Tutorial 3: Investment and Financial Market

ECON 3123: Macroeconomic Theory I

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Example 1: Wealth vs Income

Suppose that a person's wealth is \$50,000 and that her yearly income is \$60,000. Also suppose that her money demand function is given by

$$M^d = \$Y(0.35 - i).$$

1. Derive the demand for bonds. Suppose that the interest rate increases by 10 percentage points. What is the effect on her demand for bonds?
2. What are the effects of an increase in wealth on her demand for money and her demand for bonds? Explain in words.
3. What are the effects of an increase in income on her demand for money and her demand for bonds? Explain in words.
4. Consider the statement "When people earn more money, they obviously will hold more bonds." What is wrong with this statement?

Example 2: Zero Lower Bound

Consider the following money demand function where Y is the nominal income:

$$M^d = Y(0.91 - 5i).$$

1. Suppose that $Y = 100$. If the central bank would like to target an interest rate of 2.2%, then what should be the money supply?
2. If the nominal income increases to $Y = 120$, then how should the central bank change its money supply to maintain the target interest rate?
3. Keep $Y = 100$. What is the largest value of the money supply at which the interest rate is positive?
4. Once the interest rate is zero, can the central bank continue increasing the money supply?