

Subject : Advanced Corporate Finance

Chapter : 1

Introduction to corporate Finance

Corporate Finance :-

Corporate Finance refers to the area of finance which deals with the financial processes of the firm in a short or a long term.

The Balance sheet :-

Assets of the firm on the left side of the Balance sheet. These assets may be current and fixed.

Fixed Assets :-

Assets of a long term nature that are not easily converted into cash.

Current Assets :

Assets of a short term nature that are readily convertible to cash.

The Financial Manager :-

In large businesses, the finance behaviour is usually associated with a top officer of the firm or businesses, such as vice president and chief financial officer and lesser officer.

Treasurer :

The treasurer is responsible for controlling cash flows, managing capital, expenditure decisions.

Controller :-

The controller handles the accounting function, which involves taxes and financial accounting and information systems.

The Corporate Firm :-

The firm is a method to arranging the economic activity of many peoples. The most important problem of the firm is how to increase cash.

The corporate form of business that is arranging the firm as a corporation is the businesses can take other forms.

Sole proprietorship:-

A sole proprietorship is a business owned by one person. It is a cheapest business to form. They are not pay corporate income tax.

Partnerships:-

A business that is owned by partners. Two or more than 20 people can get together and form a partnership.

Corporation:-

A large business or organization that under the law has the rights and duties of an individual and follows a specific purpose.

Importance of cashflow:-

The most important job of a financial manager is to create value from the firm's capital budgeting financing, and net working capital activities.

Risk of cashflow

The business must consider risk. The amount and timing of cash flows are not usually

Known with certainty. Most investors have an aversion to risk.

Goal of Financial Management:-

The goal of financial management is to make money and increase the wealth of owners. It leads to an objective basis for making and evaluating financial decisions. The goal of financial management is to maximize the current value & increase value of stock.

Agency Relationships:-

The agency relationship between shareholders and management. Someone hires another agent to represent his or her interest. Relationship there is a possibility of a conflict of interest between the principal and the agent. Conflict is called an agency problem.

Control of the firm:-

Control of the firm ultimately rests with shareholder. They select the board of directors who, in turn select and fire management.

Chapter: 2

Financial statements and cashflow

Balance sheet :-

A statement that show the financial condition of a company at a particular time by listing the amount of money and property that the company has and the amount of cash its owes. The balance sheet have two sides: the left side are the assets and on the right sides liabilities & owner's equity.

$$\text{Assets} = \text{Liabilities} + \text{owner equity}$$

Liquidity :-

It is easily and quickly with which assets may be converted into cash without any loss in value.

Debt Versus Equity :-

Debt :-

Debt the fact that you have been influenced or helped by someone or something.

Liabilities are obligation of the business that require a payout of cash within a particular period.

Equity :-

Owner's equity is a claim against the firm's assets that is residual and not fixed.

Value versus cost :-

The accounting value of a firm's assets is frequently referred to as the carrying value or the book value of the assets. Under GAAP audited financial statement of firms in the US carry the assets at cost. The terms carrying value and book value are unfortunate. When value fact the accounting number based on cost.

Income statement :-

The income statement measures the performance of a company in annual year.

$$\text{Revenue} - \text{Expense} = \text{Income}$$

Taxes:

Taxes can be one of the most largest cash ~~flow~~ outflow a firm experience.

Corporate TAX Rate:

Corporate tax Rate in effect 2008. A normal feature of taxation instituted by the tax Reform Act of 1986 and expanded in the 1993 omnibus Budget Reconciliation act is that not strictly increasing corporate tax rate.

Average tax Rate:-

Average tax Rate is your tax bill divided by your taxable income in other words the percentage of your income that goes to pay tax.

Marginal tax Rate:-

marginal tax Rate is the tax you would pay in percentage if you earned one more dollar.

Net working capital:-

Net working capital is current assets minus current liabilities. Net working capital is when current assets are greater than current liabilities.

Financial cash flow :-

The most important item that can be extracted from financial statement is the actual cash flow of the firm. An official accounting statement called the statement of cash flows helps to explain the change in accounting cash & equivalents. The first point we should mention is that cash flow is not the same as net working capital.

The accounting statement of cash flows :-

There is official accounting statement is called the statement of cash flows. This statement helps describe the change in accounting cash which for us. It is very useful in understanding financial cash flow. The 1st step change in cash of figure out cash flow from operating activities. The result of cash flow from the firm's normal activities in producing and selling goods & services.

Chapter: 3

Financial Statement Analysis & Financial Models

Financial Statement Analysis:-

A good working knowledge of financial statements is desirable simply because such statement and members derived from those statement, the primary means gives information the financial position both within the firm & outside the firm.

