

Investment Project

Econ 422
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Description

- Objectives: learn financial institutions and conventions
- Essential features:
 - » Create a \$100,000 portfolio, describe it in Report 1
 - » Value the portfolio at term end, report performance in Report 2
 - » Intermediate trading is allowed by not required
- Some helpful hints:
 - » Start early
 - » Read the detailed instructions carefully!
 - » Reread the instructions, list questions
 - » Work with your study partner (but the portfolio and write up must be your own)
 - » Ask questions

Some Portfolio Assets for Investment Project

- Common Stock
- U.S. Treasury Bills
- Treasury, corporate, and agency bonds
 - » Zero coupon bonds
 - » Coupon bonds
 - » Inflation protected bonds
- Mutual Funds
- Options

Common Stock

- Common Stock represents a fraction or share in the ownership of a corporation.
- Share owners are normally entitled to
 - » dividends distributed by the corporation
 - » rights to vote for the corporation's directors and on certain other matters.

Finding Financial Data: Common Stock

- Daily data in *WSJ* or *NYT*: prices, volumes, etc.
- Detailed dividend data from *Barrons*, a weekly newspaper available in Foster Business Library
 - » Find the last dividend date
 - » Predict the next dividend date.

Finding Financial Data: Common Stock

- <http://finance.yahoo.com>
 - » Current price information
 - » Historical price information
 - » Dividends, capital structure, betas etc.
- <http://www.mhhe.com/edumarketinsight>
 - » Education version of Standard and Poor's Market Insight Product based on Compustat Database

Common Stock: Commissions

- Fidelity Silver commission schedule
See website file for online sources.
 - » <http://personal.fidelity.com/accounts/services/content/brokeragecommission.shtml>
 - » \$10.95 for up to 1000 shares for online trading
- Note: commission for mutual funds may depend on fund

Treasury Bills (T-Bills)

- Short term debt of US government
- Maturity: up to 1 year. \$1,000 min.
- Sold at discount to face value
 - » no coupon interest payments
- Ways to purchase
 - » Direct: competitive and noncompetitive auction (free through Treasury direct)
 - » Secondary market (small commission fee)

Treasury Notes and Bonds

- Maturities (at time of issue):
 - » Notes: One to ten years
 - » Bonds: Ten to thirty years
 - » [“Seasoned” bonds can have short times to maturity as they approach maturity.]
- Minimum Face Value: \$1,000
- Coupon interest payments every 6 mo.
 - » coupon pmt = coupon rate * face value / 2

Treasury Notes and Bonds: Prices

- Initially sold at auction
- Active secondary market
- Price quoted as a % of face value
 - » Fractional part of price is in 32nds
 - » e.g. 101:5 = $101 \frac{5}{32} = 101.15625$
- Buyer pays price *plus* “Accrued Interest” (details given later)

Treasury Bonds and Notes: Accrued Interest

- Buyer pays and seller receives accrued interest.
- Accrued interest assumes that interest is earned continually (although paid only every six months)
- $\text{Accrued interest} = ((\# \text{days since last pmt}) / (\text{number of days in 6 month interval})) * \text{semiannual coupon pmt}$

Treasury STRIPs

- Coupon bonds represent a collection of claims: claims to each of the scheduled interest payments and a claim to the face value of the bond at expiration.
- These claims can now be traded separately in packages called STRIPs.
 - » Each STRIP represents a claim to a payment at a future date of \$1000 in interest or principal.
 - » Essentially these are long maturity pure discount bonds

U.S. Agency Bonds

- Bonds issued by Federal and State agencies
 - » Federal Home Loan Bank
 - » Federal National Mortgage Association (FNMA)
 - » Federal Housing Association (FHA)
 - » Federal Student Loan Marketing Association
 - » Municipal Bonds
- These bonds are similar to Treasury bonds re. interest payments, pricing etc.
 - » They may differ in the dating conventions,

Treasury Inflation Protected Securities: TIPS

- Pure discount bonds that promise a real (inflation adjusted) rate of return
- The US Treasury website offers a good explanation of these securities
 - » <http://www.publicdebt.treas.gov/sec/seciis.htm>

Corporate Bonds

- Corporate Bonds are not risk-free
 - » Corporations will default on bonds if they become insolvent
 - » Interest rates are higher due to higher risk
- WSJ price quotes for corporate bonds.
- c.f. Moody's Industrial Manual and Moody's Bond Record for information on terms of corporate bonds.

Options

- See chapters 20 and 21 in BM
- See <http://biz.yahoo.com/opt/>
- Option commissions are similar to the stock commissions. See the Fidelity schedule

Mutual Funds

- You buy a share of a professionally managed portfolio
 - » Open vs. closed end
 - » Load vs. no load
- Quote price = NAV = net asset value determined at end of day
- No. of shares = $\frac{\$investment}{\$NAV(buy)}$
- $\$Proceeds = No. \text{ of shares} * \$NAV(sell)$

Mutual Fund Data

- <http://www.morningstar.com>
 - » Great site that gives current prices (NAV), historical performance, fees, loads, expense ratios, etc.
- <http://finance.yahoo.com>
 - » Lots of free mutual fund information
- Most funds have their own sites
- Fidelity commission depends on fund
 - » Can be expensive!!

Portfolio Analysis

- finance.yahoo.com
 - » Register (free) to create and track portfolios
- finportfolio.com
 - » Register (free) to create and analyze small portfolios using modern portfolio theory