DEBT SECURITIES, SEMESTER 1, 2012 – TUTORIAL 3

CHAPTER 4: UNDERSTANDING YIELD SPREADS

Problem 2)
Ms. Peters is a financial advisor. One of her clients called and asked about a recent change in the shape of the yield curve from upward sloping to downward sloping. The client told Ms. Peters that she thought that the market was signalling that interest rates were expected to decline in the future. What should Ms. Peters' response be to her client?

Problem 5)
Assume the following information pertaining to federal agency spreads was reported:

Agency Spreads versus Benchmark Treasury (basis points)

		Last 12 months		
	Yield spread	High	Low	Average
Noncallable				
3-year	70	70	28	44.1
5-year	80	80	32	55.4
10-year	95	95	45	71.2
Callable				
3-year (NC1)	107	107	50	80.2
5-year (NC1)	145	145	77	112.1
5-year (NC2)	132	132	65	96.9
5-year (NC3)	124	124	-	33.6
10-year (NC3)	178	178	99	132.9
10-year (NC5)	156	156	79	112.5

		Last 12 months		
	Yield spread	High	Low	Average
Callable OAS (volatility=14%)				
3-year (NC1)	75	75	20	50.0
5-year (NC1)	100	100	20	63.8
5-year (NC2)	100	100	23	60.7
5-year (NC3)	100	100	29	59.6
10-year (NC3)	115	115	34	77.0
10-year (NC5)	115	115	36	77.4

Note: NCX = X-year deferred call; - = not available

a. Relative to the previous 12 months, what does the yield spread data above indicate about yield spreads?
b. Explain what causes the yield spread relationship between callable and noncallable issues for a given maturity?
c. Explain what causes the yield spread relationship among the different callable issues for a given maturity?
d. Why are the yield spreads shown in the second panel referred to as nominal spreads?
e. Explain what causes the yield spread relationship between the callable yield spread and the callable OAS for a given maturity and given deferred call?

Problem 8)
Suppose that the yield on a 10-year noncallable corporate bond is 7.25% and the yield for the on-the-run 10-year Treasury is 6.02%. Compute the following:
a. the absolute yield spread
b. the relative yield spread
c. the yield ratio

Problem 9)
Following is a quote that appeared in the May 19, 1999 Global Relative Value by Lehman Brothers (COR-1):

"As we have written in the past, percent yield spread (spread as a percent of Treasury yields) are still cheap on an historical basis. As an illustration, the average single A 10-year industrial percent yield spread was 17% on April 30 compared to a 10-year monthly average of 12%."

a. What is another name for the yield spread measure cited in the quote?
b. Why would the analysts at Lehman Brothers focus on "percent yield spreads" rather than absolute yield spread?

Problem 12)
a. What is the after-tax yield for an investor in the 40% tax bracket if the taxable yield is 5%?
b. What is the taxable-equivalent yield for an investor in the 39% tax bracket if the tax-exempt yield on an investment is 3.1%?