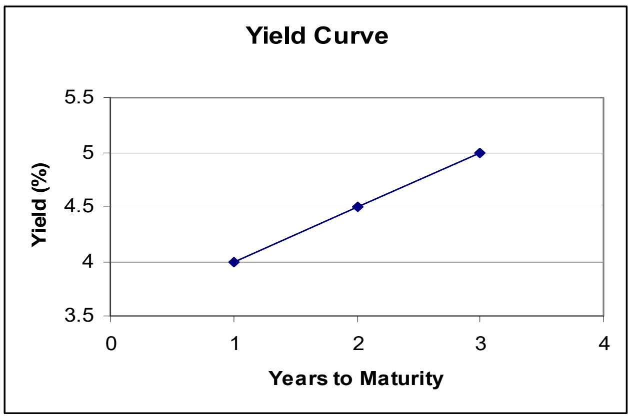
Homework Problems Chapter 7

4. Suppose that the interest rate on one-year bonds is ***4 percent today***, and is ***expected to be 5 percent one year from now and 6 percent two years from now***. Using the Expectations Hypothesis, compute the ***yield curve for the next three years***.

Yield for one-year bond = 4%
Yield for two-year bond = (4% + 5%)/2 = 4.5%
Yield for three-year bond = (4% + 5% + 6%)/3 = 5%



8. If ***inflation and interest rates become more volatile***, what would you expect to see happen to the ***slope of the yield curve***?

Investors are likely to demand a ***higher risk premium*** in the face of increased volatility. There is more uncertainty regarding the real return on investments and the price you could sell a bond for before maturity. Therefore, you should expect the ***yield curve to become steeper.***

11. Suppose the ***risk premium on bonds increases***. How would the change affect your forecast of ***future economic activity***, and why?

An ***increasing risk premium can be a sign of an impending recession***, so you would be more likely to forecast an economic downturn. During economic slowdowns, private companies have a more difficult time repaying their debt, while the government is not affected, increasing the risk premium.

19. Given the data in the accompanying table, would you say that this economy is ***heading for a boom or for a recession***? Explain your choice.

	3-month Treasury-bill	10-year Treasury bond	Baa corporate 10-year bond
January	**1.00%**	**3.0%**	**7.0%**
February	**1.05%**	**3.5%**	**7.2%**
March	**1.10%**	**4.0%**	**7.5%**
April	**1.20%**	**4.3%**	**7.7%**
May	**1.25%**	**4.5%**	**7.8%**

The information in both the term structure and the risk structure point to a healthy economy.

The ***term spread*** (the gap between the 3 month Treasury yield and the 10 year Treasury bond yield) ***is positive and widening***. This tells us that the ***yield curve is upward sloping and getting more steeply upward sloping***. This implies that interest rates are expected to continue to rise in the future—a sign that the economy is expected to do well.

The ***risk spread*** (the gap between the 10 year Treasury and corporate 10 year bonds) is ***narrowing***. This is a sign of a healthy economy as people ***do not require such a high risk premium*** on corporate bonds.