

Dr. Barry Haworth  
University of Louisville  
Department of Economics  
Economics 202  
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### **Homework #5 (due by 9:00pm on Friday, April 3)**

*Please submit your answers to this homework through the Assignment link at Blackboard. **No credit will be given for answers submitted in class or emailed to the professor, regardless of the excuse.** This includes unique excuses like my roommate ate my homework, as well as more traditional excuses like “I lost my Internet”. Please note that all submissions are final, again – regardless of the excuse (which includes “I accidentally hit the submit button”) and that if you do not correctly submit your work, then you will not receive credit. I.e., Blackboard has a Save button and a Save and Submit button, and you must use the Save and Submit button to submit your answers. If you are unfamiliar with Blackboard, then it would be a good idea to visit the class page at Blackboard and check out the homework assignments as they are posted.*

Please note that when Blackboard grades homework answers, more specifically – answers to the fill-in-the-blank questions – your answer must match exactly with the answer that Blackboard is looking for. Below, you’ll find some instructions on how to properly format these answers. A more complete discussion of these rules is provided at Blackboard. Reading this section is strongly recommended.

Formatting matters with the answers in these questions. For this reason, **understand that your answer can be technically correct but graded as wrong because you didn’t follow the directions provided below.** Given that formatting is considered part of your answer, a wrongly formatted answer is still a wrong answer. I.e., you will not have points added to your homework score if you got answers wrong due to formatting mistakes. However, this is still something you will want to bring to Professor Haworth’s attention. *In addition, if you are not sure how to round an answer (e.g. whether 3.25 rounds to 3.2 or 3.3), then please contact Professor Haworth to get your questions answered.*

### **Homework Questions 9 and 11**

*In questions 9 and 11, express your answer in whole dollars, with or without the dollar sign and with or without any commas. Do not record your answer in terms of dollars and cents. E.g., if your answer is \$300, then write it as \$300 or 300, but not \$300.00.*

## **Homework #5 questions**

*Questions #1-8 relate to the Aggregate Demand/Aggregate Supply (AD/AS) model of the U.S. economy. In each question, you'll be given an event and asked to identify the shift that results from the event.*

1. Explain how the following change affects the Aggregate Demand/Aggregate Supply (AD/AS) model for the U.S. economy: government policy in late 2025 leads consumers to expect a potentially large increase in the future inflation rate by late 2026.

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

2. Explain how the following change affects the U.S. AD/AS model: Canada experiences recession, which leads to a significant decrease in the income of Canadian citizens. Note that Canada and the U.S. are big trading partners.

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

3. Explain how the following change affects the U.S. AD/AS model: lower gasoline prices lead to a significant decrease in distribution costs for firms within the U.S.

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

4. Explain how the following change affects the U.S. AD/AS model: important technological change occurs within the U.S. that leads to greater overall productivity

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

5. Explain how the following change affects the U.S. AD/AS model: changes within the stock market lead to consumers experiencing an increase in their real wealth

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

6. Explain how the following change affects the U.S. AD/AS model: previous changes in the tax code lead to more individuals entering the labor force, which increases the amount of available laborers within the U.S.

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

7. Explain how the following change affects the U.S. AD/AS model: during a period of high inflation, workers begin pushing their employers for cost-of-living adjustments in their wage. This leads to higher wages for a large number of employees within the U.S.

- a. this event will cause the U.S. AS curve to shift right
- b. this event will cause the U.S. AS curve to shift left
- c. this event will cause the U.S. AS curve to shift upward
- d. this event will cause the U.S. AS curve to shift downward
- e. this event will cause the U.S. AD curve to shift right
- f. this event will cause the U.S. AD curve to shift left

8. Explain how the following change affects the U.S. AD/AS model: the Fed chooses to make credit more available, and as a result, real interest rates begin to decrease

- a. this event will increase investment spending, which causes the U.S. AS curve to shift right
- b. this event will decrease investment spending, which causes the U.S. AS curve to shift left
- c. this event will increase investment spending, which causes the U.S. AD curve to shift right
- d. this event will decrease investment spending, which causes the U.S. AD curve to shift left
- e. this event will increase investment spending, which does not shift the U.S. AD curve, but will shift the U.S. AS curve to the right
- f. this event will decrease investment spending, which does not shift the U.S. AD curve, but will shift the U.S. AS curve to the left

*Multiple choice questions #9-11 (below) correspond with the money demand and money supply graph discussed in class. Each event below leads to a shift in a curve (or curves), which (in turn) affects the equilibrium within this market. Based on the shift(s) implied by each event, indicate the correct change in equilibrium.*

9. Assume that the Federal Reserve engages in a monetary policy where the Fed engages in an open market purchase. How would this event affect the money market:

- a. increase in the equilibrium interest rate and increase in the equilibrium quantity of money
- b. decrease in the equilibrium interest rate and decrease in the equilibrium quantity of money
- c. increase in the equilibrium interest rate and decrease in the equilibrium quantity of money
- d. decrease in the equilibrium interest rate and increase in the equilibrium quantity of money
- e. increase in the equilibrium interest rate and no change in the equilibrium quantity of money
- f. decrease in the equilibrium interest rate and no change in the equilibrium quantity of money
- g. no change in the equilibrium interest rate and increase in the equilibrium quantity of money
- h. no change in the equilibrium interest rate and decrease in the equilibrium quantity of money

10. Assume that the Federal Reserve engages in a monetary policy where the Fed raises the discount rate. How would this event affect the money market:

