

Additional Chapter 4 problems and answers

1. Assume that expected rates of inflation over the next 5 years are 4 percent, 7 percent, 10 percent, 8 percent, and 6 percent. Calculate the average inflation rate over this 5-year period.
 - a. 6.5%
 - b. 7.5%
 - c. 8.0%
 - d. 6.0%
 - e. 7.0%

2. The real risk-free rate of interest is 2%. The expected inflation is 3% in year 1, 5% in year 2, and 7% in year 3. The maturity risk premium is 0.3% per year of maturity of a bond. The default risk premium of A rated bonds is 6%. What is the expected rate of interest on 3 year Grinch bonds which have an A rating?
 - a. 13.9%
 - b. 15.3%
 - c. 13.3%
 - d. 9.9%
 - e. None of the above.

3. The rate on 4 year AAA rated corporate bonds is 9%. Inflation is expected to be 5% in years 1 and 2, and 6% from year 3 to year 20. The default risk premium on AAA bonds is 1% and the maturity risk premium is 0.1% per year of maturity of the bond. What is the rate on a 1 year U.S. government bond?
 - a. 7.2%
 - b. 10.1%
 - c. 5.1%
 - d. 8.7%
 - e. None of the above

4. You read in The Wall Street Journal that BBB Corporate bonds maturing 1 year from today are currently yielding 12 percent. Your brother-in-law, a broker at Wahoo Securities, has given you the following estimates of current interest rate premiums:

Inflation premium	5%
Liquidity premium	0%
Maturity risk premium	.5%/year
BBB Default risk premium	2%

Based on these data, the real risk-free rate of return is

- a. 4.5%.
 - b. 7.0%.
 - c. 6.5%.
 - d. 5.0%.
 - e. 12.0%.
5. Government bondholders are NOT exposed to
- a. interest rate risk.
 - b. default risk.
 - c. inflation risk.
 - d. call risk.
 - e. Government bondholders are subject to all above risks.
6. According to the expectations theory, what should be the effect if Economists project an increase in inflation rates in 1996?
- a. An increase in interest rates.
 - b. A decrease in interest rates.
 - c. an expected increase in the stock market.
 - d. because only real cash flows matter, inflation should not affect the economy.
 - e. None of the above.

Answers

1. e.
2. a.
3. a.
4. a.
5. b.
6. a.