FN 201 Business Finance

Semester 2/2014

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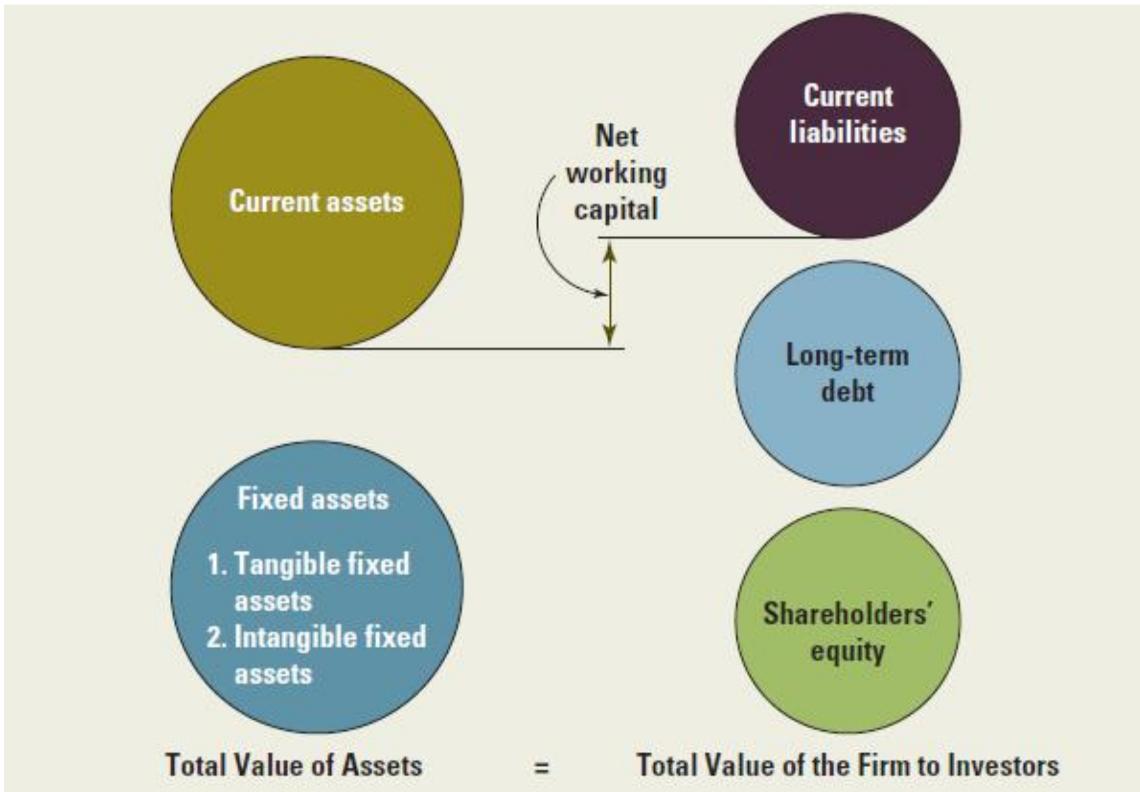
Lecture 1:
Introduction to corporate finance

Corporate finance

- Firm is a value creation vehicle.
- The value of firm is reflected in balance sheet model.



Some terminologies

- **Capital structure** – How can the firm raise cash for required capital expenditure and other assets?

  Capital structure represents the proportions of the firm's financing from current debt, long-term debt and equity.

  V = B + S

- **Capital budgeting** – In what long-lived assets should the firm invest?

