



## **Student Performance Q&A: 2007 AP<sup>®</sup> Macroeconomics Free-Response Questions**

The following comments on the 2007 free-response questions for AP<sup>®</sup> Macroeconomics were written by the Chief Reader, Arthur Raymond of Muhlenberg College in Allentown, Pennsylvania. 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?***

Question 1 evaluated students' understanding in three major areas of aggregate economic analysis: monetary equilibrium, the foreign exchange market, and aggregate supply and demand. Part (a) asked students to draw a graph showing the effect of increased money holdings resulting from sales of stocks on money demand and the nominal interest rate. Part (b) required them to illustrate, using a graph, the effect of lower prices for U.S. goods on the demand for the dollar and the price of the dollar on the foreign exchange market. Parts (c) and (d) directed students to use the change in the price of the dollar from part (b) to explain the effect on net exports of the United States and to sketch a graph to demonstrate how the change in net exports affects aggregate demand and the equilibrium price level and output in the short run. Part (e) asked them to explain the effect of the conclusions in part (d) on unemployment in the short run.

#### ***How well did students perform on this question?***

Students performed quite well on the question, scoring an average of 6.69, which is above 55 percent of the maximum 12 points. They performed best on part (d), which required them to use the aggregate supply and demand graph. The most difficult task was part (b), which required students to draw the foreign exchange market graph.

***What were common student errors or omissions?***

The most common error was the inability to show an increase in the demand for the dollar using a properly labeled diagram. The next most common error was the inability to show an increase in the demand for money using a properly labeled diagram.

***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 mislabeling of graphs is one of the most easily corrected of all mistakes, yet it remained one of the most common. All graphs must include proper labeling for the vertical axis, the horizontal axis, and all relationships shown on the graph. Also, as in the past, students continued to find international concepts difficult. International ideas should be emphasized throughout the course.

**Question 2**

***What was the intent of this question?***

The question assessed the students' understanding of the federal funds rate, the relationship between open-market operation and the federal funds rate, the effect of open-market operations on the nominal interest rate, and the relationship between the nominal interest rate and real interest rate.

***How well did students perform on this question?***

The mean student score on this question was 2.02 out of a possible 6 points, which is about 34 percent of the maximum.

***What were common student errors or omissions?***

Students were generally unaware of the size of the effect of open-market operations on loans, the definition of the federal funds rate, and the relationship between nominal and real interest rates.

***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?***

In discussing the effect of open-market operations on the money supply, there must be an emphasis on how the expansion is related to the creation of loans and how the expansion influences the federal funds rate. Students must also be aware of the meaning of nominal and real interest rates, as well as the basic relationship between them.

### Question 3

***What was the intent of this question?***

This question measured the ability of students to identify the kinds of goods and services that are included in a nation's gross domestic product (GDP).

***How well did students perform on this question?***

Students performed very well on this question. The mean score was 5.07 out of a possible 8 points, almost 64 percent of the maximum.

***What were common student errors or omissions?***

The most common mistake was the inability to explain why the 2006 rent paid by residents of an apartment building built in 2000 is included in GDP.

***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 should be emphasized that GDP can be counted in three ways. A country's GDP includes the value of final goods and services provided within the country's borders in the current period. This method is equivalent to both the value of current income to the factors producing those goods and services and to the current value added by each producer within the nation.