

## Answers to Preparation Questions for Final

1. *The Federal Reserve's Balance Sheet: Show how each of the following would initially affect the assets and liabilities of the Federal Reserve. Indicate the types of assets or liabilities that change.*

a. *The Federal Reserve sells \$100,000 in domestic credit to a bank.*

Assets	Liabilities
Domestic credit    + 100,000	Bank reserves        + 100,000

b. *The Federal Reserve reduces its foreign reserves by \$250,000 by conducting a sterilized foreign exchange intervention.*

Assets	Liabilities
Foreign reserves    - 250,000	
Domestic credit    + 250,000	

2. *World Financial and Monetary System: State and briefly describe the macroeconomic policy trilemma. How do the United States and Germany differ in their approaches to the macroeconomic policy trilemma?*

The macroeconomic policy trilemma says that countries can only attain two of the following three objectives simultaneously:

1. Fixed exchange rates
2. Free movement of capital
3. Independent monetary policy

The United States has free movement of capital and independent monetary policy, while Germany has fixed exchange rates and free movement of capital.

3. *Monetary Policy Rules in the World Economy: Briefly describe how real exchange rates can have an indirect and direct effect on the target interest rate in a Taylor-style nominal interest rate rule. Based on research of the U.S. economy, does the real exchange rate have a direct effect on the Federal Reserve's target nominal interest rate?*

Consider the following monetary policy rule:

$$R = \pi + \beta_{\pi} \times (\pi - \pi^*) + \beta_Y \times [(Y - Y^*)/Y^*] + r^{e*} - \beta_E \times E_R$$

where  $E_R$  is the real exchange rate and  $\beta_E$  is a constant coefficient

If  $\beta_E > 0$ , then  $E_R$  has a direct effect on the central bank's target  $R$ . A higher  $E_R$  has an indirect effect on  $R$  by pushing down  $(X - IM)$  which causes  $Y$  to decline. The central bank then responds according to the policy rule by lowering  $R$ . Research on the U.S. economy suggests that  $E_R$  has had no direct effect the Fed's target  $R$  (i.e.  $\beta_E = 0$ ).