

Problem Set Chapter 7 – Selected Assigned Problems Answers
GOUCHER COLLEGE
EC 217 - Intermediate Macro Theory
Spring 2015

Review Questions – Questions 8 and 9.

Numerical Problems – Question 1.

Analytical Problems - Question 2.

Answers to Problem Set 7

Review Questions

8. Equilibrium in the asset market is described by the condition that real money supply equals real money demand because when supply equals demand for money, demand must also equal supply for nonmonetary assets. The aggregation assumption that is needed for this is that we can lump all wealth into two categories: (1) money and (2) nonmonetary assets.
9. In equilibrium, the price level is proportional to the nominal money supply; in particular it equals the nominal money supply divided by real money demand. Similarly, the inflation rate is equal to the growth rate of the nominal money supply minus the growth rate of real money demand.

Numerical Problems

1. For a two-year bond, according to the expectations theory, the interest rate would be the average of the two one-year bonds, which is $(6\% + 4\%)/2 = 5\%$. Adding the risk premium of 0.5% gives an interest rate on the two-year bond of 5.5%.

For the three-year bond, according to the expectations theory, the interest rate would be the average of the three one-year bonds, which is $(6\% + 4\% + 3\%)/3 = 4.33\%$. Adding the risk premium of 1.0% gives an interest rate on the three-year bond of 5.33%.

The yield curve would show the interest rate on a one-year bond of 6%, the interest rate on a two-year bond of 5.55%, and the interest rate on a three-year bond of 5.33%, so it would be downward sloping, which is called “inverted” in the market.

Analytical Problems

2. The general rise in velocity from 1959 to 1980 is most likely due to changes in income, in interest rates, and in financial institutions. Higher income led to a less than proportional rise in real money demand, so velocity increased. Rising inflation and rising nominal interest rates in this period led people to seek alternatives to non-interest-bearing money, such as money market mutual funds. The result was lower money demand, and thus higher velocity. Financial innovations also reduced the need for money. Examples include the development of cash management accounts and the use of automated teller machines.