The following comments on the 2010 free-response questions for AP® Macroeconomics were written by the Chief Reader, David A. Anderson of Centre College in Danville, Ky. 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?
This question determined students' ability to work with models of aggregate demand–aggregate supply and loanable funds. Part (a) asked students to draw an aggregate demand–aggregate supply diagram to show an economy in long-run equilibrium. Part (b) determined whether students knew the effect of an increase in government spending on aggregate demand and the unemployment rate. Part (c) tested for understanding of the self-adjustment process for aggregate supply. Part (d) asked students to draw and manipulate a graph of the loanable funds market. Part (e) required students to identify the relationship between real interest rates, investment and economic growth.

How well did students perform on this question?
The mean score for this question was 4.75, almost 48 percent of the maximum possible score of 10 points. Students performed relatively well on parts (a), (b) and (d). They had the most difficulty with the explanation of the self-adjustment of aggregate supply in part (c), and the explanation of how the increase in interest rates affects the economic growth rate in part (e).

What were common student errors or omissions?
Common omissions included (1) discussion of input prices driving the self-adjustment process in the aggregate demand–aggregate supply model; and (2) mention of the role of slower capital formation as a link between higher interest rates and slower economic growth.

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?
Teachers should emphasize the need to understand why curves in graphs shift the way they do and remind students to explain every step in a sequence between cause and effect. Many students
seemed to know what the graphs should look like but could not convey the reasons for shifts and other changes. Also, many students provided explanations that missed key points. For each assertion within an explanation, students should ask themselves if they have also indicated why that assertion is true.

**Question 2**

*What was the intent of this question?*

This question tested students’ understanding of the money market, the influence of interest rates on other elements of the economy, and the open-market tools of the Federal Reserve. Part (a) asked students to draw and manipulate the graph of the money market. Part (b) determined whether students understood the relationship between the interest rate and bond prices. Part (c) tested for an understanding of the relationship between the interest rate and the aggregate price level. Part (d) asked students to select the appropriate open-market operation to counteract a decrease in the interest rate.

*How well did students perform on this question?*

The mean score on this question was 2.65, which is 44 percent of the maximum possible score of 6 points. Students did very well in drawing the money market graph, shifting the money demand curve, and identifying the resulting effect on the price level. Students did not do so well in explaining how the interest rate decrease caused the price level to increase.

*What were common student errors or omissions?*

The most common error was to omit a mention that the lower interest rate encourages investment spending or consumption spending or both, and that with the rise in these components of aggregate demand, aggregate demand rises and brings about a higher equilibrium price level.

*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?*

Teachers should stress that when asked to explain a chain of events, students should take care to include each step along the way and explain it in enough detail to clarify the reason for the subsequent change. Only about one-third of the students knew of the inverse relationship between interest rates and bond prices. Although the exam did not require an explanation of that concept, more study of the reasons for that relationship would help students remember it and be prepared to explain it if necessary.

**Question 3**

*What was the intent of this question?*

This question tested students’ ability to work with the foreign exchange market and their understanding of the effects of international trade.

*How well did students perform on this question?*

The mean score on this question was 2.60, which is 43 percent of the maximum possible score of 6 points. Students did well at identifying the effect of exports on the current account balance and
the effect of an inflation rate differential on the exchange rate. However, they had difficulty explaining why the peso depreciated as a result of the inflation rate differential.

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

There were many problems with the labels on the exchange rate graph, particularly on the vertical axis, which would be most clearly labeled as “Pesos per Dollar.” The shift in the dollar supply curve in part (c) presented a problem for almost two-thirds of the students as well. Most commonly omitted was an explanation in part (d) that the higher inflation rate in Argentina makes U.S. goods relatively appealing, thus increasing demand for dollars with which to purchase U.S. goods.

**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 foreign exchange market presented numerous problems for students, suggesting that there is considerable room for improvement in the understanding of this market. In many ways the workings of the foreign exchange market resemble those of the market for any good, and reminders of these similarities can bolster comfort when discussing this model. It is also important for students to use explicit axis labels that are specific to the currencies involved; the common errors with labels suggest that more practice with labeling would improve scores for many students.