

BOSTON COLLEGE
Department of Economics

EC 204
Macroeconomic Theory

Prof. Murphy

Sample Final Exam

Part I. True, False, or Uncertain. Explanation determines grade.
Answer 4 of the following 7 questions.

1. According to the Solow growth model, an increase in the saving rate will raise the steady-state rate of economic growth.
2. According to the Ricardian view of government debt, a tax cut that increases the deficit will raise consumption spending, aggregate demand, and output.
3. The life-cycle theory predicts that an increase in the value of the stock market will raise consumption spending and raise output.
4. An increase in the mortgage interest rate will raise the price of existing housing and thereby increase the rate of residential investment.
5. Menu costs are so small that they can not explain why prices are sticky.
6. According to the real-business cycle model, shifts in technology under flexible prices are responsible for generating short-run fluctuations in output.
7. Monetary policy is easier and quicker to enact because it has shorter inside and outside lags than fiscal policy.

--ANSWER ONLY THREE OF THE FOLLOWING FOUR PARTS--

Part II. Money Supply and Money Demand

1. Explain how a purchase by the Federal Reserve of government bonds worth \$100 million leads to an increase of more than \$100 million in the money supply. Be sure to explain the roles of commercial banks and the public.
2. List the three tools that the Federal Reserve can use to affect the money supply. How does each tool work?
3. Can the proliferation of ATM machines over the past 15 years be responsible for a decline in the demand for currency? Explain.
4. Does the portfolio model of money demand provide a reasonable explanation for why people hold money?

Part III. Short-run Open Economy Analysis. Use the small, open economy version of the ISLM model to answer the following questions.

1. Show how an increase in the money supply affects output in a small, open economy under flexible exchange rates. How does the transmission mechanism differ from that of a closed economy?
2. Show how an increase in government spending affects output and the exchange rate in a small, open economy under flexible exchange rates. Explain carefully the way in which private spending is "crowded out."
3. Show how an increase in the tariff rate on imports affects output and the exchange rate in a small, open economy under flexible exchange rates.
4. Suppose instead that the exchange rate were fixed. How does an increase in the tariff rate on imports affect output? Do you think that protectionism is a "useful" tool for stabilizing the economy?

Part IV. Investment and Consumption

1. Briefly discuss the neoclassical model of business fixed investment. Explain how investment depends on the cost of capital. How does an increase in interest rates affect investment in this model?
2. President Clinton proposed in 1993 to reinstate the tax credit for business fixed investment, but Congress ultimately rejected his proposal. Using the neoclassical model of business fixed investment, explain how (and why) an investment tax credit might have affected investment if it had been enacted into law.
3. Briefly discuss the permanent-income model of consumption spending. Explain the difference between permanent and transitory income and how changes in each of these types of income affect consumption spending.
4. The budget that the Congress and President agreed to in 1997 included income tax cuts that were to be gradually phased in over the next five years. Using the permanent-income model of consumption, how would you expect these tax cuts to affect consumption spending?

Part V. Short Essay on Monetary Policy.

"Because policymakers can not be trusted to do what they say, monetary policy should be set by rules that limit the discretion of policymakers. And because monetary policy works only with a long lag, a passive policy should be preferred to an active one."

In a brief essay, discuss why a reasonable person might come to these conclusions. Why are policymakers tempted to go back on their word? Be sure to describe how optimal policy may be time inconsistent. How might you design rules to improve the policymakers' performance? Would your rules be active or passive? Can you point to any examples of rules in use today?