Chapter 3 HW Exercises

1. Prudential-Bache's Director of Economics & Fixed Income Research once proposed that the Fed target a flat term structure: if the interest rates on long- term bonds are 5%, use monetary policy to set short-term interest rates at 5% too. If the liquidity preference hypothesis is correct, what interest rate expectations are consistent with a flat term structure?

2. Explain why you might hesitate to follow this financial advice: "Since short-term rates are currently lower than long-term rates, it is better to borrow short-term."

3. After Iraq invaded Kuwait in 1990, many financial analysts expected that there would be a temporary worldwide oil shortage and consequent inflation. Use the expectations hypothesis to calculate these interest rates that were anticipated by investors in November 1990: 1-year zeros issued in November 1991, and 5-year zeros issued in November 1995.

Maturity	Interest Rate (percent)
November 1991	7.61
November 1992	7.90
November 1995	8.35
November 2000	8.81
November 2005	9.01

4. Critically explain and evaluate these excerpts from a *Wall Street Journal* article:

> With inflation abated and interest rates down sharply on money-market funds and bank accounts, consumers are turning to bond products for higher yields. Many investors have shifted dollars out of money funds paying around 7% and into [long- term] Treasury securities paying more than 10%....
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> A California real estate attorney admits that he was "dumbfounded" to find that $192,000 in Treasury zeros he bought in January 1984 were valued at $156,000 when he went to sell them four months later...
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> Nelson Chase, a West Blomfield, Mich., attorney is representing a group [that invested in zeros and is now] suing New York-based Merrill Lynch & Co. "All the literature talks about how safe these investments are," he says. "Unless you can be absolutely sure you will hold to maturity, these aren't safe investments."

In particular, explain

a. what circumstances, if any, would dissuade you from shifting out of a bank paying 7 percent into Treasury zeros paying 10 percent.
b. how Treasury zeros could lose nearly 20 percent of their value in four months.
c. why zeros held to maturity may not be safe.

5. Here are some excerpts from a 1986 *New York Times* article:

"In my view, making long-term fixed-rate mortgages is simply not a viable strategy any longer," said Dennis Jacobe, director of research at the United States League of Savings Associations.

The widespread issuance of fixed-rate mortgages in the 1970's led to the collapse or merger of nearly a quarter of the nation's 4,000 savings associations then existing . . . Of those that survived, some remain in extremely poor shape. . . .

Adjustable-rate mortgages reached their height of popularity in late 1984, when 70 percent of the mortgages issued by savings and loan associations were adjustable-rate, according to the savings league. . . .

Fixed-rate loans, [however], were the only type Washington Federal [a Seattle S&L] was making. . . .

"You can't be reckless, but right now we're in a deflationary cycle . . . ," Mr. Knutson [the company's president and chief executive] said. Referring to 1981, he added that "you can't operate based on one devastating period; otherwise you leave too much profitability on the table."

a. What economic event caused trouble for S&Ls with fixed-rate mortgages? How do adjustable-rate mortgages provide protection?
b. Some S&Ls have moved to shorter-term mortgages and longer-term deposits. If the duration of their liabilities is greater than the duration of their assets, are they protected from interest rate fluctuations?
c. Why do you suppose many S&Ls now wish they had issued fixed-rate mortgages during 1981–1984?