1. Operating, Investment and Financial Cash Flows

1.1 Investment Decision and Financial Decision

Financial decisions can be broadly classified as the investment decision, which assets to acquire, and the financial decision, how to finance asset acquisition.

Business firms cannot produce goods and services without productive assets. Tangible assets include **real assets**, such as land, plant facilities and equipment. Intangible assets include patents or licenses.

The company needs to finance its assets by acquiring capital from financial markets.

1. **investment decision** - what mix of fixed assets (land, plant, machinery, and equipment) and what mix of current assets (cash, accounts receivable, and inventories) will best facilitate the firm's production of goods and services,
2. **financial decision** - what securities to issue and what mix of equity, long term debt, and short term liabilities best meets the firm's objectives.

The art and science of making the right investment and financial decisions for the firm are called corporate finance **financial management**. These two broad decisions, the investment decision and the financial decision, are the responsibility of the chief financial officer (CFO).

Financial decision making deals basically with the future.

Investments

$$I = \Delta \text{ FIXED ASSETS} + \Delta \text{ NET CURRENT ASSETS}$$

The process of planning and managing a firm's investments is called capital budgeting.

Sources of Finance

$$F = \Delta \text{ EQUITY} + \Delta \text{ DEBT}$$

A capital structure refers to the mixture of equity and long-term debt the firm uses to finance its fixed assets and net current assets.

The firm must maximize the welfare of its residual claimants (stockholders).

1.2 The four types of firms

A **sole proprietorship** is a business owned and run by one person. The owner has unlimited personal liability for any of the firm's debts. The life of a sole proprietorship is limited to the life of the owner.

A **partnership** is a business owned and run by more than one owner. All partners are liable for the firm's debt. The partnership ends on the death or withdrawal of any single partner.

A limited partnership is a partnership with two kinds of owners, general partners and limited partners. General partners are personally liable for the firm's debt obligations. Limited partners have liability limited to their investment. They cannot run the business. Their private property cannot be seized to pay off the firm's outstanding debt.

A **limited liability company** is a limited partnership without a general partner. The owners have limited liability, but they can also run the business.

A **corporation** is a legal entity solely responsible for its obligations. The owners are not liable for any obligations of a corporation. An owner is known as a shareholder, stockholder or equity holder. The shareholders of a corporation exercise their control by electing a board of directors. The board of directors delegates decisions that involve day-to-day running of the corporation to its management team.

1.3 Cash Flows in Accounting and Financial Management

1.3.1 Free cash flow to the firm (FCFF)

Free cash flow to the firm (FCFF) is the cash flow available to suppliers of capital (equity holders and debtors) after all investments in fixed assets and net current assets have been made.

FCFF is independent of the company's capital structure. The same cash flow is used to value levered and unlevered company. FCFF does not depend on capital structure and also on cost of equity and interest rates. It may be interpreted as cash flow to equity holders of an unlevered company. FCFF depends on sales, operating costs and depreciation.

FCFF is different from EBIT. FCFF can be expressed as

(1) $FCFF = EBIT (1-T) + D - \Delta FA - \Delta NCA$

where

EBIT – operating income (earnings before interest and taxes),
T - tax rate,
D - depreciation,
ΔFA - investment in fixed assets,
ΔNCA – investment in fixed current assets.

FCFF can be also estimated as follows:

(2) FCFF = NI + D + Interest Expense (1-T) - ΔFA - ΔNCA

or

(3) FCFF = OCF + Nonoperating Income – Interest Expense T - ΔFA

or

(4) FCFF = NOI (1-T) +D + Nonoperating Income (1-T) - ΔFA - ΔNCA

or

(5) FCFF = ΔCash – Tax Savings – Financial Flow

where

OCF - operating cash flows,
Interest Expense x T – tax savings.

1.3.2 Free cash flow to equity (FCFE)

Free cash flow to equity is the cash flow available to equity holders after all financial flow adjustments (interest and principal payments have been paid and new borrowing received). FCFE can be estimated as follows:

(6) FCFE = FCFF – Interest Expense (1-T) + Net Borrowing

or

(7) FCFE= NI + D - ΔFA - ΔNCA + Net Borrowing

or

(8) FCFE= OCF + Nonoperating income – Interest Expense - ΔFA + Net Borrowing

or

(9) FCFE = ΔCash – (Issued Stock – Divivdends Paid)

Questions:

Interpret the term “a firm”.
What is the market value of a company ?
What is the difference between market value and economic (fair value) ?
Discuss the differences between accounting and financial management ?
Show the difference between operating cash flows in accounting and financial management.
Show the difference between investment cash flows in accounting and financial management.