Corporate Restructuring

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Definition: The **Corporate Restructuring** is the process of making changes in the composition of a firm’s one or more business portfolios in order to have a more profitable enterprise. Simply, reorganizing the structure of the organization to fetch more profits from its operations or is best suited to the present situation.

1. **Financial Restructuring**: The Financial Restructuring may take place due to a drastic fall in the sales because of the adverse economic conditions. Here, the firm may change the equity pattern, cross-holding pattern, debt-servicing schedule and the equity holdings. All this is done to sustain the profitability of the firm and sustain in the market. Generally, the financial or legal advisors are hired to assist the firms in the negotiations.

2. **Organizational Restructuring**: The Organizational Restructuring means changing the structure of an organization, such as reducing the hierarchical levels, downsizing the employees, redesigning the job positions and changing the reporting relationships. This is done to cut the cost and pay off the outstanding debt to continue with the business operations in some manner.

Meaning and Need for Corporate Restructuring

Corporate restructuring is the process of redesigning one or more aspects of a company. The process of reorganizing a company may be implemented due to a number of different factors, such as positioning the company to be more competitive, survive a currently adverse economic climate, or poise the corporation to move in an entirely new direction.

Restructuring a corporate entity is often a necessity when the company has grown to the point that the original structure can no longer efficiently manage the output and general interests of the company. For example, a corporate restructuring may call for spinning off some departments into subsidiaries as a means of creating a more effective management model as well as taking advantage of tax breaks that would allow the corporation to divert more revenue to the production process. In this scenario, the restructuring is seen as a positive sign of growth of the company and is often welcome by those who wish to see the corporation gain a larger market share.

Characteristics of Corporate Restructuring

1. To improve the company's Balance sheet, (by selling unprofitable division from its core business).
2. To accomplish staff reduction (by selling/closing of unprofitable portion).
3. Changes in corporate management.
4. Sale of underutilized assets, such as patents/brands.
5. Outsourcing of operations such as payroll and technical support to a more efficient 3rd party.
6. Moving of operations such as manufacturing to lower-cost locations.
7. Reorganization of functions such as sales, marketing, & distribution.
8. Renegotiation of labor contracts to reduce overhead.
9. Refinancing of corporate debt to reduce interest payments.
10. A major public relations campaign to reposition the company with consumers.
11.

Reasons for Corporate Restructuring

Corporate rebuilding is executed in the following circumstances:

Change in the Strategy: The administration of the troubled element endeavors to improve its exhibition by disposing of its specific divisions and backups which don't line up with the center technique of the organization. The division or backups may not seem to fit deliberately with the organization's long haul vision. In this way, the corporate element chooses to concentrate on its center methodology and discard such resources for the potential purchasers.

Absence of Profits: The endeavour may not be making sufficient benefit required to take care of the capital expenses of the organization and may cause financial misfortunes. The lacklustre showing of the endeavor might be the aftereffect of an off-base choice taken by the administration to begin the division or the decrease in the benefit of the endeavor because of the adjustment in client needs or expanding costs.

Switch Synergy: This idea is opposed to the standards of cooperative energy, where the estimation of a blended unit is more than the estimation of individual units on the whole. As indicated by switch cooperative energy, the estimation of an individual unit might be more than the combined unit. This is one of the basic explanations behind stripping the advantages of the organization. The concerned substance may choose that by stripping a division to an outsider it can bring more worth as opposed to owning it.

Income Requirement: Disposing of an ineffective endeavour can give a significant money inflow to the organization. If the concerned corporate substance is confronting some multifaceted hurdles in getting funds, discarding a benefit is a methodology to fund-raising and to pay off past commitments.

Problems in Implementing Corporate Restructuring

1. Managing consensus within the promoter group and sometimes between promoters and management is cumbersome job. Conflicting stakeholders' perspective is certainly one such factor and efficient mechanism for equitable balancing of interests needed.

2. Arriving at consensus among and with the institutional investors and lenders is time consuming process that slows down the restructuring programme.

3. Inadequate upfront planning and evaluation particularly relating to tax, and regulatory laws and other implementation issues have been noted as forces retarding the speed of restructuring effort.

Inadequacy of bankruptcy and foreclosure laws and the lack of facilitating environment for debt restructuring are adversely affecting restructuring exercises. Stamp duty regulations, capital gains of unabsorbed depreciation and business losses significantly increase transaction costs, introduce uncertainty and impose restrictive covenants on the companies engaged in restructuring programme.