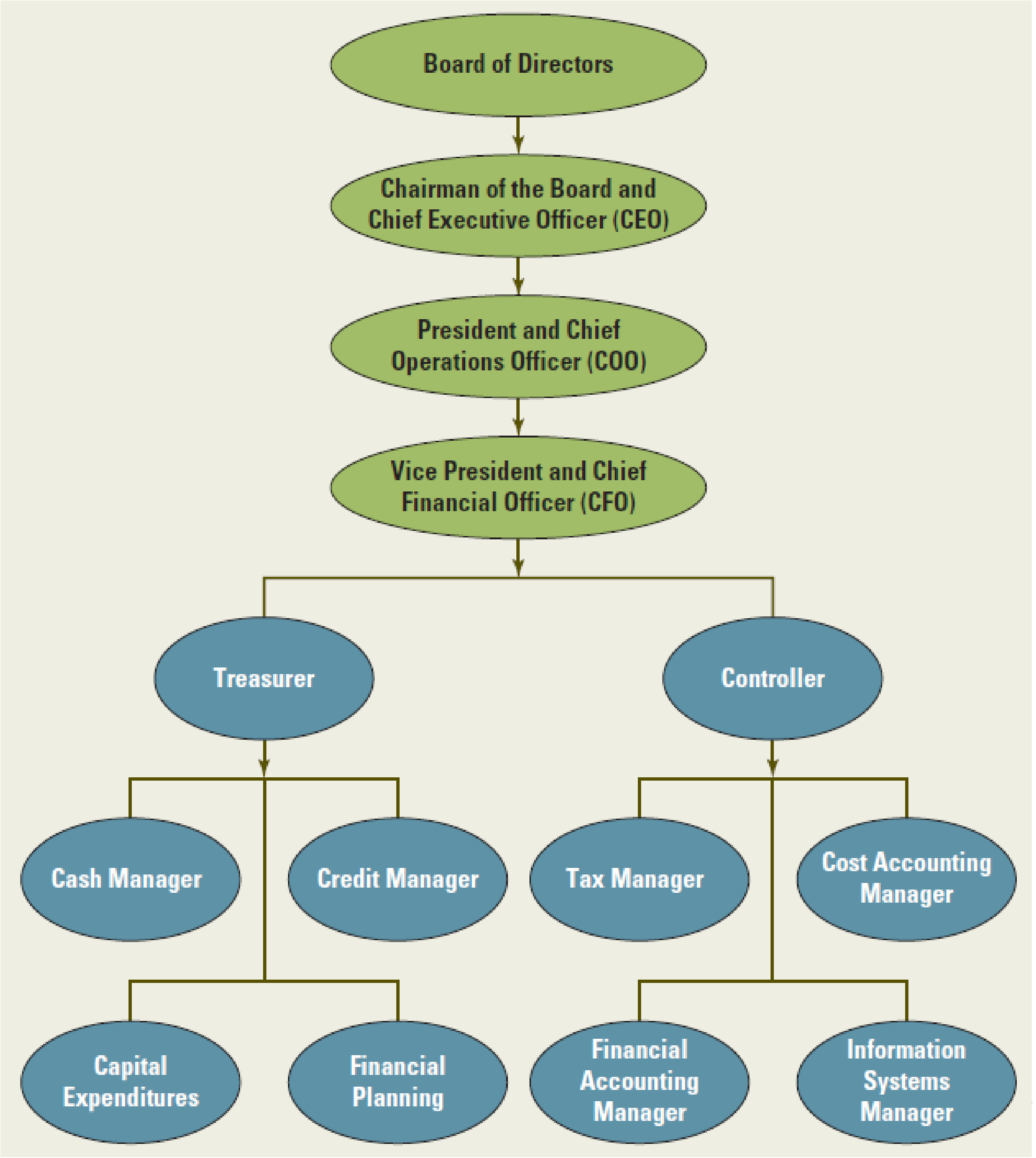
  Capital budgeting describes the process of making and managing expenditures on long-lived assets.

- **Networking capital** – How should short-term operating cash flows be managed?

  Short-term management of cash flow is associated with a firms' net working capital.

  Networking capital = Current asset – Current liabilities

Firm organization chart



3 Basic legal forms of organizing firms

- Sole proprietorship
- Partnership
- Corporation: Company Limited/Public Company Limited

	Sole Proprietorship	Partnership	Corporation
Liquidity and marketability			
Voting rights			
Taxation			
Liability			
Continuity of existence			

3 Basic legal forms of organizing firms

1. Sole Proprietorship

- Business is owned and run by one person
- Typically has few, if any, employees
- Advantages
  - Easy to create
- Disadvantages
  - Unlimited personal liability
  - Limited life

3 Basic legal forms of organizing firms

2. Partnership

- Similar to a sole proprietorship, but with more than one owner
- All partners are personally liable for all of the firm's debts. A lender can require any partner to repay all of the firm's outstanding debts.
- The partnership ends with the death or withdrawal of any single partner.

