

1. What aspects of economy-wide "well being" are excluded from the national-income concept of gross domestic product?

Among the most important items excluded from the national-income and product accounts, because they are not sold in organized markets, are the homemaking and child-rearing services provided within the family without explicit pay. On the other hand, the social costs of "externalities" such as pollution are not subtracted from the NIPA measure of gross domestic product.

2. What macroeconomic characteristic of a country is most important in explaining differences over time and across space in the standard of living?

Output per worker ("labor productivity") is most closely related to standard of living, both across countries at a point in time and over time within a country.

3. Why is the unemployment rate in France so much higher than the unemployment rate in the United States?

The unemployment rate in France is typically almost twice that in the United States, despite roughly comparable standards of living and business-cycle conditions, because of relatively stronger unions, much more generous unemployment compensation, lower worker mobility, and more restrictive laws regarding employee terminations.

4. Does it matter if the government uses an increase in taxes or an increase in debt to finance an increase in government spending?

If the assumptions of the Ricardian Equivalence Theorem hold, then the government's choice between raising taxes or issuing debt to finance an increase in government spending does not affect the consumption-saving decision and, therefore, has no effect on aggregate demand, capital accumulation, and the growth in real GDP.

5. How does the banking system (the Fed and member banks) affect the money supply?

The Federal Reserve has three instruments for affecting the money supply: open-market operations (buying and selling Treasury bonds), the discount (-window) rate, and reserve requirements. By far, the most common method of changing the money supply is an open-market purchase or sale of

Treasury bonds. When the Fed wants to increase the money supply, it buys T-bonds; when it wants to decrease the money supply, the Fed sells T-bonds. An increase (decrease) in the discount rate will contract (expand) the money supply and, similarly, an increase (decrease) in member-bank reserve requirements will decrease (increase) the money supply.

6. What are the short-run and long-run effects of an increase in the money supply on interest rates, GDP, and the price level?

In the short run, an increase in the money supply will decrease nominal and real interest rates, increase nominal and real GDP, and increase the price level (unless prices are completely rigid in the short run, in which case the price level is unchanged). In the long run, the real interest rate and real GDP are independent of the increase in the money supply, while nominal interest rates, nominal GDP, and the price level increase.

7. What are the determinants of the levels of, and spread between, nominal and real interest rates?

The average real interest rate is determined by the demand for and supply of loanable funds which are driven, respectively, by the marginal productivity of capital and the marginal rate of time preference. Differences in real interest rates paid by borrowers depend on the duration (length) of the loan, the credit-worthiness of the borrower, and the amount and quality of collateral for the loan. The difference between the nominal interest rate and the (ex ante) real interest rate is equal to the expected rate of inflation.

8. What influences the volume and composition of trade between two countries?

The most important determinants of the volume and composition of trade between two countries is their comparative advantage in producing tradeable goods and geographical proximity.

9. How are exchange rates between two countries determined?

The exchange rate between two countries' currencies depends on the trade balance (exports minus imports) between them and the difference between the expected inflation rates of their currencies.

10. What is the "optimal" currency area for the U.S. dollar? Euro? Danish Krone?

An optimal currency area is a geographic region in which residents would be better off with a common currency (or fixed exchange rate with an "anchor" currency) than with floating exchange rates among various sub-region currencies. Two countries will benefit most from a common currency if their economies are affected similarly by external shocks, highly diversified

in the production of goods and services, and have few barriers to trade and to labor mobility. The U.S. and Canada would most likely benefit from a common currency. Similarly, Denmark and Sweden would most likely benefit from joining the European Monetary Union. The optimal currency area for the British Pound or the Japanese Yen is less clear.