

EC303: Money and Banking

Worksheet 5

Spring 2023

Exercise 1

If the next chair of the Federal Reserve Board has a reputation for advocating an even slower rate of money growth than the current chair, what will happen to interest rates?

- Slower money growth will lead to a liquidity effect, which will raise interest rates; however, lower income, price level, and inflation will tend to lower interest rates.
- Slower money growth will lead to a liquidity effect, which will lower interest rates. Moreover, the lower income, price level, and inflation will reinforce the decrease in interest rates.
- Slower money growth will lead to a liquidity effect, which will raise interest rates. Moreover, the lower income, price level, and inflation will reinforce the increase in interest rates.
- Slower money growth will lead to a liquidity effect, which will lower interest rates; however, the lower income, price level, and inflation will tend to raise interest rates

Exercise 2

For every \$1,000 of annual income, households maintain average cash balances (their demand for money) of \$200. How will growth in GDP affect interest rates, holding the money supply constant? Hint: Use the liquidity preference framework

Exercise 3

What is the opportunity cost of holding \$1,500 in cash if the relevant interest rate is 5 percent?

Exercise 4

Use the model of supply and demand for bonds to show what will happen to interest rates if the economy's GDP expands.

Exercise 5

Which one of these is a less risky bond: a corporate Baa bond or a 10-Year Treasury note? Why?

Exercise 6

How do you show the effect of an upward revision of inflation expectations on the bond market? Hint: Fisher Effect

Exercise 7

Choose an investment below to maximize your expected returns

- Stock: Rate of return: 30% with probability 0.2; 12.5% with probability 0.8
- Bond: Rate of return: 12%, probability 0.5; 6% with probability 0.5
- Commodities: Rate of return: 20% with probability 0.15, 80% with probability 0.85

Exercise 8

Suppose Maria prefers to buy a bond with a 7% expected return and 2% standard deviation of its expected return, while Jennifer prefers to buy a bond with a 4% expected return and 1% standard deviation of its expected return. Can you tell if Maria is more or less risk-averse than Jennifer? Why or why not?