Limited Partnership has two types of owners

- General Partners
  - Have the same rights and liability as partners in a "regular" partnership
  - Typically run the firm on a day-to-day basis
- Limited Partners
  - Have limited liability and cannot lose more than their initial investment
  - Have no management authority and cannot legally be involved in the managerial decision making for the business

3 Basic legal forms of organizing firms

3. Corporation

- A legal entity separate from its owners
  - Has many of the legal powers individuals such as the ability to enter into contracts, own assets, and borrow money.
  - The corporation is solely responsible for its own obligations. Its owners are not liable for any obligation the corporation enters into.
- Ownership
  - Represented by shares of stock
  - Owner of stock is called
    - Shareholder
    - Stockholder
    - Equity holder
  - There is no limit to the number of shareholders, and thus the amount of funds a company can raise by selling stock.
  - Owner is entitled to dividend payments.

TABLE 1.1 **Strengths and Weaknesses of the Common Legal Forms of Business Organization**

	Sole proprietorship	Partnership	Corporation
Strengths	• Owner receives all profits (and sustains all losses) • Low organizational costs • Income included and taxed on proprietor's personal tax return • Independence • Secrecy • Ease of dissolution	• Can raise more funds than sole proprietorships • Borrowing power enhanced by more owners • More available brain power and managerial skill • Income included and taxed on partner's tax return	• Owners have *limited liability*, which guarantees that they cannot lose more than they invested • Can achieve large size via sale of stock • Ownership (stock) is readily transferable • Long life of firm • Can hire professional managers • Has better access to financing • Receives certain tax advantages
Weaknesses	• Owner has *unlimited liability*—total wealth can be taken to satisfy debts • Limited fund-raising power tends to inhibit growth • Proprietor must be jack-of-all-trades • Difficult to give employees long-run career opportunities • Lacks continuity when proprietor dies	• Owners have *unlimited liability* and may have to cover debts of other partners • Partnership is dissolved when a partner dies • Difficult to liquidate or transfer partnership	• Taxes generally higher, because corporate income is taxed, and dividends paid to owners are also taxed • More expensive to organize than other business forms • Subject to greater government regulation • Lacks secrecy, because stockholders must receive financial reports

Source: Gitman and Zutter (2011)

Double tax

- Shareholders of the corporation is subjected to double tax

Taxation of Corporate Earnings

Problem

You are a shareholder in a corporation. The corporation earns $5 per share before taxes. After it has paid taxes, it will distribute the rest of its earnings to you as a dividend. The dividend is income to you, so you will then pay taxes on these earnings. The corporate tax rate is 40% and your tax rate on dividend income is 15%. How much of the earnings remains after all taxes are paid?

Role of financial manager

Investment Decision	Financing Decision
Current Assets - Cash - Short-term investments - Account receivable - Inventory **Fixed Assets** - Plant and office equipment - Machine - Land	**Current Liabilities** - Account payable - Accrued expense - Short-term debt **Long-term debt** - Long-term loan - Long-term bond **Equity** - Capital stock - Retained earning

Balance Sheet

Role of financial manager

Liquidity management

Current Assets - Cash - Short-term investments - Account receivable - Inventory	**Current Liabilities** - Account payable - Accrued expense - Short-term debt
Fixed Assets - Plant and office equipment - Machine - Land	**Long-term debt** - Long-term loan - Long-term bond **Equity** - Capital stock - Retained earning

Balance Sheet

Role of financial manager

Current Assets	**Current Liabilities**
- Cash	- Account payable
- Short-term investments	- Accrued expense
- Account receivable	- Short-term debt
- Inventory	**Long-term debt**
Fixed Assets	- Long-term loan
- Plant and office equipment	- Long-term bond
- Machine	**Equity**
- Land	- Capital stock
	- Retained earning

Growth management

Goal of financial management

Possible goals

Related to bankruptcy avoidance, controlling risk

- Survive
- Avoid financial distress and bankruptcy
- Beat the competition

Related to earning or increasing profits

- Maximize sales or market share
- Minimize cost
- Maximize profits
- Maintain steady earnings growth

It's not clear that any of these actions are in the shareholders' best interest. The pursuit of profit normally involves some element of risk.

"The goal of financial management is to maximize the current value per share of the existing stock."