Ratio Analysis:-

Avoiding the problems involved in comparing companies of different size is to calculate and compare financial. Some ratio are way comparing & investigating the relationship b/w different pieces of financial information

Short term solvency

Short term solvency ratios as a group are goal to provide information about a firm liquidity, these ratios are sometime called liquidity measures.

Current Ratio:

one of the best known and most over used ratios is the current ratio

$$\text{Current ratio} = \frac{\text{current assets}}{\text{Current Liabilities}}$$

Quick (or Acid-Test) Ratio:

inventory is often the least liquid current asset. It also the one for which the book values are least reliable as measures of market value because the quality of the inventory is not considered.

The quick, or acid-test, ratio is computed just like the current ratio except inventory is omitted

$$\text{Quick ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{current liabilities}}$$

Cash Ratio:-

A very short-term creditor might be interested in cash ratio

$$\text{Cash ratio} = \frac{\text{Cash}}{\text{current liabilities}}$$

long-term solvency measures:

long-term solvency ratio purpose to address the business long-run ability to meet its obligation or more generally, its financial leverage. it is also called financial leverage ratio.

Total Debt Ratio:-

Total debt ratio takes into account all debts of all maturities to all creditors.

$$\text{Total debt ratio} = \frac{\text{Total assets} - \text{Total equity}}{\text{Total assets}}$$

Times Interest Earned:-

Common measure of long-term solvency is the times interest earned ratio.

$$\text{Times Interest earned ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

This ratio measures how well a company has its interest obligation covered & it is often the interest coverage ratio.

Asset mgt or Turnover Measures :-

The measures in this section are also called asset management or utilization ratio.

The specific ratios we discuss can all be interpreted as measures of turnover. They describe how efficiently a firm uses its assets to generate sales.

Inventory Turnover & Day's Sales Inventory

we sold off, or turnover, the entire inventory times during the year, ~~the~~ ~~long~~ ~~as~~ ~~we~~ ~~are~~ ~~not~~ ~~running~~ ~~of~~ ~~stock~~ ~~&~~ ~~thereby~~ ~~for~~ ~~going~~ ~~sales~~ higher this ratio more efficiently we are managing inventory

Receivables Turnover & Day's sales in Receivables

Our inventory measures give some indication of how fast we can sell products. We know look at how fast we collect on those sales.

$$\text{Receivable turnover} = \frac{\text{Sales}}{\text{Account receivable}}$$

This ratio makes more sense if we convert it to days, so the day's sales in receivable is

$$\text{Day's Sales Receivable} = \frac{365 \text{ days}}{\text{Receivable turnover}}$$

Return on Assets

ROA is a measure of profit per dollar of assets. ~~It can~~

$$\text{Return on Assets} = \frac{\text{Net income}}{\text{Total assets}}$$

Return on Equity

ROE is a measure of how stockholders fared during the year. Because benefiting shareholders

is our goal, ROE is in an accounting sense the true bottom-line measure of performance.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Total equity}}$$

Market capitalization

The market capitalization of a public firm is the stock market price per share multiplied by the number of shares outstanding.

Enterprise value,

Enterprise value is a measure of firm value that is very closely related to market capitalization. The purpose of the EV measure is to better estimate how much it would take to buy all of the outstanding stock of a firm and also to pay off the debt.

Financial Models :-

Most financial planning models output proforma financial statement, proforma means as a matter of form. That financial statement are the form we use to summarize the projected future financial status of a company.

Income Statements :-

The income statement measures the performance of a company in annual year.

Balance sheet :-

A statement that show the financial position of a company at a particular time by listing the amount of cash that the company has & the amount of cash its owes.

External Financing & Growth -

External financing needed and growth are related.

All other thing staying the same, the higher the rate of growth in sales or assets, the greater will be the need for external financing.

The internal Growth rate:-

The growth rate of interest is the maximum growth rate that can be achieved with no external financing of any kind. We call this internal growth rate because this is the rate the firm can maintain with internal financing only.

The sustainable Growth rate:-

The 2nd growth rate of interest is the maximum growth rate a firm can achieve with no external equity financing if it maintains a constant debt equity ratio.

Chapter : 4

Net Present Value

The multiperiod case :

Future Value :

Future value is the value of a current asset at a future date based on an assumed rate of growth.

Compounding :

The process of leaving the money in the financial market and lending it for another year is called compounding.

Simple Interest :

The term $2xr$ represent simple interest over the two years, & the term r^2 is referred to as the interest on interest.

Compound Interest :-

When cash is invested at compound interest each interest payment is reinvested.

The Power of Compounding :-

Most people who have had any experience with compounding are impressed with its power over long term periods.