4. Limited flexibility in optimization of labour due to highly restrictive and outmoded labour laws impair the ability of the firm to reduce cost, liquidate unviable businesses, redeploy assets or shift operations to low cost areas.

5. Another major issue relating to any restructuring programme is promoters' concern to maintain their control over group companies while mobilizing the resources required for growth. An avoidable route that promoters have sometimes taken in the past is to leverage listed group companies to finance their holdings.

What is Mergers & Acquisitions?

Mergers and acquisitions (M&A) are defined as consolidation of companies. Differentiating the two terms, **Mergers** is the combination of two companies to form one, while **Acquisitions** is one company taken over by the other. M&A is one of the major aspects of corporate finance world. The reasoning behind M&A generally given is that two separate companies together create more value compared to being on an individual stand. With the objective of wealth maximization, companies keep evaluating different opportunities through the route of merger or acquisition.

Mergers and **acquisitions** are both **changes in control** of companies that involve combining the operations of multiple entities into a single company.

Merger Definition-

The process of merger involves combining of two companies as a single company. In merger, both the companies mutually agree to merge themselves.

The process of merger is generally adopted for business growth and it is done on a permanent basis. Generally, merger takes place between two companies. However, more than two companies can also participate in the process.

There are two important concepts in merger-

Acquiring company-

It is a single existing company which purchases the majority of equity shares of another company

Acquired company-

It surrenders its majority of equity shares to the acquiring company.

Types of Mergers-

There are various types and forms of mergers. Some of them are listed below-

Horizontal merger

Merger of two companies that are in direct competition. Such companies share the same product lines and markets.

Vertical merger

Merger of a customer and company or a supplier and company.

Example- Merger of a cone supplier with an ice cream maker.

Market-extension merger

This includes the merger of two companies that sell the same products in different markets.

Product-extension merger

This is the merger of two companies selling different but related products in the same market.

Conglomeration

This is the merger of two companies that have no common business areas.

Some examples of well-known Mergers are-

- British Salt (UK) merged with TATA Chemicals (India)

Acquisition Definition / Acquisition meaning –

In the process of acquisition, one company buys majority of the company ownership stakes of the target company in order to obtain control over the same.

Acquisitions often form a vital part of a company's growth strategy. For such firms, it is more beneficial to take over an existing firm's operations rather than expanding its own operations.

Acquisitions can be both, friendly or hostile. In Friendly acquisitions, the target firm offers its agreement to get acquired. Whereas in hostile acquisitions the target firm does not give any agreement, thus the acquiring firm purchases a large stakes of the target company in order to have a majority stake in it.

Stages involved in any M&A:

Phase 1: Pre-acquisition review:

This would include self assessment of the acquiring company with regards to the need for M&A, ascertain the valuation (undervalued is the key) and chalk out the growth plan through the target.

Phase 2: Search and screen targets:

This would include searching for the possible apt takeover candidates. This process is mainly to scan for a good strategic fit for the acquiring company.

Phase 3: Investigate and valuation of the target:

Once the appropriate company is shortlisted through primary screening, detailed analysis of the target company has to be done. This is also referred to as due diligence.

Phase 4: Acquire the target through negotiations:

Once the target company is selected, the next step is to start negotiations to come to consensus for a negotiated merger or a bear hug. This brings both the companies to agree mutually to the deal for the long term working of the M&A.

Phase 5:Post merger integration:

If all the above steps fall in place, there is a formal announcement of the agreement of merger by both the participating companies.

What are the Different Motives for Mergers?

Companies pursue mergers and acquisitions for several reasons. The most common motives for mergers include the following:

1. Value creation

Two companies may undertake a merger to increase the wealth of their shareholders. Generally, the consolidation of two businesses results in synergies that increase the value of a newly created business entity. Essentially, synergy means that the value of a merged company exceeds the sum of the values of two individual companies. Note that there are two types of synergies:
Revenue synergies: Synergies that primarily improve the company's revenue-generating ability. For example, market expansion, production diversification, and R&D activities are only a few factors that can create revenue synergies.

Cost synergies: Synergies that reduce the company's cost structure. Generally, a successful merger may result in economies of scale, access to new technologies, and even elimination of certain costs. All these events may improve the cost structure of a company.

2. Diversification

Mergers are frequently undertaken for diversification reasons. For example, a company may use a merger to diversify its business operations by entering into new markets or offering new products or services. Additionally, it is common that the managers of a company may arrange a merger deal to diversify risks relating to the company's operations.