Agency problems

- Agency problem – conflict of interest between the principal and the agent
- Exists whenever someone (principal) hires another (agent) to represent his/her interest

Stakeholders in conflict	**Reasons for conflict**
Managers vs. shareholders	Are managers worth their high remuneration and benefits? Do managers make decision in the best interests of shareholders?
Customers vs. shareholders	Customers want low prices, shareholders want high profits.
Employees vs. shareholders	Employees want good working conditions and high salaries that shareholders may prefer not to pay.
Lenders vs. shareholders	Interest has to be paid even if no profit is earned, and it is paid before dividends are paid to shareholders.
Government vs. employees	The government may impose taxes on a firm which may affect future growth of employment.

Financial market classification

1. Debt market – Bond

   Equity market – Common stock, Preferred stock

2. Primary Markets - a corporation itself issues new shares of stock and sells them to investors, they do so on the primary market. (IPO, SPO)

   Secondary Markets - after the initial transaction in the primary market, the shares continue to trade in a secondary market between investors.

   - Organized exchange : New York Stock Exchange (NYSE), Stock Exchange of Thailand (SET)
   - Over-the-counter: NASDAQ, The Bond Electronic Exchange (BEX)
     - Does not meet in a physical location
     - May have many market makers for a single stock
   - Bid Price - Ask Price

Financial market classification

3. Money Market – Short term maturity <1 year (ex. Short term bill)

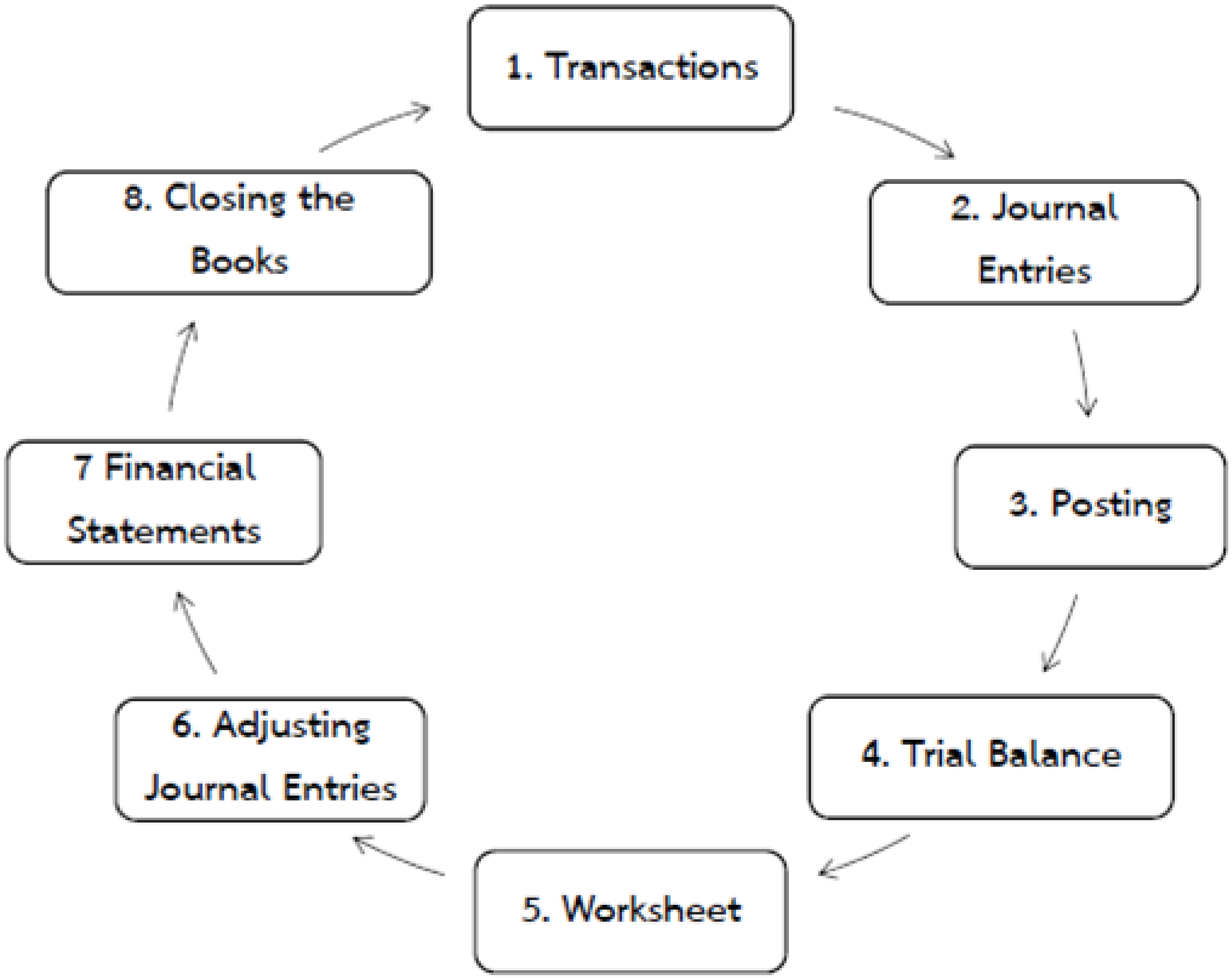
   Capital Market – Long term maturity > 1 year (ex. Stock, Bond)

