FUNDING INVESTMENTS
FINANCE 238/738, D. Musto
SECOND TEST
80 MINUTES / 80 POINTS

Your Name: ________________________________
1. As of April 1, 2005, the Bond Markets Association reported that pools of 6.5% mortgages originated in 2003 had a CPR of 26.8%.
   a) (5 pts) What does this mean, exactly?
   b) (5 pts) Suppose the CPR of 8.0% mortgages originated in 1996 was also 26.8%. Would this be plausible? What considerations are important?

2. A press release (slightly edited) from December:

   (Marne-la-Vallee, 12/2/04) Euro Disney S.C.A., operator of Disneyland Resorts Paris, reported today that the company and other entities … have finalized and signed the legal documentation called for by the previously announced memorandum of agreement (MOA). Most of the terms of the MOA … remain subject to certain conditions including the condition that Euro Disney, subject to shareholders’ approval, complete a capital increase for at least €250MM in the form of a rights offering. The Company has until March 31, 2005 to complete such a capital increase.

   In January, Euro Disney, which had 1.1BB shares outstanding at the time, trading at €0.26 each, announced an underwritten rights offering: for every five shares now held, you get 13 transferable rights, and with each right you can buy one new share for €0.09.
   a) (4 pts) Determine whether this offering is sufficient, by itself, to raise the €250MM.
   b) (3 pts) Characterize the offering’s underwriter’s exposure to Euro Disney.
   c) (3 pts) Bearing in mind that this offering is underwritten, how much should Euro Disney’s share price drop on the day the shares go ex-rights – that is, from the day when ownership determines who gets the rights (when the share price is €0.26), to the following day?

3. (10 pts) What rationale (if any) is there for the following policies intended to reduce stale-price trading of a mutual fund’s shares?
   a. (3 pts) Don’t let investors know which stocks the fund holds
   b. (4 pts) Just before the close of each trading day, place an order to buy or sell (randomly) one share of each stock the fund holds
   c. (3 pts) Don’t take any orders from fund investors after the market closes
4. Late last year, NGP Capital Resources went public, selling 16MM shares at $15 each. The underwriter, Raymond James, had an overallotment option (i.e. Green Shoe) of 2.4MM shares. Here’s the shares’ market performance over the following weeks:

![NGP Capital Resources since IPO](image)

a) (5 pts) Judging from the market price, is this IPO’s offering price likely to have been a discount from the price range announced in August, when NGP announced their intention to go public? Why or why not?

b) (5 pts) On November 29, NGP announced that Raymond James had exercised only a fraction of its overallotment option, 500,000 of the 2.4 million shares available. Is this consistent with what we see in the graph?

5. From a meeting of the Financial Institutions and Consumer Credit Subcommittee, Rep. Bachus (chairman), speaking:

I remain hopeful that we can work with the Senate and the administration to resolve the coverage issue and get deposit insurance reform passed this year. All of us have heard from community bankers in our districts about the challenges they face daily in competing for deposits with large money-center banks that are perceived by the market rightly or wrongly as being too big to fail.

a) (5 pts) What is the difficulty facing a small bank whose competitor is “too big to fail”?

b) (5 pts) Suppose Congress passes a new law: if a run starts, the Fed can provide liquidity only for a week, while it figures out whether the bank is solvent. If it is insolvent, the Fed must close the bank and bail out only the insured deposits. How would this affect the incentives of large depositors to monitor banks? What considerations are important?
6. You are a market maker for GE, so you post a bid and an ask at which you will honor the next order to sell or buy 1 share. GE will announce its earnings tomorrow, and everybody knows that GE will be worth 40 if earnings are good, and 38 if earnings are bad. The next order has a 25% chance of coming from an Insider, and 75% chance of coming from a Day Trader. Insiders know for sure what the stock will be worth tomorrow, and Day Traders think they know for sure but you know that they are right only 70% of the time.

a. (3 pts) If a buy order comes in and you know it came from a Day Trader, what is the expected value of a share?

b. (4 pts) At what Ask price do you break even, given that the chance that a buy order came from a Day Trader is 75%?

c. (3 pts) Is the overconfidence of Day Traders good or bad for Insiders? Explain.

7. In a March 18, 2005 press release, we read

Sunstone Hotel Investors, Inc., (NYSE: SHO) announced that it has closed its public offering of 4,850,000 shares, including the underwriters’ exercise of the over-allotment option, of 8.0% Series A and Series B Cumulative Redeemable Preferred Stock with a liquidation preference of $25.00 per share for gross proceeds of $121,250,000 … Sunstone Hotel Investors, Inc. is a Southern California-based lodging real estate company that expects to qualify as a real estate investment trust for federal income tax purposes. The Company owns 54 hotels primarily in the upper-upscale and upscale segments primarily operated under nationally-recognized franchises, such as Marriott, Hilton, InterContinental and Hyatt.

a. (5 pts) What kind of bond is this like? How is it unlike a bond?

b. (5 pts) 8% would be very high for a bond yield. Why not just sell a bond?

8. Your company has a bond outstanding that matures Aug 15, 2011, and that pays an 8% coupon. Currently this bond is trading at 100.

a. (5 pts) Using the 4/11/05 prices from the WSJ (last page), how much would it cost to defease your bond? (Assume here that all the Treasury bonds mature on the 15th of the month, don’t worry about accrued interest on either your company’s bond or the Treasury bonds, and if you have a choice, don’t use a “ci” STRIP).

b. (5 pts) Would your bond investors be sad, happy or indifferent about the defeasance? Explain.
### Treasury Bonds, Notes and Bills

**April 11, 2005**

#### Explanatory Notes
- Futures contracts (with the CME as the settlement broker and transactions of $1 million or more) on treasury bond, note, and bill contracts are on a net-of-interest basis. Contracts in bid and asked quotes represent T-bonds, T-notes, and T-bills, respectively. Treasury bill futures are for 13-week and 26-week tenors. Futures contracts for treasury bonds, notes, and bills are for delivery during the next scheduled delivery month. Trading in futures and options will be for delivery of treasury securities, dated 13 weeks and 26 weeks from issue dates. For bonds callable prior to maturity, yields are computed to the earliest call date for issues quoted above par and to the maturity date for issues quoted below par.
- Source: EON/Center Trading
- U.S. Treasury bills of less than $1 million, for delivery tenor, tenor-on-tenor contracts based on transactions of $1 million or more. Contracts in bid and asked quotes represent T-bonds, T-notes, and T-bills, respectively. Futures contracts for treasury bonds, notes, and bills are for delivery during the next scheduled delivery month. Trading in futures and options will be for delivery of treasury securities, dated 13 weeks and 26 weeks from issue dates. For bonds callable prior to maturity, yields are computed to the earliest call date for issues quoted above par and to the maturity date for issues quoted below par.
- Source: EON/Center Trading & Co. Inc. & Street Knowledge Technology Inc.

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#### Government Bonds & Notes

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#### U.S. Treasury Strips

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#### Inflation-Indexed Treasury Securities

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**Note:** Rates and quotes are in percentage terms.