Markets, Firms & Investors

- Financial Instruments
  - Issuers
  - Functions
- Ownership versus Control
  - Shareholders
  - Directors
  - Managers
- M & A
- Arbitrageurs, Speculators, & Hedgers

Introduction

- Function of financial markets?

  Provide a market for capital funding: Allows those that require funding for their activities to obtain funds from those that wish to put their excess capital to use in exchange for an income stream.
- Risk versus return.
- Stock of financial assets is the cumulative savings from the past.
- Large variety of instruments exist to suit different requirements.

Markets & Instruments

- Securities
  - Timing and size of payment-stream
  - Liquidity (ease of sale)
  - Legal Obligation (residual value)
  - Bid-Ask Price and Spread
  - Tick size (Price increments, often in 1/32nd's)
  - Basis Points (0.01%)

Traders

- Market Maker
  - Maintains book (portfolio of assets)
  - Buys & Sells stocks at quoted P
  - Profits from spread
  - Own A/C
- Broker
  - Middle man between counterparties
  - Commission based profits

Value vs. Price

- Value and Price not necessarily the same
- Price quoted in the market
- Value?
  - For us: DPV of income stream
  - Must account for size and risk of payment, plus time dimension & discount factors
- In Equilibrium: $P = V$ by *arbitrage*

Types of Securities

- Money Market
  - Pure discount bonds with s.t. maturity (< 1 year)
  - Commercial paper & certificates of deposit versus bills
- Repurchase Agreements (Repos)
  - Form of ***collateralised*** borrowing: Sale (of asset at one price) and repurchase (at another price) agreement
  - **Reverse repo** is the position of the ***counterparty***
- Bonds (Government vs. Corporate), bond indenture
- Equity
- Mezzanine
- Derivatives

Government Securities

- Generally liquid
- Low default risk
- Public auction issue
- Short Term: pure **discount** bonds (Money Market)
- Medium [<7yr] to Long Term [<30yr].: coupon paying bonds (Gilts [UK], T-Notes, -bonds [US])
- Foreign denominated: Eurobonds

Corporate Securities

- Issued to raise funds for future investment (or to cash-in)
- *Initial Public Offering* and *Seasoned* Public Offering
- Large transactions costs => economies of scale => large issues
- Underwriting
  - Correct price? Usually too low, i.e. oversubscribed!
  - Risks
  - Incentives & agency problems
    - Firm commitment, Best efforts, Green-shoe provision
    - Corporate finance literature
- Private placements
- Debt vs. Equity Distinction
  - !! In reality a sliding scale, with different mixes of legal rights and payments streams: Mezzanine finance

Debt

- Typically Fixed income, but innovation…
- Rights to liquidation value of company if default (usually there is an order in which debtors are paid, depending on security type)
- Loans vs. Bonds
  - secondary markets and liquidity
  - Depth of U.S. bond market vs. EU & Japan
  - Securitisation & Structured Finance
- Syndicated Loans
  - Reason: limits on single institutions’ single loan size relative to assets, portfolio & participation advantages, .
  - Lead bank takes set-up fee, remainder commensurate to portion
- Eurobonds vs. Foreign Bonds

Debt Retirement

- Companies may choose to retire debt in order to change the debt-equity ratio
  - Maturity & no re-issue
  - Buy bond back in open market
  - Call provision or conversion

Equity

- Shareholders have the right to *residual* earning (after paying for labour, capital, and raw materials, new investments and taxes)
- Ltd.: Losses are limited to purchase price of holdings in company (value of shareholdings)
- Primary markets (IPOs vs. seasoned offering, various forms of underwriting)
- Secondary markets (bilateral ‘dealer’ vs. auction markets)

Corporate Securities

- Corporate Equity:
  - Ordinary shares (Common Stock): voting rights, no residual claim
  - Preferred shares: no voting rights, but residual claim below debt
  - Share warrants (form of option)
- Corporate Debt
  - (Syndicated) Loans
  - Debentures (Bonds secured by assets, general and specified)
  - Subordinated Debt
  - Convertible Bonds
  - Exchangeable (like convertible, but for other company)
  - Callable Bonds
  - Floating Rate Note
  - Deep Discount Bonds
  - Junk bonds

Other Securities

- Derivatives
  - Contracts, the value of which depends on some other assets
  - Forwards
  - Futures
  - Options
  - Swaps

Other Issues

- Bond Rating Agencies (S&P, Moody's,…)
- Risk Premia: rate of return above T-bills (benchmark rate)
- Security of interest and capital?
- Securitisation
  - Practice of issuing marketable securities backed by non-marketable loans, such as mortgage and asset backed loans

S & P Ratings

- AAA→A (7bp→50 above T-bills): strong interest repayment ability, with circumstantial risks increasing.
- A→ BBB (124bp>T-Bill) : risk susceptible to economic changes, but good under current circumstances
- Bb→C: Speculative (Junk) Bonds (average 400bp > T-Bill, with considerable spread)
- D: In default

Corporate Equity Market

- Full Listing on primary market, s.a. NYSE, LSE, can be onerous by requirements:
  - % of company for sale
  - Financial information
- Second markets less onerous
  - For example: Alternative Investments Market

Mutual Funds

- Allows investors to hold managed portfolio of assets that may not be able to hold.
  - Size of investment
  - Sophistication and time-requirements of investor
- Open- vs. closed-end funds
  - In an open fund the managers of the fund commit to repurchase of the security at a price reflecting the value of the underlying assets
  - In a closed fund these securities are traded
  - German open property funds' liquidity problems

Derivatives

- Forward and futures contracts
- Swaps
- Options

Ownership & Control

- Purpose of setting up firm: Create positive value added (revenues greater then operating costs: labour, capital, inputs)
- Different forms of ownership:
  - Sole Proprietor
  - Partnership
  - Publicly listed enterprise

Merger/Takeover Activity

- Mode: Cash vs. share swap
- Takeover code:
  - All information to shareholders
  - Benefits carefully outlined, financial details confirmed by independent auditors
  - Target management must behave in best interest of *their* shareholders
  - No inflation of own share price

Investors

- Invest for profit: income received plus capital gain realised
- Return (income + net capital gain)/buy price
- Investors need to know their target return & risk appetite and which investment strategies can provide them with those. Hold portfolio of financial assets which reflect these.
- Considerable problem: Mutual funds vs. personal investment strategy (Markowitz vs. Keynes)
- Expectations, risks (use variance for scale), correlations
- Sectors and countries
- Fundamentals vs. noise traders (chartists, neural networks)

Investing

- Cash vs. Margin A/C: allows leverage
  - maintenance margin: value equity/(value equity + loan))
  - leverage
- Long/short position
- Short selling

Orders

- Market order: sell/buy @ highest/lowest P
- Limit order: buy/sell at P below/above P*
- Stop order: buy/sell as soon as P past P*
  - Stop loss: sell Qty if P < P*
  - Buy stop: buy Qty if P > P*
- Stop limit order: sell if P within certain range
- Fill or kill order
- Open order