4. Spot Market – A commodities or securities market in which goods are sold for cash and delivered immediately. Contracts bought and sold on these markets are immediately effective

   Future Market – Participants buy and sell commodity/future contracts, options, swap, forward for delivery on a specified future date.

Lecture 1:
Financial statements

Accounting cycle



1. The balance sheet

ASSETS	2009	2010	LIABILITIES (DEBT) AND STOCKHOLDERS' EQUITY	2009	2010
Current assets:			Current liabilities:		
Cash and equivalents	$ 107	$ 140	Accounts payable	$ 197	$ 213
Accounts receivable	270	294	Notes payable	53	50
Inventories	280	269	Accrued expenses	205	223
Other	50	58	Total current liabilities	$ 455	$ 486
Total current assets	$ 707	$ 761			
			Long-term liabilities:		
Fixed assets:			Deferred taxes	$ 104	$ 117
Property, plant, and equipment	$ 1,274	$1,423	Long-term debt*	458	471
Less accumulated depreciation	460	550	Total long-term liabilities	$ 562	$ 588
Net property, plant, and equipment	$ 814	$ 873	Stockholders' equity:		
Intangible assets and others	221	245	Preferred stock	$ 39	$ 39
Total fixed assets	$ 1,035	$1,118	Common stock ($1 par value)	32	55
			Capital surplus	327	347
			Accumulated retained earnings	347	390
			Less treasury stock†	20	26
			Total equity	$ 725	$ 805
Total assets	$1,742	$1,879	Total liabilities and stockholders' equity‡	$1,742	$1,879

*Long-term debt rose by $471 million − 458 million = $13 million. This is the difference between $86 million new debt and $73 million in retirement of old debt.

†Treasury stock rose by $6 million. This reflects the repurchase of $6 million of U.S. Composite's company stock.

‡U.S. Composite reports $43 million in new equity. The company issued 23 million shares at a price of $1.87. The par value of common stock increased by $23 million, and capital surplus increased by $20 million.

2. Income statement

Income Statement 2010 (in $ millions)	
Total operating revenues	$2,262
Cost of goods sold	1,655
Selling, general, and administrative expenses	327
Depreciation	90
Operating income	$ 190
Other income	29
Earnings before interest and taxes (EBIT)	$ 219
Interest expense	49
Pretax income	$ 170
Taxes	84
Current: $71	
Deferred: $13	
Net income	$ 86
Addition to retained earnings:	$ 43
Dividends:	43

Note: There are 29 million shares outstanding. Earnings per share and dividends per share can be calculated as follows:

$$\text{Earnings per share} = \frac{\text{Net income}}{\text{Total shares outstanding}} = \frac{\$86}{29} = \$2.97 \text{ per share}$$

