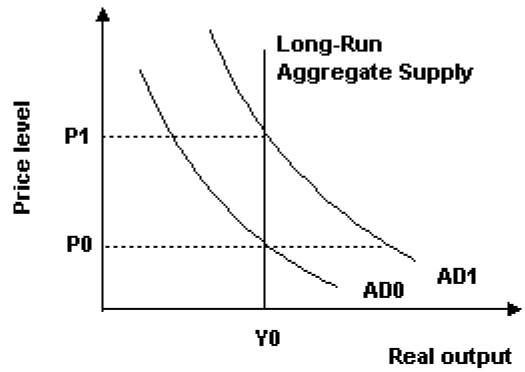
Ans: D
Feedback: See discussion in textbook.

15. In the short run, the position of the aggregate demand curve determines:
A) output.
B) the price level.
C) both output and the price level.
D) neither output nor the price level.

Ans: C
Feedback: In the short run, aggregate demand determines output and the price level.

16. If aggregate demand exceeds potential output, eventually:
A) input prices will rise and output will fall.
B) both input prices and output will rise.
C) input prices will fall and output will rise.
D) both input prices and output will fall.

Ans: A
Feedback: In an inflationary gap, the demand for inputs is high, causing input prices to rise. As input prices rise, so do output prices, and this causes a decrease in aggregate demand and output.

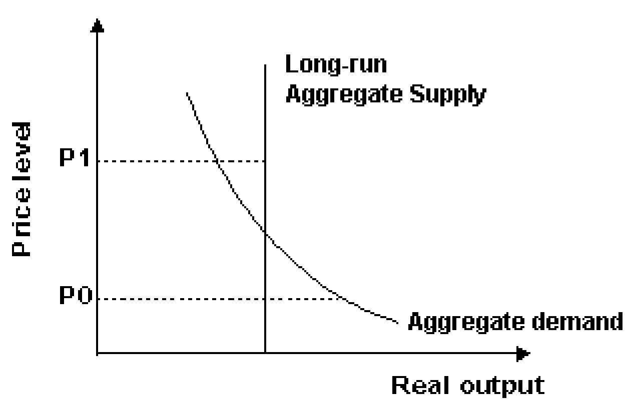


17. Refer to the graph above. In the graph, if the price level is P_0 and the aggregate demand curve is AD_0, then the economy is in:
A) a recessionary gap.
B) an inflationary gap.
C) a long-run equilibrium.
D) a short-run equilibrium but not a long-run equilibrium.

Ans: C
Feedback: Since output equals potential output at this combination, the economy is in a long-run equilibrium.

18. If the Canadian economy is producing above its potential income, all of the following are likely to happen *except*:
A) production will continue to increase.
B) there will be a shortage of labour and raw materials.
C) prices will rise.
D) inventories will decline.

Ans: A
Feedback: There will not be enough resources available to increase production.



19. Refer to the graph above. If the price level is P_0, then
A) input prices will fall and output will rise in the long run.

B) both input prices and output will fall in the long run.
C) input prices will rise and output will fall in the long run.
D) both input prices and output will rise in the long run.

Ans: C
Feedback: Because there is an inflationary gap at P0, input prices will rise in the long run, forcing up output prices and reducing aggregate demand and output.

20. In the late 1990s, the Canadian budget went into surplus and there was a lengthy debate about what should be done with the surplus. Suppose the government used the surplus to finance tax cuts. If the Canadian economy was at potential output before the tax cut, the short-run effect of the tax cut would most likely be:
A) higher output and higher prices.
B) higher output without higher prices.
C) higher prices without higher output.
D) no change in output or prices.

Ans: A
Feedback: In the short run, the tax cut would boost aggregate demand, generating higher output and higher prices.

21. If foreign income increases and the domestic economy is at potential output, then domestic aggregate demand will __________ in the short run and domestic aggregate supply will __________ in the long run.
A) increase, increase.
B) increase, not change.
C) decrease, increase.
D) decrease, not change.

Ans: B
Feedback: Domestic aggregate demand will rise in the short run as foreigners demand more of our goods. Since the economy is at potential output, however, attempts to increase production to meet the higher level of demand will only lead to higher input and output prices in the long run.

22. In the short run, a decline in the value of a country's currency:
A) reduces its price level in the Classical range.
B) raises its price level in the Keynesian range.
C) reduces its price level in the intermediate range.
D) raises its price level in the Classical range.

