Discussion Handout #8 **TA: John Stromme**
Econ 102 UW Madison, Fall 2016
Prof. Eudey Date: 10/28/16

Goals for this session

- Arbitrage Theory
- Bonds
- Stocks

Vocabulary/Definitions

- Four modes of savings:
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- Real Expected Rates of Return
  - Interest rate is COST for borrowers, and BENEFIT for lenders.
- Arbitrage
  - Are there arbitrage opportunities in equilibrium?
- Liquidity
- Interest Rate Spread
  - What 'costs' does the spread ecompass?
- Bonds
  - Yield
  - Term
  - Repayment Price (Face Value)
  - Coupon
  - Secondary Market
- Stocks
  - Shares
  - Two types of returns:
    1. Dividends
    2. Rate of return by holding share

Problems

1. Why is the interest rate spread countercyclical?

2. Do stocks or bonds have a higher rate of return? Why?

3. Something exogenous occurs causing interest rates to fall

   (a) What happens to bonds?

Coupon on old bond	
Secondary bond price	
Secondary bond yield	
New bond yield	

   (b) What happens to stocks?

Dividends	
Stock price	

4. The government decides to issue more bonds in order to pay for increased social security liabilities:

   (a) What happens to bonds?

Coupon on old bond	
Secondary bond price	
Secondary bond yield	
New bond yield	

   (b) What happens to stocks?

Dividends	
Stock price	

From past exams

6. **Fall 13 Q2** If the interest rate is 4%, the present value of a $300 bond a year from now is about:

7. **Fall 13 Q8** The present value of lottery winnings over a 20-year period will increase with a(n) **(increase/decrease)** in interest rates.

8. **Fall 14 Q16** Many economists expect bank lending rates to rise in March of 2015. Use arbitrage theory to how an increase in the interest rate would affect each of the following:

   (a) Stock prices and their returns, explain.

   (b) Secondary bond prices and their returns, explain.