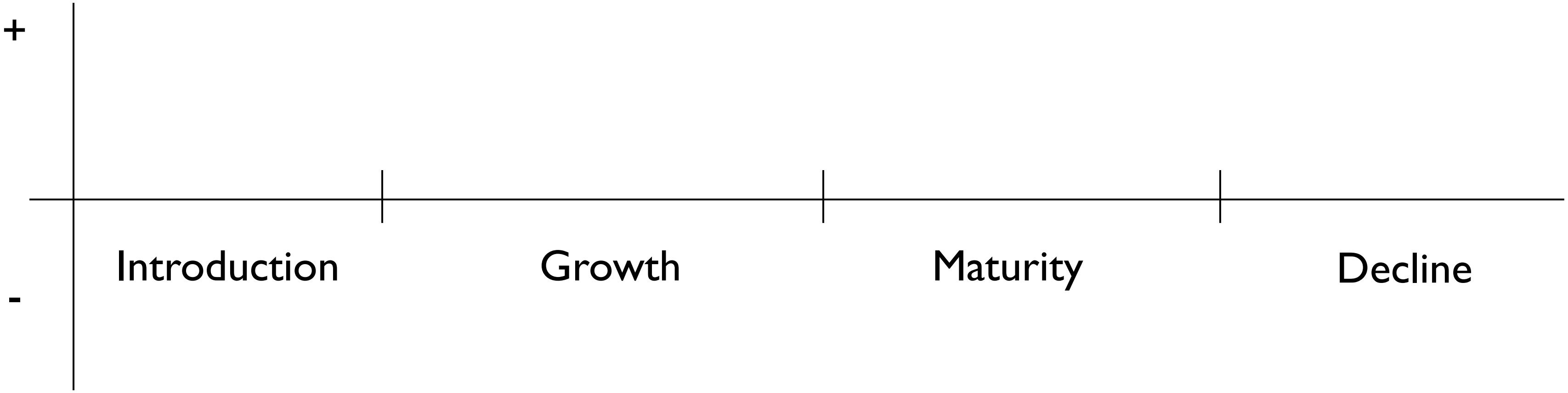
$$\text{Dividends per share} = \frac{\text{Dividends}}{\text{Total shares outstanding}} = \frac{\$43}{29} = \$1.48 \text{ per share}$$

3. Statement of Cash Flows

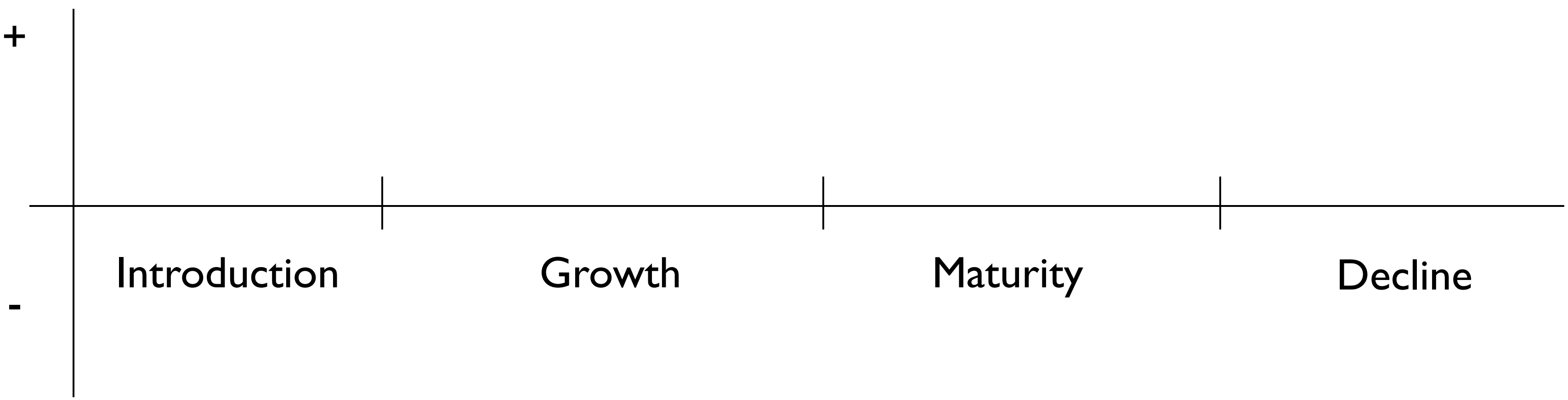
- Statement that summaries the sources and uses of cash
- Statement to report the firm's cash flow over a period
- Conversion of accrual basis to cash basis
- Finance concerns more on cash basis compared to accrual basis
- Net Income typically does NOT equal the amount of Cash the firm has earned because;
  - Non-Cash Expenses
    - Depreciation and Amortization
  - Uses of Cash not on the Income Statement
    - Investment in Property, Plant, and Equipment
- Changes divided into 3 major categories
  - Operating Activities – includes net income adjusted for non-cash items
  - Investment Activities – includes changes in fixed assets and investment in securities
  - Financing Activities – includes changes in notes payable, long-term debt and equity accounts as well as paid-out dividend

