

Introduction to Macroeconomics · M5 · 2015-16

Problem Set 2 · Multiple choice questions

- What may leave the money multiplier unchanged, where l is the liquidity ratio and r is the reserve ratio?
 - l falls and r remains constant
 - l falls and r rises
 - l and r both fall
 - l and r both duplicate
- Which sequence represents the money stock creation process in the textbook model?
 - \uparrow deposits \Rightarrow \downarrow loans \Rightarrow \uparrow reserves \Rightarrow \uparrow deposits
 - \uparrow deposits \Rightarrow \uparrow loans \Rightarrow \downarrow expenditures \Rightarrow \downarrow revenues \Rightarrow \uparrow deposits
 - \uparrow deposits \Rightarrow \uparrow liquidity ratio \Rightarrow \uparrow money multiplier \Rightarrow \uparrow deposits
 - None of the above
- What is not a monetary aggregate?
 - M1**
 - The monetary base
 - M2**
 - The money multiplier
- M0** is defined as
 - currency held by the public minus bank reserves.
 - currency held by the public plus sight bank deposits.
 - sight bank deposits minus bank reserves.
 - currency held by the public plus bank reserves.
- If the monetary base is 100, **M1** = 1,000 and the liquidity ratio is 0.1,
 - the money multiplier cannot be calculated.
 - the reserve ratio must be zero.
 - the money multiplier is 10.
 - None of the above
- If **M0** remains constant and the cash held by the public diminishes, then
 - bank reserves must have been increased.
 - M1** also remains constant if the money multiplier has fallen.
 - M1** is twice **M0**.
 - It is impossible for **M0** to remain constant.
- Identify the sentence that is not false.
 - The money multiplier may be negative.
 - M2** is always smaller than **M1**.
 - M0** is always greater than **M1**.
 - None of the above
- Which event does not reduce the money multiplier?
 - An increase in the liquidity ratio
 - An increase in the reserve ratio
 - An increase in the liquidity ratio combined with a decrease in the reserve ratio
 - None of the above
- Which of the following concepts represents currency?
 - The CPI or nominal GDP
 - The bank deposits
 - The liquidity ratio
 - None of the above
- The money multiplier directly relates
 - the difference **M0** – **M3** to the reserve ratio.
 - M1** to **M0**.
 - currency held by the public to loan default.
 - nominal GDP to real GDP.
- The money multiplier process is a process involving
 - real GDP, the inflation rate, and the output gap.
 - the GDP deflator, the CPI, and the monetary base.
 - neither (a), nor (b), nor (d).
 - loans, deposits, expenditures, and revenues.
- Suppose financial assets A and B differ only in two properties. Which one of the following sentences is more likely to be true?
 - If A is riskier than B , then B 's rate of return should be higher than A 's.
 - If A is less liquid than B , then A should be riskier than B .
 - If A 's rate of return is higher than B 's, then A should be more liquid than B .
 - None of the above

13. Which claim about the money multiplier process is not true?
- More deposits give rise to more loans.
 - More loans give rise to more expenditure.
 - More expenditures give rise to more revenues.
 - More revenues give rise to fewer deposits.
14. Which variables are linked by the money multiplier?
- The monetary base and the nominal interest rate
 - The money stock and the bank reserves
 - The liquidity ratio and the volume of sight deposits
 - None of the above
15. The money multiplier (as presented in the notes) relates
- the inflation rate to either currency or the GDP growth rate.
 - expenditures and revenues to the inflation rate.
 - the growth rate of real GDP per capita to the monetary base.
 - the money stock **M1** to the monetary base **M0**.
16. With l being the liquidity ratio and r the reserve ratio, the money multiplier may remain constant if
- both l and r fall.
 - both l and r rise.
 - l declines and r does not change.
 - l goes down and r goes up.
17. The money multiplier has decreased. A possible explanation is that
- the liquidity ratio l has decreased.
 - the reserve ratio r has decreased.
 - liquidity and reserve ratios have not changed.
 - the liquidity ratio l has increased and the reserve ratio r has decreased.
18. The money creation process
- is a process that establishes the relationship between the CPI and the GDP deflator, or between real GDP and nominal GDP per capita.
 - is a technique to compute the inflation rate and guarantees the role of money as a means of payment.
 - is an example of the fallacy of composition.
 - is based on the creation of deposits.
19. What variable is not a monetary aggregate?
- M0**
 - The money multiplier
 - M1**
 - All of the above
20. Which of the following concepts is a better measure of the amount of money in an economy?
- The amount of coins and bank notes
 - The foreign currency
 - The money stock
 - All of the above
21. Which sentence is not false?
- The liquidity ratio is a monetary aggregate only when money is a not a unit of account.
 - The monetary base is the sum of **M1** and the money multiplier.
 - The inflation rate cannot be smaller than the growth rate of **M2**.
 - Sweden or Latvia or Lithuania is not a member of the eurozone but Estonia is.
22. Which variable does not directly affect the money multiplier?
- the liquidity ratio l .
 - the reserve ratio r .
 - the rate of growth of **M0**.
 - None of the above
23. An individual has a constant liquidity ratio l . Specifically, he has €1,000 in cash and deposits worth €2,000. While wandering around the streets, he finds a €20 banknote and a €1 coin. According to l which part of the €21 is held in cash and which part is deposited in a bank?
- Cannot be determined
 - €10.5 are held in cash and €10.5 are deposited in a bank.
 - €14 are held in cash and €7 are deposited in a bank.
 - €7 are held in cash and €14 are deposited in a bank.
24. Which of the following countries is not a member of the eurozone (officially known as "euro area")?
- Estonia
 - Malta
 - Slovenia o Latvia
 - None of the above

25. Financial assets A and B differ only in two properties. Which of the following sentences is more likely to be true?

- (a) If A is as liquid as B , then B should be more profitable than A .
- (b) If A is riskier than B , then B 's rate of return should be higher than A 's.
- (c) If A is more liquid than B , then B should be riskier than A .
- (d) If A 's rate of return is smaller than B 's, then B should be less liquid than A .