Note that shareholders are not always content with situations when the merger deal is primarily motivated by the objective of risk diversification. In many cases, the shareholders can easily diversify their risks through investment portfolios while a merger of two companies is typically a long and risky transaction. Market-extension, product-extension, and conglomerate mergers are typically motivated by diversification objectives.

3. Acquisition of assets

A merger can be motivated by a desire to acquire certain assets that cannot be obtained using other methods. In M&A transactions, it is quite common that some companies arrange mergers to gain access to assets that are unique or to assets that usually take a long time to develop internally. For example, access to new technologies is a frequent objective in many mergers.

4. Increase in financial capacity

Every company faces a maximum financial capacity to finance its operations through either debt or equity markets. Lacking adequate financial capacity, a company may merge with another. As a result, a consolidated entity will secure a higher financial capacity that can be employed in further business development processes.

5. Tax purposes

If a company generates significant taxable income, it can merge with a company with substantial carry forward tax losses. After the merger, the total tax liability of the consolidated company will be much lower than the tax liability of the independent company.

6. **Incentives for managers**

Sometimes, mergers are primarily motivated by the personal interests and goals of the top management of a company. For example, a company created as a result of a merger guarantees more power and prestige that can be viewed favorably by managers. Such a motive can also be reinforced by the managers' ego, as well as his or her intention to build the biggest company in the industry in terms of size. Such a phenomenon can be referred to as "empire building," which happens when the managers of a company start favoring the size of a company more than its actual performance.

Additionally, managers may prefer mergers because empirical evidence suggests that the size of a company and the compensation of managers are correlated. Although modern compensation packages consist of a base salary, performance bonuses, stocks, and options, the base salary still represents the largest portion of the package. Note that the bigger companies can afford to offer higher salaries and bonuses to their managers.

Common Reasons Why Mergers and Acquisitions Fail

- **Insufficient due diligence**

The importance of due diligence can never be emphasized enough, partly because so many firms are evidently keen to get it over with as soon as possible. One of the major problems that arises during the process is that the acquirer is depending on the target company to provide information that isn't always complimentary to their management. This creates obvious agency problems.

By extension, the more uncomplimentary the information, the more the target company team is likely to withhold it and/or explain it away. In extreme cases, this can lead to the failure of the transaction in the long-run.

- **Lack of a strategic plan**

A good '**why**' is an essential component of all successful M&A transactions. That is, without a good motive for a transaction, it's doomed to failure from the outset.A good rule of thumb here is that the less simply the motive for the transaction can be explained, the more likely it is to be a failure. 'Market share' is a good motive; 'become a visionary in the industry' is not.

- **Lack of cultural fit**

Perhaps '**inability to acknowledge cultural differences**' might be a better title.

Why?

Because cultural difference in itself isn't a problem - rather, it's the inability (or unwillingness) to acknowledge them and look to bridge the gap. As we have stated in earlier articles [How to Drive Change Management During M&A Integration], it's vital that any two companies engaging in a transaction use a change manager to oversee the process. Underestimating this element of mergers and acquisitions as merely a '**soft area**' of the transaction has led to billions of dollars being destroyed over the years.

- **Overextending resources**

'**Bolt on**' mergers and acquisitions - that is, target companies which are small in size relative to the acquiring company - are usually considered to be the best type of transactions. One of the main strands of thought behind this is that they don't require as many resources to be acquired or to be integrated.

At the other side of this equation, are those transactions that require significant resources on the part of the acquiring firm. Loading up on debt to acquire any firm creates a pressure from day one to cut costs - never a good start for a deal, and often the beginning of the end.

- **External factors**

External factors , refers to everything that's out of the manager's control. 2020 provides us with a readily available example. Suppose the managers of two hotel chains are considering a merger. It makes sense on almost every level - financial, cultural and strategic. There is no overlap in geography, meaning regional hotel chains are joining to create a national chain.

On paper, it is perfect. As soon as the deal closes, a pandemic sweeps the world, tourism stops and money dries up. The deal has been a failure because of external factors that few could have foreseen.

- **Lack of management involvement**

The most obvious reason for failure is left till last. Management involvement is something of a catch-all answer and often incorporates many of the other reasons on this list. No stage of the M&A process will manage itself, be that the search for a suitable target firm to the integration of the two firms into the newly formed entity. When managers deem other tasks in their company to be more important than the successful implementation of M&A, they shouldn't be surprised when their deal is eventually deemed a failure.