Ans: D
Feedback: When a country's currency depreciates, demand for its output increases, causing the aggregate demand curve to shift to the right. The price level either remains constant (if the economy is in the Keynesian range) or increases (if the economy is in the intermediate or Classical ranges.)

23. If the target rate of unemployment falls, potential income will:
A) first decrease, then increase.
B) increase.
C) decrease.
D) first increase, then decrease.

Ans: B
Feedback: Potential income varies inversely with unemployment.

24. Fiscal policy influences the levels of income and employment by changing:
A) the money supply, credit availability, and interest rates.
B) government regulations.
C) exchange rates and tariffs.
D) taxes, transfers, and expenditures.

Ans: D
Feedback: Fiscal policy includes any policy that changes government outlays or tax receipts.

25. Fiscal policy is used to "manage":
A) aggregate demand.
B) aggregate supply.
C) both aggregate demand and aggregate supply.
D) neither aggregate demand nor aggregate supply.

Ans: A
Feedback: Fiscal policy is one type of demand management policy. The purpose of these policies is to alter aggregate demand in such a way as to bring the economy to its potential output level.

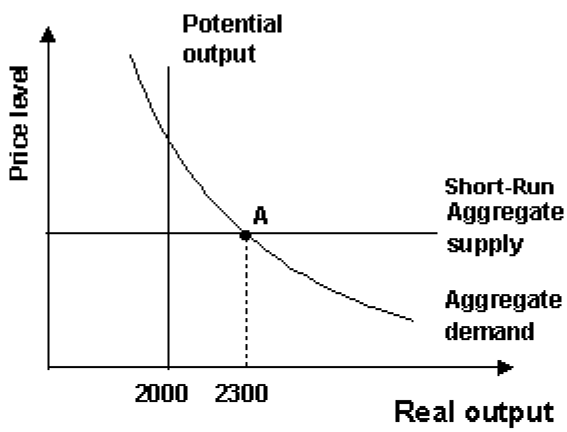
26. Suppose the Japanese government decides to increase government expenditures by 120. If the multiplier in the economy is 3 and the price level is constant, the AD curve would ultimately:
A) shift out by 40.
B) shift out by 120.
C) shift out by 360.
D) not shift at all because the price level is constant.

Ans: C
Feedback: Since the price level remains unchanged, the AD curve would shift out by 360, which is the product of the change in government expenditures and the multiplier.

27. Suppose equilibrium income is $3,000 billion and government policy makers determine that potential income is $3,400 billion. If the mpc = 0.75 and the price level is constant, by how much must government spending change to close the GDP gap?

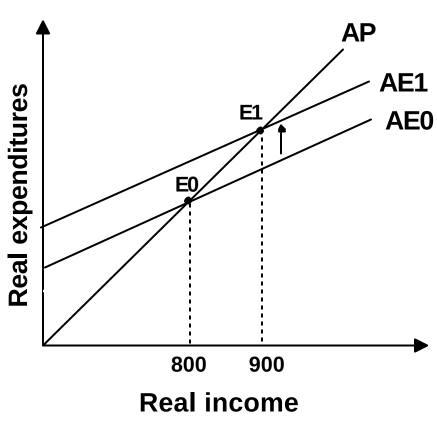
A) increase by $400 billion.
B) decrease by $300 billion.
C) increase by $100 billion.
D) decrease by $50 billion.

Ans: C
Feedback: In this case, the multiplier equals 1/(1-mpc) or four, so government spending must increase by $100 billion.



28. Refer to the graph above. If the economy in the graph is operating at point A and the mpc is 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.

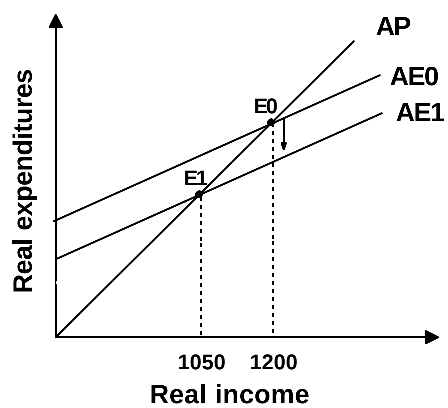
Ans: B
Feedback: Since the multiplier is 4 in this case, an decrease in government spending of 75 will reduce aggregate demand and output by 300, moving output to its potential.



