

Economics 132.02
Principles of Macroeconomics
Spring 2013

Professor Peter Ireland

Second Midterm Exam

This exam has nine questions on four pages; before you begin, please check to make sure your copy has all nine questions and all four pages. Each of the nine questions will receive equal weight in determining your overall exam score. Please record all of your answers on the answer sheet that is provided; tear off the answer sheet and be sure to write your name at the top before handing it in.

1. Please indicate whether each of the following statements is true or false (circle one on the answer sheet):
 - a. When a firm like IBM or General Electric sells new bonds to savers, it is said to raise funds through “direct finance,” but when the same firm sells new shares of stock to savers, it is said to raise funds through “indirect finance.”
 - b. Mutual funds raise funds by issuing deposits and then use those funds purchase bonds and stocks.
 - c. In terms of the dollar value of bonds versus shares of stock outstanding in the US financial system today, the bond market is larger than the stock market.
 - d. “Commercial paper” refers to short-term debt – that is, bonds with terms to maturity of one year or less – issued by corporations.
 - e. “Municipal bonds” refer to bonds issued by federal government agencies like the Tennessee Valley Authority and the Federal National Mortgage Association (“Fannie Mae”).

2. Consider a very small economy in which private saving is \$5, public saving is \$2, tax revenues are \$3, and consumption is \$4. Assume for simplicity that the economy is closed, that is, both imports and exports always equal zero, so that net exports are always zero too.
 - a. Calculate government purchases for this economy.
 - b. Calculate investment for this economy.
 - c. Calculate GDP for this economy.

3. Consider two open economies: the United States, which is now running a trade deficit, meaning that its net exports are negative, and China, which is now running a trade surplus, meaning that its net exports are positive.
 - a. What does the United States' trade deficit imply for the relationship between its national saving and investment: is national saving greater than, equal to, or less than investment in the US?
 - b. What does China's trade surplus imply for the relationship between its national saving and investment: is national saving greater than, equal to, or less than investment in China?
 - c. What does the United States' trade deficit imply: is the US lending to or borrowing from the rest of the world?
 - d. What does China's trade surplus imply: is China lending to or borrowing from the rest of the world?

4. Suppose that a compromise is reached in the US Congress that calls for a combination of tax increases and spending cuts that work, together, to shrink the federal budget deficit and reduce the US government's need to borrow.
 - a. According to the loanable funds framework, will this reduction in the US government's need to borrow shift the demand curve or the supply curve for loanable funds?
 - b. In which direction will the curve that you mentioned above – demand or supply – shift: to the left or to the right?
 - c. According to the loanable funds framework, what will happen to national saving as a result of this change: will it rise, fall, or stay the same?
 - d. According to the loanable funds framework, what will happen to investment as a result of this change: will it rise, fall, or stay the same?
 - e. According to the loanable funds framework, what will happen to the interest rate as a result of this change: will it rise, fall, or stay the same?

5. Each month, the Bureau of Labor Statistics surveys about 60,000 American workers, and based on their responses, classifies each into one of three categories: employed, unemployment, or not in the labor force. To which of these three groups would each of the following workers belong?
 - a. A self-employed person.
 - b. A worker who has been temporarily laid off and waiting to be recalled.
 - c. Someone who has a part-time job, but would like to work full time.
 - d. Someone who has a full-time job, but is on vacation during the week of the survey.

6. Consider another very small economy in which the total adult population is 10. Of those ten people, 1 person is unemployed and 5 are outside of the labor force.
 - a. What is the labor force participation rate in this economy?
 - b. What is the unemployment rate in this economy?

7. During the 1950s, about one-third of all American workers belonged to labor unions; today, only about 12 percent of US workers belong to labor unions. Assume that labor unions succeed, through collective bargaining, at raising the wages their members receive above the equilibrium wage that would, in the microeconomic model of labor supply and demand, equate labor supply with labor demand; then use the microeconomic model of labor supply and demand to answer the following questions:
- How does this decline in union membership affect the number of employed people: does it go up, down, or stay the same?
 - How does this decline in union membership affect the number of unemployed people: does it go up, down, or stay the same?
 - How does this decline in union membership affect the size of the labor force: does it go up, down, or stay the same?
 - How does this decline in union membership affect the natural rate of unemployment: does it go up, down, or stay the same?
8. Consider an economy in which the following amounts of different types of assets are outstanding:

Asset	Amount Outstanding
Currency	\$10
Traveler's Checks	\$1
Savings Deposits	\$60
Money Market Mutual Funds	\$6
Equity Market Mutual Funds	\$15
Small (under \$100,000) Time Deposits	\$12
Demand Deposits	\$9
Other Checkable Deposits	\$3

- Based on the figures from this table, what is the value of the M1 money supply?
- Based on the figures from this table, what is the value of the M2 money supply?
- What happens to the M1 money supply when a bank customer takes \$10 out of his or her savings account (savings deposit) and holds \$10 in currency instead: does M1 go up, down, or stay the same?
- What happens to the M2 money supply when a bank customer takes \$10 out of his or her savings account (savings deposit) and holds \$10 in currency instead: does M2 go up, down, or stay the same?

9. Please indicate whether each of the following statements is true or false (circle one on the answer sheet):
- a. Consistent with the theory of the long-run neutrality of money, average rates of money supply growth across countries appear to be uncorrelated with (unrelated to) average rates of real GDP growth in those same countries.
 - b. The “liquidity” of an asset refers to the ease and speed with which that asset can be converted into the economy’s medium of exchange.
 - c. The monetary policymaking committee within the Federal Reserve System is called the “Federal Open Market Committee.”
 - d. In addition to conducting monetary policy, the Federal Reserve acts as a lender of last resort, making loans to banks during periods of crisis, when other sources of credit dry up.
 - e. The money supply falls when the Federal Reserve conducts an open market operation in which it sells US government bonds to private savers.