- **Misunderstanding the target company**

Even due diligence doesn't guarantee that you'll fully understand the target company. It gives you the best opportunity to do so, but there are plenty of cases where even a lengthy period of due diligence doesn't let you know what makes a company tick. The example of British grocery retailer Morrisson's acquiring rival company Safeway in 2003 is testament to this. What looked on paper like a great deal for Morrisson's - expanding their footprint all over the UK - turned into a nightmare, essentially because the two firms served completely different types of customers.

- **Wrong time in industry cycle**

For the myriad of reasons cited for the failure of the notorious AOL/Time Warner deal, one is seldom given: The year 2000 was not a good time for media firms to merge. The media industry was about to undergo the biggest shake-up in its history, from which it is only now beginning to show signs of recovery.

The inability to see long-term shifts is a human trait (we overestimate change in the short-term and underestimate it in the long-term) and one that catches out many managers in M&A, ultimately leading to the downfall of many transactions.

Reverse Mergers

Reverse merger is also known as Reverse Takeover (RTO). A reverse takeover (RTO) is a process whereby private companies can become publicly traded companies without going through an initial public offering (IPO).

To begin, a private company buys enough shares to control a publicly-traded company.At this point, the private company has effectively become a publicly-traded company.

- A reverse takeover (RTO) is a process whereby private companies can become publicly traded companies without going through an initial public offering (IPO).
- While reverse takeovers (RTOs) are cheaper and quicker than an IPO, there can often be weaknesses in an RTO's management and record-keeping, among other things.
- Foreign companies may use reverse takeovers (RTOs) to gain access and entry to the U.S. marketplace.
- A reverse merger is an attractive strategic option for managers of private companies to gain public company status.
- It is a less time-consuming and less costly alternative to the conventional initial public offerings (IPOs).

Reverse mergers typically occur through a simpler, shorter, and less expensive process than a conventional IPO. With an IPO, private companies hire an investment bank to underwrite and issue shares of the new soon-to-be public entity.

By engaging in an RTO, a private company can avoid the expensive fees associated with setting up an IPO. However, the company does not acquire any additional funds through an RTO, and it must have enough funds to complete the transaction on its own.

Advantages of Reverse Mergers

- **Simplified process**: The conventional method of offering a public issue through IPO usually takes months or years to materialize, whereas a reverse merger is done swiftly within a period of weeks. This saves a lot of time and effort for the management of the company

- **Risk minimization**: Though several months are put into planning out the IPO, it is conventionally never guaranteed if the company would actually go in for the IPO. At times the stock market may seem really unfavorable, and the deal may get canceled, and all of the efforts sometimes do go into waste

- **Less dependence on the market**: All the laborious tasks of undertaking roadshows to gauge the market sentiment and convince the potential investors to undertake subscriptions of the upcoming issue is not a matter of concern when a company adopts the route of reverse mergers. It even need not be even concerned when it comes to subscription and market acceptance of the offer. Since the process of this mergers is merely a mechanism to convert a private company into a public one, the market conditions have little or no bearing on the company that wants to go public

- **Less costly:** Since there are no hefty fees to be paid for investment bankers, unlike in the case of public issuances, this adopted measure of reverse merger becomes cost-efficient to the company. Further, it may also exempt itself from all of the lengthy procedures involved in regulatory filings and preparation of prospectus.

- **Gains the benefits of a public company:** Once a private company goes public. The companies' shares will now be traded on a public stock exchange and thus would help it gain the advantage of additional liquidity. The company now will have further access to capital markets to issue further shares through even secondary offerings.

Disadvantages of a Reverse Merger

- **Information asymmetry:** Since the process of due diligence is often overlooked, the letters and bank statements may often be forged by dishonest management as there is little transparency, thereby causing information asymmetry

- **New burden of compliance:** When a private company goes public, it often happens that managers are often sometimes inexperienced when it comes to all of the requirements that come along in being a public company. These burdens may often result in affecting the performance of the company if managers tend to focus more on all of the administrative concerns than having to run the business

Limitations

- It is often noticed that it is the IPO process that raises more money, contrary to a reverse merger process
- It lacks the market support for the stock, which is usually prevalent in case of an IPO

What is an Acquisition?

An acquisition is defined as a corporate transaction where one company purchases a portion or all of another company's shares or assets. Acquisitions are typically made in order to take control of, and build on, the target company's strengths and capture synergies. There are several types of business combinations: acquisitions (both companies survive), mergers (one company survives), and amalgamations (neither company survives).

