Topic 1
Chapter 1: Introduction to Corporate Finance

Key Concepts and Skills
Financial Markets - where securities are being bought and sold between businesses, investors and financial securities
Role of Financial Markets:
- To channel savings into investments

Money Markets - involve the trading of short-term debt securities (less than 12 months)
Capital Markets - involving the trading of long term debt securities and common shares (more than 12 months)
Primary Markets - involves the original sale of securities from companies (IPOs)
Secondary Markets - involve the trading of issued securities among investors on stock exchanges (ASX)

Goal of a Manager
- Board of directors are elected by the shareholders who are in charge of hiring a CFO and CEO
- Managers of publicly listed companies make decisions on behalf of shareholders, to maximize shareholder's wealth, or share price
- Main goal is to maximize shareholders wealth and share price

CFO Duties
- Capital Budgeting (Investment)
    - Making decisions on whether to invest in a project
    - Projects are profitable if cash inflows exceed cash outflows
- Capital Structure (Financing)
    - How should capital investment be financed
    - Debt-Equity ratio should be determined
- Dividend
    - If the business is successful, how much should we pay in cash dividends
    - Too low, shareholders loose confidence, too high, the company isn't investing enough in future endeavors

Investment
- Capital budgeting is the planning of capital investment in fixed assets to generate future cash flows
  Criteria:
    Input - future cash flows size, timing and risk
    Output - profitable or unprofitable project?

Financing
- Financing decision - what should be the mix of debt and equity used to finance the firm's operations

Dividend
- If a company generates profits, how much should the company pay out to shareholders

Agency Problem
Agency Relationship
- Principal hires an agent to represent his/her interest
- Stockholders hire managers to run the company, the agent is stockholders / managers

Agency Problem
- Conflict of interest between principal and agent

Agency Cost - costs arising due to conflict of interests between owners and managers

Direct - corporate expenditure that benefit management but cost shareholders (e.g. purchasing unnecessary corporate jet)
Indirect - lost opportunity (e.g. not taking a risky but highly beneficial investment)

Managing the Managers (Corporate Governance)
- Managerial Compensation
  - Incentives can be used to align management and stockholder interests
- Corporate Control
  - Board of directors can fire a bad manager
  - Threat of a takeover

Chapter 2: Financial Statements

Balance Sheet
- Snapshot of the firm's assets and liabilities at a given point in time
- Balance Sheet Identity
  - Assets = Liabilities + Owner's Equity
- Net Working Capital
  - Current assets - current liabilities

Liquidity - the ability to turn assets into cash quickly without loosing significant value
- Liquid firms are less likely to experience financial distress
- Liquid assets earn a lower return

Book Value - how much something is worth on paper
Market Value (realized) - how much something is worth to the market
Debt vs Equity
- Financial Leverage - whether to use debt financing to fund new projects

Example of a Balance Sheet

U.S. Corporation
2015 and 2016 Balance Sheets
($ in millions)

Assets			*Liabilities and Owners' Equity*		
	2015	**2016**		**2015**	**2016**
Current assets			*Current liabilities*		
Cash	$104	$160	Accounts payable	$232	$266
Accounts receivable	$455	$688	Notes payable	$196	$123
Inventory	$553	$555	Total	$428	$389
Total	$1,112	$1,403			
			Long-term debt	$408	$454
Fixed assets					
Net plant & equipment	$1,644	$1,709	*Owners' equity*		
			Common stock and paid-in surplus	$600	$640
			Retained earnings	$1,320	$1,629
			Total	$1,920	$2,269
Total assets	$2,756	$3,112	Total liabilities and owners' equity	$2,756	$3,112

Income Statement
- Measures performance of a firm over a specified period of time
  - Revenues - Expenses = Income

- Use financial ratios to account for size of company differences

U.S. Corporation 2016 Income Statement ($ in millions)		
Net sales		$1,509
Cost of goods sold		750
Depreciation		65
Earnings before interest and taxes		694
Interest paid		70
Taxable income		624
Taxes		212
Net income		$412
Dividends	$103	
Addition to retained earnings	309	

Sales
- CGS
- Depr
EBIT
- Int
EBT
- tax
NI

Payout = Dividend / NI =
How to detect the underlying co. financial problem? Du Pont Identity

Du Pont Identity

Du Pont Identity:

Return on Equity = (NI/Sales * Sales) * (Sales / Assets) * (Assets / Equity)
= Profit Margin * Asset Turnover * Equity multiplier

=> ROE = PM * ATO * EM; EM = (D+E)/E

- ➔ Low ROE due to low Pricing (P-V), low Volume (Q) or low financial leverage

Chapter 3: Financial Ratios

Liquidity
- Current Ratio = Current Assets / Current Liabilities
- Quick Ratio - (Cash + Accounts Receivable) / Current Liabilities

Financial Leverage
- Debt/Asset Ratio = Debt / Assets
- Debt/Equity Ratio = Debt / Equity
- Equity Multiplier = Total Assets / Equity

Asset Management
- Total Asset Turnover (ATO) = Sales / Total Assets

Profitability

- Profit Margin (PM) = Net Income / Sales
- Return on Assets (ROA) = Net Income / Total Assets
- Return on Equity (ROE) = Net Income / Equity

Market Value Measures
- Market Value of Equity (MVE) - Share Price x Shrout
- Earnings per Share (EPS) - Net Income / Shrout
- PE Ratio - Share Price / EPS
- Market-to-book Ratio (MB) - Share Price / Book Value of Equity per share

Why Evaluate Financial Ratios?
- Internal Uses
    - Performance evaluations (compensation and comparison between divisions)
    - Planning for the future
- External Uses
    - Creditors, Stockholders
    - Suppliers, customers

Benchmarking
- Ratios need to be compared to benchmark

Time-Trend Analysis - used to see how the firm's performance is changing through time (historical ratios)
Peer Group Analysis - compares to similar companies within the industry in the same year

Potential Problems
- There is no underlying theory so there is no way to know which ratios are most relevant
- Benchmarking is difficult for diversified firms
- Varying accounting procedures
- Different fiscal years