UNIVERSITY OF ESSEX DEPARTMENT OF ECONOMICS

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EC248-2-SP: MONETARY INNOVATIONS AND CENTRAL BANKS

Class 3 (1 February 2006): Problem Set – Sketch of Answers

Essay Questions

1) List three economic magnitudes affected by the money stock and state how money affects each of them. (Mishkin, Chapter 1)

Answer: Money affects the business cycle/unemployment. Decreases in the growth rate of money precede recessions. High rates of monetary growth cause high rates of inflation. High rates of money growth lead to rising inflation and, hence, an increased demand for long-term bond interest rates.

2) Shortly after his election, President George W. Bush proposed legislation that resulted in a cut in income taxes. Explain how this tax cut affected the federal budget deficit. What are the possible economic consequences of this change in the budget deficit? (Mishkin, Chapter 1)

Answer: The tax cut increases the deficit, which possibly results in higher interest rates, a higher rate of monetary growth, and higher inflation.

3) Explain the concepts of asymmetric information, adverse selection, and moral hazard. When do adverse selection and moral hazard become relevant to the lending process? How has the financial system developed to deal with these problems? (Mishkin, Chapter 2)

Answer: Asymmetric information is uneven information, which creates the problems of adverse selection and moral hazard. Adverse selection is having a disproportionate number of high-risk loan applications. Moral hazard is the risk that the borrower will engage in risky behavior after the loan is made. Adverse selection is a problem before a loan is made, and moral hazard is a problem that exists after a loan is made. Financial intermediaries develop the expertise to screen and monitor loans, overcoming these problems. Regulations require timely provision of information.

4) Why does the government regulate the financial system? How does regulation reduce the problems of adverse selection and moral hazard? What regulations are or have been used to protect the public from panics? (Mishkin, Chapter 2)

Answer: Regulation attempts to reduce asymmetric information and financial instability. The SEC requires timely provision of information. Financial stability is promoted by regulations restricting entry, disclosure and/or examination, restrictions on assets and risk taking, deposit insurance, limits on competition, and interest rate controls.

5) Explain the functions of money and the problems of barter that each overcomes. (Mishkin, Chapter 3)

Answer: Money is a medium of exchange, generally acceptable for payment for goods, services, and debts. It reduces transactions costs relative to barter and eliminates the double coincidence of wants. Money is a unit of account, reducing the transactions costs associated with the multiplicity of barter prices. Money is a store of value. As a store of value, money is more liquid than the many stores of value that might be used under barter.

6) The payments system has evolved from commodity money to fiat money to checks to electronic money. Discuss one advantage and one disadvantage of each form of money. (Mishkin, Chapter 3)

Answer: Commodity money—Advantages: standardized; widely acceptable; divisible; does not deteriorate. Disadvantage: difficult to carry and transport. Fiat money—Advantage: easy to carry. Disadvantage: requires trust in authorities to be acceptable, easily stolen, and can be difficult to transport large amounts.
Checks—Advantages: reduce transport costs, easy to transfer large amounts, safe. Disadvantages: Takes time to clear checks, costly to clear checks. Electronic money—Advantages: very low cost, ease of use. Disadvantages: Initial cost of computer systems, safety concerns; concerns about privacy due to electronic trail.

Multiple Choice / Simple Computation Questions

7) If your nominal income in 1996 was $50,000, and prices doubled between 1996 and 2002, to have the same real income, your nominal income in 2002 must be (Mishkin, Appendix to Chapter 1)

(a) $50,000.
(b) $75,000.
(c) $90,000.
(d) $100,000.
(e) $200,000.

Answer: D

8) If nominal GDP in 2001 is $9 trillion, and 2001 real GDP in 1996 prices is $6 trillion, the GDP deflator price index is (Mishkin, Appendix to Chapter 1)

(a) 67.
(b) 100.
(c) 150.
(d) 200.
(e) cannot be determined.

Answer: C

9) If real GDP grows from \$10 trillion in 2002 to \$10.5 trillion in 2003, the growth rate for real GDP is (Mishkin, Appendix to Chapter 1)

(a) 5%.

(b) 10%.

(c) 50%.

(d) 0.5%.

(e) cannot be determined.

Answer: A

10) If the CPI in 2004 is 200, and in 2005 the CPI is 180, the rate of inflation from 2004 to 2005 is (Mishkin, Appendix to Chapter 1)

(a) 20%.

(b) 10%.

(c) 0%.

(d) –10%.

(e) –20%.

Answer: D