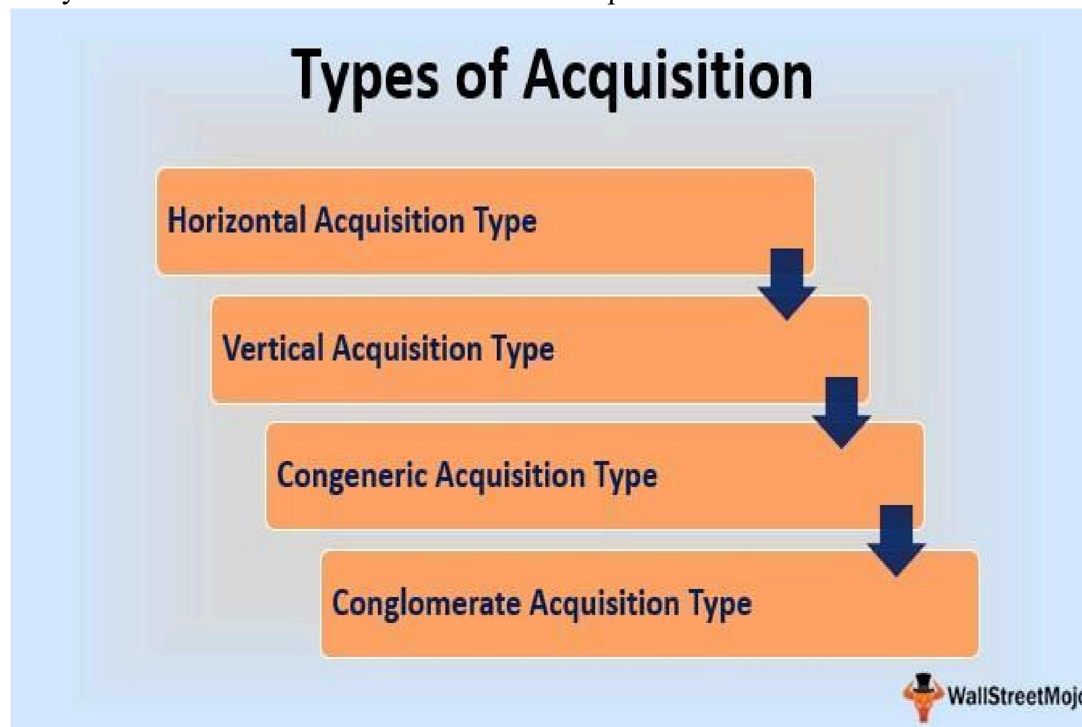
The acquiring company buys the shares or the assets of the target company, which gives the acquiring company the power to make decisions concerning the acquired assets without needing the approval of shareholders from the target company.

List of Top 4 Acquisition Types

The top 4 acquisition types are as follows –

- Horizontal Acquisition
- Vertical Acquisition
- Congeneric Acquisition
- Conglomerate Acquisition

Mergers and Acquisitions are considered key for growth in the market in a short span of time in today's corporate world.



#1 – Horizontal Acquisition Type

In the market, the biggest factor to be factored while drafting any business formula is competition. If the entity has to grow in the market, it will have to constantly strive to maximize its share in the market. In the market, an entity, which is thriving at the same stage of production, capacity, and serving the same class of customers, will be considered as the competitor. In order to cover the market, either entity will have to serve better quality of products or try to eliminate the competition. Competition can be easily eliminated by acquiring the competitor. It is termed a horizontal acquisition.

Example of Horizontal Acquisition

Company A and Company B produce a cell phone in the market. Now, if Company A acquires Company B, then company A will be able to serve the customer base of Company B also under its brand name. It will help in penetrating the market and, as a result, will act as the market leader.

#2 – Vertical Acquisition Type

To have all the activity related to any business gives synergy benefit to any entity. A vertical acquisition can be made by either backward integration or forward integration. Any wholesaler who is having a monopoly in the trading, it acquires any manufacturing unit producing the same commodity, will be considered as backward integration. It will help in obtaining the inventories at highly reasonable rates. If the same wholesaler acquires retail stores, it will be considered as forwarding integration. It will give direct customer-facing, which will help in earning the retail level profit. The above process is termed a vertical acquisition.

Example of Vertical Acquisition

The company, named Target Corporation, is the best example of vertical acquisition. The company is one of the largest retail chain holders in the USA. It has its manufacturing unit, its distribution channels, own wholesale, and retail stores, which covers a large number of customer base and helps itself by removing any kind of intermediary.