26. What cannot be considered a financial asset?

- (a) A bank deposit
- (b) A government bond
- (c) A loan
- (d) None of the above

27. Financial assets A and B differ only in two properties. Which one of the following sentences is more likely to be true?

- (a) If A is more liquid than B , then B should be more profitable than A .
- (b) If A is less risky than B , then B 's rate of return should be same as A 's.
- (c) If A is less liquid than B , then A should be riskier than B .
- (d) If A 's rate of return is higher than B 's, then A should be more liquid than B .

28. It is to be expected from a financial asset that, other things being equal,

- (a) the higher its liquidity, the smaller its risk.
- (b) the smaller its rate of return, the higher its liquidity.
- (c) the higher its risk, the smaller its rate of return.
- (d) None of the above

29. Financial assets A and B , traded in a secondary market, differ only in three properties: liquidity, rate of return, and risk. If A is more liquid than B

- (a) and B is more risky than A , then A 's rate of return should be smaller than B 's.
- (b) and B is less risky than A , then necessarily A and B should have the same rate of return.
- (c) and both A and B are equally risky, then A 's rate of return should be higher than B 's.
- (d) None of the above

30. Sight deposits are $D = 100$. The bank reserves are $R = 20$. The money multiplier is 3. Then the cash E held by the public

- (a) is smaller than 30.
- (b) is larger than 40.
- (c) is such that the liquidity ratio is smaller than 0.1.
- (d) cannot be determined.

31. The liquidity ratio is four times the reserve ratio. The money multiplier is 2. It is then false that

- (a) $M0 = 5 \cdot R$, where R designates the banks' reserves.
- (b) the amount R of the banks' reserves can be determined.
- (c) the liquidity ratio is $2/3$.
- (d) cash in the hands of the public is four times R .

32. The unit of account function of money

- (a) is emphasized by the credit (or debt) theory of money.
- (b) is the same as the medium of exchange function of money.
- (c) asserts that $M3$ is larger than $M2$ or that securitization is a measure of financial depth.
- (d) holds that the higher the liquidity of a financial asset, the larger its rate of return.

33. Which sentence is highly unlikely?

- (a) A highly liquid financial asset with a high rate of return will be very risky
- (b) An almost riskless financial asset with a high rate of return will be highly illiquid
- (c) A highly liquid financial asset with a high rate of return will be almost riskless
- (d) None of the above

34. Two financial assets differ in just two properties. It is then to be expected that

- (a) the less profitable asset will be the less liquid.
- (b) the more liquid asset will be the less risky.
- (c) the riskier asset will be the less profitable.
- (d) the more profitable asset will be the riskier.

35. The difference $M1 - M0$

- (a) is known as the amount of bank reserves, R .
- (b) is equal to the total volume of deposits, D .
- (c) does not exist or has no meaning.
- (d) None of the above

Problem set 1 · More exercises

41. GDP. What is the relationship between the concepts of aggregate production and real GDP?

42. Fallacies. (i) Define briefly the meaning of the post hoc ergo propter hoc fallacy and suggest an example. (ii) Explain by means of an example the fallacy of composition. (iii) Indicate something that the fallacy of composition and the fallacy of division have in common and something that differentiates them.

43. Price indices. (i) Is it possible for the GDP deflator inflation rate to be positive and, simultaneously, for the CPI inflation rate to be negative? Justify the answer. (ii) List four concepts directly related to, or built from, a price index.

44. GDP. Can real GDP be larger than nominal GDP? Whatever the case, explain why or how.

45. GDP, CPI. (i) Real GDP has increased by 5% while the CPI inflation rate has decreased by 3%. By how much has nominal GDP varied approximately? (ii) The GDP deflator has fallen a 3%. Real GDP has increased by 2%. Find out by how much nominal GDP has changed approximately.

46. Identities. Government purchases equal imports. Exports equal savings. Taxes equal investment. If possible, find, using the savings macroeconomic identity, the value of transfers.

47. Government budget. Net exports are -50 . Investment is equal to savings. Determine the value of the government budget.

48. Identities. (i) Write down the savings macroeconomic identity. (ii) If possible, find imports if (private) savings are 10, the trade balance is zero, consumption is 20, the government deficit is zero, the inflation rate is negative, the unemployment rate is 24%, exports equal government spending, and government spending equals (private) savings.

49. GDP. If the GDP deflator has fallen by 2%, by how much should approximately vary real GDP in order to keep nominal GDP constant? Justify the answer by means of the corresponding formula.

50. El Farol. Why is El Farol bar problem relevant for macroeconomic analysis?

51. Nominal/real GDP. In the chart below, nominal GDP is larger than real GDP in 1998 but real is larger than nominal in 1970. Has the GDP deflator increased or decreased from 1970 to 1998?