29. Refer to the graph above. A shift in the aggregate expenditure curve from AE0 to

AE1 could be caused by:
A) an increase in income taxes.
B) an increase in government spending on education.
C) a decrease in welfare payments.
D) an increase in the corporate profits tax.

Ans: B
Feedback: Higher spending on education increases aggregate expenditure at each income level, which shifts the AE curve up.



30. Refer to the graph above. A shift in the aggregate expenditure curve from AE0 to AE1 could be caused by:
A) an increase in income taxes.
B) an increase in defence spending.
C) an increase in social assistance payments.
D) a decrease in the capital gains tax.

Ans: A
Feedback: An increase in income taxes reduces aggregate expenditure at each income level and shifts the AE curve down.

31. Refer to the graph above. If the mpc is 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.

Ans: B
Feedback: The shift in the AE curve causes equilibrium income to fall by $150. Since the mpc is 2/3, the government spending multiplier is 3 (=1/[1-mpc]), so that government spending has to change by only one-third of the change in income.

32. Which of the following is an example of countercyclical fiscal policy?
A) A reduction in taxes when the economy is booming.
B) An increase in government spending when the economy is booming.
C) An increase in taxes when the economy is in a recession.
D) An increase in government spending when the economy is in a recession.

Ans: D
Feedback: An increase in government spending will increase aggregate expenditure and income and help the economy recover from the recession.

33. The mpc in Singapore is 2/3 and there is an inflationary gap of 150. Singapore should:
A) decrease autonomous spending by 50.
B) decrease autonomous spending by 450.
C) increase autonomous spending by 50.
D) increase autonomous spending by 450.

Ans: A
Feedback: Since the gap is inflationary, contractionary policy is called for. As the multiplier is 3, Singapore should decrease autonomous spending by 50.

34. If the mpc = 0.8 and government spending decreases by 40, then the AE curve shifts __________ while the AD curve shifts __________.
A) down by 40; in by 40.
B) down by 40; in by 200.
C) down by 200; in by 200.
D) up by 40; out by 200.

Ans: B
Feedback: The decrease in government spending decreases aggregate expenditure by 40 at each income level, causing the AE curve to shift down by 40. The multiplier effect then translates the initial decrease in income into a decrease in aggregate demand equal to the multiplier (1/(1-mpc) or 5) times the initial decrease in government expenditures.

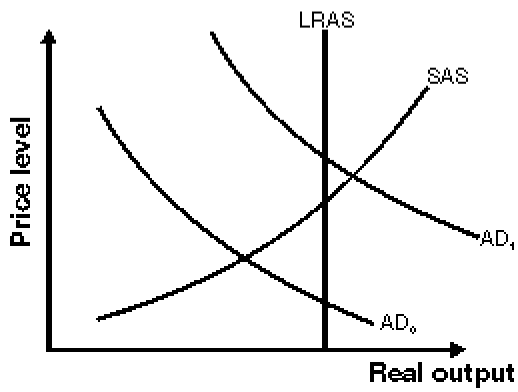
35. All of the following policies are alternatives to fiscal policy *except*:
A) policies that affect autonomous consumption.
B) policies that affect autonomous investment.
C) policies that affect income tax rates.
D) policies that affect autonomous net exports.

Ans: C
Feedback: Changes in income tax rates are one type of fiscal policy.

36. 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.

Ans: B
Feedback: A country that boosts its own economy by increasing its exports necessarily increases another country's imports and undercuts that country's economy.



37. Refer to the graph above. If wage and price controls had not been introduced during the Second World War, the massive increase in military spending would have eventually:
A) shifted the SAS curve to the right.
B) shifted the AD curve to the left.
C) shifted the SAS curve to the left.
D) had no effect on AD and SAS.

Ans: C
Feedback: The huge increase in defence spending would have eliminated the recessionary gap produced by the Depression and created an inflationary gap instead, leading to an upward shift of the AS curve.

38. The budget surplus that developed during the late 1990s and early 2000s:
A) helped check inflationary pressures.
B) resulted from politically costly tax increases and spending cuts.
C) contributed to the economic boom experienced during this period.
D) occurred because equilibrium output fell beneath potential output during this period.

Ans: A
Feedback: The budget surplus resulted from an unexpected surge in tax revenues. The increase in tax revenues reduced spending by consumers and businesses and in this way reduced inflationary pressures.