Cash flow and cycle of patterns

Revenue

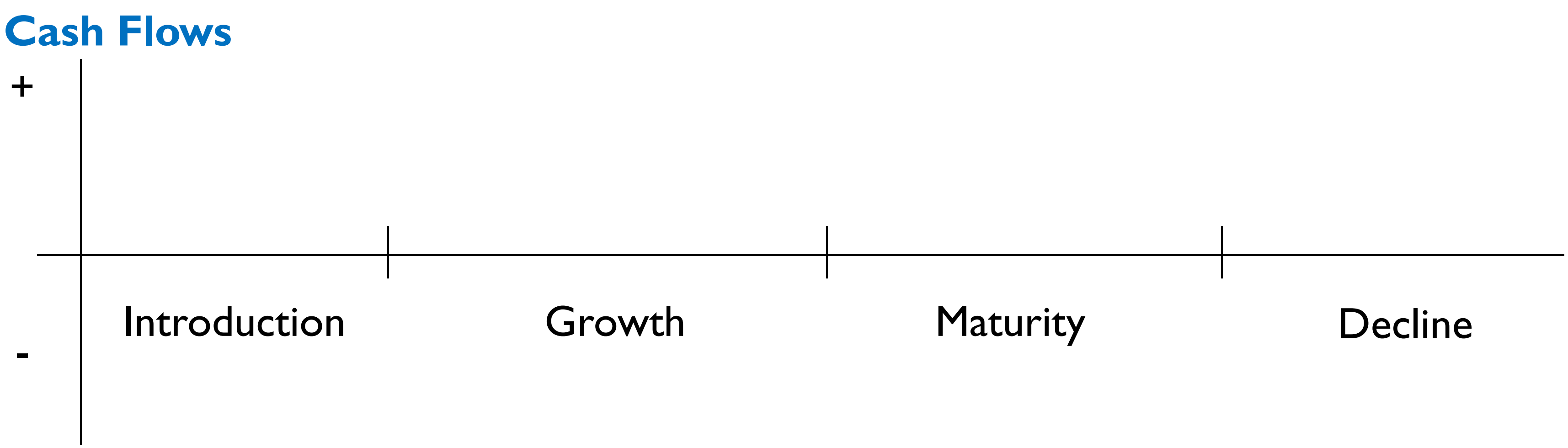


Net Income



Cash flow and cycle of patterns

Activities	Ability to generate cash	Need to use cash
Operating	Profitability of goods and services sold	Working capital management
Investing	Sales of existing plant assets or investments	Plant capacity requirements
Financing	Borrowing capacity	Debt service requirements



Accounting statement of cash flows

	Cash inflows	**Cash outflows**
Operating activities	• Sale of goods or services • Sale of investments in trading securities • Interest revenue • Dividend revenue	• Inventory payments (Repay account payables) • Interest payments • Wages/ Salaries • Utilities, rent • Taxes
Investing activities	• Sale of plant assets • Sale of securities, other than trading securities • Collection of principal on loans	• Purchase of plant assets • Purchase of securities other than trading securities • Making of loans to other entities (lending)
Financing activity	• Issuance of own stock • Borrowing	• Dividend payments of the firm itself • Repaying principal on borrowing • Stock repurchase/Treasury stock purchase

Financial Cash Flow

Cash Flow of the firm

Operating cash flow

(= EBIT + depreciation – current taxes)

- Capital spending

(= Acquisitions of fixed assets – sales of fixed assets)

(= End. net fixed assets – Beg. net fixed assets + Depreciation)

- Change in net working capital

Cash Flow to investors in the firm

Debt

(= Interest paid – net new borrowing)

(= Internets paid – (End. L/T debt – Beg. L/T debt)

Equity

(= Dividends paid – Net new equity raised)

(= Dividends paid - Stock sold + Stock repurchase)

Reference

Berk and DeMarzo, Corporate Finance, 3th edition, 2013.

Chatuporn Tangkathach, Analysis of financial statements, 2006.

Ross, Stephen A., Randolph W. Westerfield, Jeffrey F. Jaffe, and Bradford D. Jordan, Core Principles and Applications of Corporate Finance, 3th edition, 2010.

Winai Homsombat, Introduction to corporate finance and financial statements, 2013.