Student Performance Q&A:

2012 AP® Macroeconomics Free-Response Questions

The following comments on the 2012 free-response questions for AP® Macroeconomics were written by the Chief Reader, Arthur Raymond of Muhlenberg College in Allentown, Pa. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

Question 1

What was the intent of this question?

Part (a) tested students' ability to draw a production possibilities frontier diagram and to indicate a recession on the diagram. Part (b) asked students to identify the open-market operation that a central bank would use to address a recession; to show the effect of expansionary monetary policy on the nominal interest rate, using a correctly labeled money market graph; and to explain the effect of the expansionary monetary policy on the real interest rate and real gross domestic product in the short run. Part (c) tested students' ability to explain the effect of an increase in a country's real GDP on that country's current account deficit and the value of the country's currency.

How well did students perform on this question?

The mean score was 5.45 out of a possible 12 points. Students performed well in drawing a properly labeled production possibility frontier diagram and indicating an expansionary open market policy.

What were common student errors or omissions?

Part (c), which asked students to explain the effect of a change in real GDP on the current account deficit and the value of a country's currency, proved most difficult for students.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The connection between macroeconomic variables and the international movements of goods, services, and financial capital, and the effect on currency values, should be clearly established for students by focusing on each macroeconomic variable and the resulting international effects. Major macroeconomic variables that affect the international movement of goods and services are real GDP and the price level. A major economic variable that affects the flow of financial capital is the interest rate.

Question 2

What was the intent of this question?

Part (a) asked students to use the balance sheet of a bank to find the reserve requirement. Part (b) tested their ability to identify the effect of a cash withdrawal on bank reserves, explain the effect of the cash withdrawal on the money supply, and identify the effect of the cash withdrawal on excess reserves. Part (c) asked students to identify how a bank with deficient reserves could meet its reserve requirements.

How well did students perform on this question?

The mean score was 2.21 out of a possible 5 points.

What were common student errors or omissions?

Students had difficulty explaining the effect of a cash withdrawal from a bank on the M1 measure of the money supply and calculating the level of excess reserves after the cash withdrawal.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

The relationship between demand deposits, required reserves, and excess reserves is important in understanding the effect of cash deposits and withdrawals. In addition, the basic definition of the money supply as cash plus demand deposits bears some emphasis.

Question 3

What was the intent of this question?

Part (a) examined students' ability to draw an aggregate supply-and-demand diagram depicting an economy at full employment. Part (b) tested students' ability to show the effects of an increase in a country's exports on the country's equilibrium price level and equilibrium real GDP. Part (c) tested students' ability to explain the effect of an increase in exports on real wages in the short run. Part (d) tested students' ability to identify the component of aggregate demand affected by an increase in firms' expenditures on equipment, and to explain the effect of the increased equipment expenditures on long-run aggregate supply.

How well did students perform on this question?

The average score was 3.39 out of a possible 6 points. Students performed very well in drawing an aggregate supply-and-demand diagram that indicates full employment.

What were common student errors or omissions?

The greatest source of difficulty for students was in explaining the effect of an increase in exports on real wages when nominal wages are unchanging. Students also found it difficult to explain the effect of increased equipment expenditures on the long-run aggregate supply.

Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

It is important to recognize that changes in the real wage rate are due to both changes in the nominal wage rate and changes in the price level. With respect to the effect of increased expenditures on equipment, it is crucial for students to recognize a short-run effect and a long-run effect. The short-run effect of increased expenditures on equipment is to increase aggregate demand. The long-run effect is to increase the stock of physical capital, which is a source of an increase in long-run aggregate supply.