39. When potential output is known to be within a particular range of values:
A) a more expansionary fiscal policy is appropriate.
B) a more contractionary fiscal policy is appropriate.
C) no change in fiscal policy is appropriate until potential output can be determined

more precisely.
D) the choice of fiscal policy will depend on the level of equilibrium output.

Ans: D
Feedback: If equilibrium output is below the range, a more expansionary fiscal policy is called for. If equilibrium output is above the range, a more contractionary fiscal policy is called for. If equilibrium output is inside the range, no change in fiscal policy is probably best.

40. 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.

Ans: A
Feedback: Crowding out arises when government bond sales drive up interest rates and depress business investment.

41. When the price level is flexible, the multiplier is:
A) smaller than in the case where prices are constant.
B) larger than in the case where prices are constant.
C) the same as in the case where prices are constant.
D) larger in the case of expansionary fiscal policy and smaller in the case of contractionary fiscal policy.

Ans: A
Feedback: The multiplier is smaller than in the fixed-price case. This occurs for both expansionary and contractionary fiscal policy.

42. If government has no debt initially but then annual revenues are $8 billion for 10 years while annual expenditures are $11 billion for 10 years, then the government has a:
A) deficit of $3 billion per year and a debt of $30 billion.
B) surplus of $3 billion per year and a debt of $30 billion.
C) deficit of $30 billion and a debt of $3 billion per year.
D) surplus of $30 billion and a debt of $3 billion per year.

Ans: A
Feedback: A deficit of $3 billion exists because spending exceeds revenues by this amount in each year. Since the debt is just the accumulation of deficits over the period, it equals $30 billion (10 x $30 billion).

43. The real deficit is the nominal deficit adjusted for changes in:

A) interest rates.
B) potential output.
C) output.
D) the price level.

Ans: D
Feedback: The real deficit is the nominal deficit adjusted for inflation's effect on the existing debt.

44. Bond holders:
A) lose when actual inflation is less than was expected.
B) gain when actual inflation is more than was expected.
C) do not lose when the expected inflation built into the nominal interest rate is correct.
D) do not lose when the expected inflation built into the nominal interest rate is lower than actual inflation.

Ans: C
Feedback: Bond holders can avoid losing purchasing power by building inflation into nominal interest rates, but they will be correctly compensated only if inflation expectations prove right.

45. If an economy operates below potential income, the actual deficit is __________________ the structural deficit.
A) smaller than
B) larger than
C) the same as
D) comparable to

Ans: B
Feedback: As income falls below its potential, the passive deficit increases, causing the total deficit to exceed the structural deficit.

46. Suppose that the economy has a structural surplus of $100 billion and is operating above potential output. From this we can infer that the budget as a whole:
A) is in deficit.
B) is balanced.
C) is in surplus.
D) could be in deficit or surplus depending on the size of the passive deficit.

Ans: C
Feedback: The sum of the passive and structural deficits equals the budget deficit. Since there is both a structural deficit and a passive surplus (output is above potential output), the budget as a whole must be in surplus.

47. Paying interest on internal government debt involves a:
A) net reduction in domestic income.

B) redistribution of income among citizens of the country.
C) net increase in domestic income.
D) redistribution of income to citizens of other countries.

Ans: B
Feedback: Since interest on internal debt is owed to a country's citizens, it does not represent a loss of income, just a redistribution from taxpayers to bondholders.

48. Prior to Keynesian economics, budget deficits were viewed as:
A) always good.
B) good when output was beneath potential output but bad otherwise.
C) good when output was above potential output but bad otherwise.
D) always bad.

Ans: D
Feedback: Prior to Keynesian economics, budget deficits were viewed with alarm, something to be eliminated as quickly as possible.

49. In its attempt to address the problem of the structural deficit in the 1990s, the federal government:
A) lowered interest rates in order to reduce the cost of financing the debt.
B) increased government spending in order to create economic growth and higher tax revenues.
C) cut many social programs and raised taxes.
D) reduced taxes in order to increase the rate of growth of GDP.

Ans: C
Feedback: In an attempt to reduce the structural deficit, the federal government raised some taxes and cut many social programs in the 1990s.

50. Suppose the real rate of interest is 5 percent and nominal interest rate is 8 percent. What is the annual rate of inflation?
A) 13 percent.
B) -3 percent.
C) 3 percent.
D) 8 percent.

Ans: C
Feedback: Substituting numbers into the Fisher equation ($i = r + p^e$) and solve for p^e.