Present value :-

The sum of money which if invested now at a given rate of compound interest will accumulate exactly to a specified amount at a specified future date.

Discounting :

This process of calculating the present value of a future cash flow is called discounting.

Simplification :

These concepts allow one to answer a host of ~~future~~ ^{problems} concerning the time value of money the human effort involved can frequently be excessive.

we provide simplifying formulas

Perpetuity:

A Perpetuity is constant stream of cash flows without end.

Growing perpetuity

One assumes that this rise will continue indefinitely the cash flow stream is term a growing Perpetuity

Important point of growing perpetuity:

Numerator:

The numerator is the cash flow one period hence not at date 0.

The interest rate & the growth rate:

The interest rate r must be greater than the growth rate g for the growing perpetuity formula to work.

The timing assumption:-

Cash generally flows into and out of real-world firms both randomly and nearly continuously.

Annuity:

An annuity is a level stream of regular payments that lasts for a fixed number of periods.

Growing Annuity :-

A growing annuity which is a finite number of growing cash flows.

Chapter: 5

Net Present value and Investment Rules

Net Present value

Net Present Value (NPV) is the difference between the present value of cash inflows and the present value of cash outflow over period of time. NPV is used in capital budgeting & investment planning to know the profitability of a projected investment or project.

The Payback Period Method:

The payback period refers to the amount of time it takes to recover the cost of an investment.

The Discounted Payback Period Method

Aware of the problems of payback, some decision makers use a variant called the discounted payback period method.

The Internal Rate of Return :-

The internal rate of return is a measure of an investment's rate of return. The term internal refers to the fact that the calculation excludes external factors, such as the risk free rate. It is also called the discounted cash flow rate of return.

Independent project

An independent project is one whose accept or reject is independent of the accepts and rejects of other projects.

Mutually exclusive investment:-

Mutually exclusive investment refer to a set of projects out of which only one project can be selected for investment.

A decision to undertake one project from mutually exclusive projects excludes all other projects from consideration.

Modified IRR:

The modified IRR method which handles the multiple IRR problem by combining cash flow until only one change in sign remains.

The Guarantee against multiple IRRs:-

If the 1st cash flow of a project is negative (because it is the initial investment) and if all of the remaining flows are positive, there can be only

a single unique IRR no matter how many periods the project lasts.

Profitability Index:-

Profitability index also known as profit investment ratio and value investment ratio is the ratio of payoff to investment of a proposed project. It is a useful tool for ranking projects because it allows you to quantify the amount of value created per unit of investment.

Chapter: 6

Making Capital Investment Decisions

Incremental Cash flow: The key to capital budgeting

Cash Flows - Not Accounting Income

Techniques in corporate finance generally use cash flow whereas financial accounting generally stresses income or earnings number. Net Present Value technique is a discount cash flow not earnings. Always discount cash flows, not ~~to~~ earnings when performing a capital budgeting calculation. Earnings do not represent real money. In calculating the NPV of a project only cash flows that are incremental to project should be used.

Cashflow change in the firm's cashflows that occur as a direct consequence of accepting the project.

The use of incremental cash flows sounds easy enough but pitfalls abound in the real world.

Sunk Cost :

A sunk cost is a cost that has been incurred before that time to be found. Because sunk costs are in the past they cannot be changed by the decision to accept or reject the project.

Opportunity Costs :-

If the assets are used in a new project, potential revenues from alternative uses are lost. These lost revenues can meaningfully be viewed as cost. They are called opportunity costs.

Allocated Cost :-

Accountants allocate this cost across the different projects when determining income. In capital budgeting purpose this allocated cost should be viewed as a cash outflow of a project only if it is an incremental cost of the project.

Investment :

The outlay of money usually for income or profit it is called investment.

Three parts of investment:-

The bowling ball machine:

The purchase requires an immediate (year 0) cash outflow 100000. The firm realize a cash inflow when the machine is sold in year 5.

The opportunity cost of not selling the warehouse:

Accepts the bowling ball project, it will use a warehouse and land that could otherwise be sold.

The investment in working capital:

working capital rises over the early years of the project as expansion occurs. All working capital is assumed to be recovered at the end a common assumption in capital budgeting.

Salvage value:

when selling an asset, one must pay taxes on the difference between the asset's sales price and its book value. Therefore, taxes must be estimated if the sale of an asset is part

'of a capital budgeting project.

Inflation & capital budgeting

Inflation is an important fact of economic life, and it must be considered in capital budgeting. we begin our examination of inflation by considering the relationship b/w interest rates and inflation

Nominal cash flow:-

A nominal cash flow refers to the actual dollars to be received (or paid out).

Real cash flow:-

A real cash flow refers to the cash flow's purchasing power.