- a. increase in the equilibrium interest rate and increase in the equilibrium quantity of money
- b. decrease in the equilibrium interest rate and decrease in the equilibrium quantity of money
- c. increase in the equilibrium interest rate and decrease in the equilibrium quantity of money
- d. decrease in the equilibrium interest rate and increase in the equilibrium quantity of money
- e. increase in the equilibrium interest rate and no change in the equilibrium quantity of money
- f. decrease in the equilibrium interest rate and no change in the equilibrium quantity of money
- g. no change in the equilibrium interest rate and increase in the equilibrium quantity of money
- h. no change in the equilibrium interest rate and decrease in the equilibrium quantity of money

11. Assume regulatory change coincides with technological change and that this results in consumers holding more money in their savings accounts and hold less money as cash and as deposits in a checking account. How would this event affect the money market:

- a. increase in the equilibrium interest rate and increase in the equilibrium quantity of money
- b. decrease in the equilibrium interest rate and decrease in the equilibrium quantity of money
- c. increase in the equilibrium interest rate and decrease in the equilibrium quantity of money
- d. decrease in the equilibrium interest rate and increase in the equilibrium quantity of money
- e. increase in the equilibrium interest rate and no change in the equilibrium quantity of money
- f. decrease in the equilibrium interest rate and no change in the equilibrium quantity of money
- g. no change in the equilibrium interest rate and increase in the equilibrium quantity of money
- h. no change in the equilibrium interest rate and decrease in the equilibrium quantity of money

12. Assume we have an economy where the price of all goods and service are denominated in terms of the local currency. This allows consumers to determine the relative value of each good or service. For simplicity, let's say their currency is called the dollar. This feature is an example of which of the following:

- a. this local currency serves as a unit of account
- b. this local currency serves as a store of value
- c. this local currency serves as a medium of exchange
- d. this local currency serves as a means of deferred payment

13. Assume that in a specific economy, households hold a variety of assets which contribute to their overall wealth. One of those assets is the local currency. This feature is an example of which of the following:

- a. this local currency serves as a unit of account
- b. this local currency serves as a store of value
- c. this local currency serves as a medium of exchange
- d. this local currency serves as a means of deferred payment

14. In the money market graph, which of the following is a true statement:

- a. an increase in interest rates leads directly to an increase in money demand
- b. if large numbers of consumers withdraw money from their checking accounts in order to hold that money as cash, then this leads directly to an increase in money demand
- c. an increase in income leads directly to an increase in money demand
- d. monetary policy which increases the amount of money circulating within the economy will lead directly to an increase in money demand

15. Gresham's Law can be applied in contexts other than the context of money. Using the basic statement of Gresham's Law, which of the following is an example of Gresham's Law being correctly applied to another context:

- a. selling homes: where smaller, lower quality homes and larger, higher quality homes are both produced, where higher income households tend to only purchase the better homes
- b. political discourse: where negative discourse and attack ads increase during a campaign and positive, more constructive discourse decreases
- c. used car sales: where the sellers of good used cars (i.e. cars without a lot of hidden problems) don't believe they can get a fair price in the overall used car market, so they withdraw from that market and sell only to close friends, leaving the overall used car market full of bad used cars (i.e. cars with lots of hidden problems)
- d. all of the above
- e. a and b are correct, but c is incorrect
- f. b and c are correct, but a is incorrect

16. Assume that in Country X, you have a system of banks and that each bank has a T-account that is identical to what's displayed below. Assume further that the only assets ever held by banks would be required reserves (RR), excess reserves (ER), loans (L) and bonds (B), and that demand deposits (DD) represent the only liabilities. Assume further that the required reserve ratio associated with this T-account is 20%.

	A		L
_____	RR		DD \$8000
_____	ER		
\$3000	L		
\$1500	B		

- a. Given the information above, then required reserves (RR) at this bank are \_\_\_\_\_.
- b. Given the information above, the excess reserves (ER) at this bank are \_\_\_\_\_.

17. Assume that in Country Z, there is a Federal Reserve that operates in the same system we've discussed in class (all transactions are by check (i.e. consumers hold no currency) and banks loan out all available excess reserves). Assume further that this country's Fed has set the required reserve ratio at 20%.

- a. Assume that Country Z's Fed buys \$500 in bonds from one bank, in exchange for \$500 in excess reserves. In terms of just this \$500 increase in excess reserves at this one bank, we know that the money supply in Country Z will expand by \_\_\_\_\_
- b. If there is a \$1000 increase in demand deposits within this economic system, then the money supply in Country Z will expand by \_\_\_\_\_.

18. To answer the question below, you'll use information provided at the FAQ page of the Bureau of Engraving and Printing Web site (<https://www.bep.gov/currency/faqs>).

What is the largest denomination of U.S. currency ever printed:

- a. \$100 note
- b. \$500 note
- c. \$1000 note
- d. \$10,000 note
- e. \$50,000 note
- f. \$100,000 note (also known as the \$100,000 Gold Certificate)
- g. \$500,000 note (also known as the \$500,000 Gold Certificate)
- h. \$1,000,000 note (also known as the \$1,000,000 Gold Certificate)

19. To answer this question, you'll use information provided at the FAQ page of the Bureau of Engraving and Printing Web site (<https://www.bep.gov/currency/faqs>).

What is the largest denomination of U.S. currency currently in circulation:

- a. \$100 note
- b. \$500 note
- c. \$1000 note
- d. \$10,000 note
- e. \$50,000 note
- f. \$100,000 note (also known as the \$100,000 Gold Certificate)
- g. \$500,000 note (also known as the \$500,000 Gold Certificate)
- h. \$1,000,000 note (also known as the \$1,000,000 Gold Certificate)