

Chapter 16 Questions

Problem 1. If a bank that desires to hold no excess reserves and has just enough reserves to meet the required reserve ratio of 10 percent receives a deposit of \$400, it has a

- (a) \$400 increase in excess reserves and no increase in required reserves.
- (b) \$400 increase in required reserves and no increase in excess reserves.
- (c) \$360 increase in excess reserves and a \$40 increase in required reserves.
- (d) \$40 increase in excess reserves and a \$360 increase in required reserves.

Problem 2. Which list ranks assets from most to least liquid?

- (a) currency, fine art, stocks
- (b) currency, stocks, fine art
- (c) fine art, currency, stocks
- (d) fine art, stocks, currency

Problem 3. The Federal Reserve

- (a) was created in 1836.
- (b) serves as a lender of last resort.
- (c) was created to facilitate the federal governments collection of taxes as well as its expenditures.
- (d) All of the above are correct.

Problem 4. To increase the money supply, the Fed could

- (a) sell government bonds.
- (b) increase the discount rate.
- (c) decrease the reserve requirement.
- (d) None of the above is correct.

Problem 5. You put money in the bank. The increase in the dollar value of your savings

- (a) and the change in the number of goods you can buy with your savings are both nominal variables.
- (b) and the change in the number of goods you can buy with your savings are both real variables.
- (c) is a nominal variable, but the change in the number of goods you can buy with your savings is a real variable.
- (d) is a real variable, but the change in the number of goods you buy with your savings is a nominal variable

Answer 1: (c). They're required to hold $\$400(.10) = \40 as required reserves. The remaining $\$360$ are the excess reserves.

Answer 2: (b). Currency is as liquid as it gets. Stocks can be sold for cash relatively quickly, but not instantly. Fine art takes a while to sell for cash.

Answer 3: (b). Federal Reserve was created in 1913 and doesn't have anything to do with taxes. It does serve as the lender of last resort, however. This was seen a lot during the Great Recession a few years ago when the popping of the housing bubble left a lot of banks in really bad shape.

Answer 4: (c). Selling government bonds means the Federal Reserve now holds that cash, so the money supply is reduced.

Banks occasionally borrow from the Federal Reserve when they find themselves short on reserves. A higher discount rate decreases banks' incentives to borrow reserves from the Federal Reserve, thereby decreasing the quantity of reserves in the banking system and causing the money supply to fall.

A lower reserve requirement means a lower R so the money multiplier $1/R$ is larger and thus the money supply is larger.

Answer 5: (c). Nominal variables are variables measured in monetary units. Real variables are variables measured in physical units.

Problem 6. The principle of monetary neutrality implies that an increase in the money supply will

- (a) increase real GDP and the price level.
- (b) increase real GDP, but not the price level.
- (c) increase the price level, but not real GDP.
- (d) increase neither the price level nor real GDP

Problem 7. The members of the Federal Reserves Board of Governors

- (a) are appointed by the president of the U.S. and confirmed by the U.S. Senate.
- (b) serve six-year terms.
- (c) are also the presidents of the regional Federal Reserve banks.
- (d) share power equally, with no governor having any more influence or power than any other governor.

Problem 8. Which of the following entities actually executes open-market operations?

- (a) the Board of Governors
- (b) the New York Federal Reserve Bank
- (c) the Federal Open Market Committee
- (d) the Open Market Committees of the regional Federal Reserve Banks

Problem 9. When a bank loans out \$1,000, the money supply

- (a) does not change.
- (b) decreases.
- (c) increases.
- (d) may do any of the above.

Problem 10. Which tool of monetary policy does the Federal Reserve use most often?

- (a) term auctions
- (b) open-market operations
- (c) changes in reserve requirements
- (d) changes in the discount rate

Answer 6: (c). The price level is a nominal variable, so a change in the money supply will change the price level. For example, if the money supply doubles, eventually the price level will double.

Real GDP measures productivity. Just because there's more money circulating in the economy doesn't somehow make the economy more productive, so real GDP won't change.

Answer 7: (a). A full term is fourteen years. There are seven members. And yes, they are nominated by the President and confirmed by the Senate

The Presidents of the regional Federal Reserve banks (of which there are twelve) are appointed by the board of directors of the Bank, with the approval of the Board of Governors of the Federal Reserve System, for a term of five years.

The Chairman and the Vice Chairman of the Board are named by the President from among the members and are confirmed by the Senate. They serve a term of four years. The “Chair” is the head of the central banking system of the United States.

Answer 8: (b). The president of the New York Fed always gets a vote because New York is the traditional financial center of the U.S. economy and because all Fed purchases and sales of government bonds are conducted at the New York Fed's trading desk.

Answer 9: (c). See *Step 2* in my description of the money multiplier at the following: https://wmvolckmann.github.io/ECN1B_W2017/moneymultiplier.pdf

Answer 10: (b). Open market operations. Not sure what else to say here.

Problem 11. The discount rate is the interest rate that

- (a) banks charge one another for loans.
- (b) banks charge the Fed for loans.
- (c) the Fed charges banks for loans.
- (d) the Fed charges Congress for loans.

Problem 12. The use of borrowed funds to supplement existing funds for purposes of investment is called

- (a) arbitrage.
- (b) leverage.
- (c) convergence.
- (d) intermediation.

Problem 13. Bank capital is

- (a) the resources a banks owners have put into the institution
- (b) delivered by Santa Claus once a year
- (c) delivered by the Easter Bunny once a year
- (d) delivered by Ronald McDonald twice a year

Problem 14. A capital requirement is

- (a) a government regulation specifying a minimum amount of bank capital
- (b) a breakdancing world champion
- (c) a professional wrestler
- (d) currently wearing sweatpants

Answer 11: (c). Banks occasionally borrow from the Federal Reserve when they find themselves short on reserves. The interest rate at which they borrow from the Fed is the discount rate.

Answer 12: (b). Leverage is particularly important for banks because borrowing and lending are at the heart of what they do.

Answer 13: (a). Yeah, I couldn't find a question about this one but wanted to get the definition in here somewhere.

Answer 14: (a). Again. Capital requirements are there to ensure that banks will be able to pay off their depositors (without having to resort to government-provided deposit insurance funds).

Chapter 17 Questions

Problem 15. Inflation can be measured by the

- (a) change in the consumer price index.
- (b) percentage change in the consumer price index.
- (c) percentage change in the price of a specific commodity.
- (d) change in the price of a specific commodity.

Problem 16. Interest rates adjusted for the effects of inflation

- (a) and inflation are nominal variables.
- (b) and inflation are real variables.
- (c) are real variables; inflation is a nominal variable.
- (d) are nominal variables; inflation is a real variable.

Problem 17. More later once I see what she actually covers in lecture.

Answer 15: (b). Inflation is an economy-wide phenomenon that concerns, first and foremost, the value of the economy's medium of exchange. An inflation rate is the *percentage change* in some price index.

Answer 16: (c). The real interest rate corrects the nominal interest rate for the effect of inflation to tell you how fast the purchasing power of your savings account will rise over time. The real interest rate is the nominal interest rate minus the inflation rate:

$$r = i - \pi.$$