#3 – Congeneric Acquisition Type

Modern society is highly lacking in time. People prefer a one-stop-shop and try to optimize time for shopping by acquiring all the necessities from the same roof. Due to this only, shopping malls have thrived in the market. It helps individuals to satisfy their various needs from the same vendor, which will not only save time but will also put pressure on them to ensure the better quality of the products. Moreover, an entity will be in a position to charge premiums from the customer to offer the various products together, which will help in satisfying the single need of the customer. It helps the acquirer to enjoy the different areas of the same industry, which will be served to the same customer.

Example of Congeneric Acquisition

Citi Group is the global Banking Corporation. Its core business focuses on providing banking services to the customers. The major crunch of it is large corporates whose presence is there across the globe. Such large corporates have executives who are frequently traveling throughout the world for business meetings. For such executives, there is a huge need to take travel insurance. Citi Group identified this requirement of travel insurance and acquired Travelers Insurance Company. With the help of this, Citi group is now able to same large corporate clients, even travel insurance along with banking services.

#4 – Conglomerate Acquisition Type

Under these types of acquisition, Conglomerate Acquisition occurs in between the entity that is a completely indifferent product line, different geographies, and different customer base and has a completely different business model. It means such firms will be having nothing common in them, and they plan to undertake such acquisition to diversify their risk and try to cover the new market. Such types of acquisition will help to provide the existing products to the customers of the newly acquired company and vice versa. Such a diversification strategy helps both the firm in the diversification of business, Synergy benefits, increasing customer base, and to achieve better economies of scale.

Conclusion

The acquisition helps to see the new market, customer base, and to obtain the synergy gains. It will not only give the edge to a firm but will also bring maturity in the maturity in the operations of the firm.

What is a Joint Venture (JV)?

A joint venture (JV) is a commercial enterprise in which two or more organizations combine their resources to gain a tactical and strategic edge in the market. Companies often enter into a joint venture to pursue specific projects. The JV may be a new project with similar products or services or it may involve creating an entirely new firm with different core business activities.

Companies initiate a JV through a contractual agreement between all concerned parties. The profit and loss from the venture are shared by the participants.

Advantages of Joint Ventures

A joint venture offers several advantages to its participants. It can help a business grow faster, increase productivity, and generate additional profits.

1. Shared investment

Each party in the venture contributes a certain amount of initial capital to the project, depending upon the terms of the partnership arrangement, thus alleviating some of the financial burden placed on each company.

2. Shared expenses

Each party shares a common pool of resources, which can bring down costs on an overall basis.

3. Technical expertise and know-how

Each party to the business often brings specialized expertise and knowledge, which helps make the joint venture strong enough to move aggressively in a specified direction.

4. New market penetration

A joint venture may enable companies to enter a new market very quickly, as all relevant regulations and logistics are taken care of by the local player. A common joint venture arrangement is one between a company headquartered in country "A" and a company headquartered in country "B" that wants to obtain access to the marketplace in country "A". With the formation of the joint venture, the companies are able to expand their product portfolio

and market size, and the country B company obtains easy access to the marketplace in country A.

5. New revenue streams

Small businesses often face having limited resources and access to capital for growth projects. By entering into a joint venture with a larger company with more financial resources, the small business can expand more quickly. The larger company's extensive distribution channels may also provide the smaller firm with larger and/or more diversified revenue streams.

6. Intellectual property gains

Advanced technology is often difficult for businesses to create in-house. Therefore, companies often enter into joint ventures with technology-rich firms to gain access to such assets without having to spend the time and money to develop the assets for themselves in-house. A large firm with good access to financing may contribute their working capital strength to a joint venture with a firm that has only limited financing capabilities but that can provide key technology for the development of products or services.

7. Synergy benefits

Joint ventures can offer the same type of synergy benefits that companies often look for in mergers and acquisitions – either financial synergy which lowers the cost of capital, or operational synergy where two firms working together increases operational efficiency.

8. Enhanced credibility

It typically takes some significant period of time for a young business to build market credibility and a strong customer base. For such companies, forming a joint venture with a larger, well-known brand can help them achieve enhanced marketplace visibility and credibility more quickly.

9. Barriers to competition

One of the reasons for forming a joint venture is also to avoid competition and pricing pressure. Through collaboration with other companies, businesses can sometimes effectively erect barriers for competitors that make it difficult for them to penetrate the marketplace.

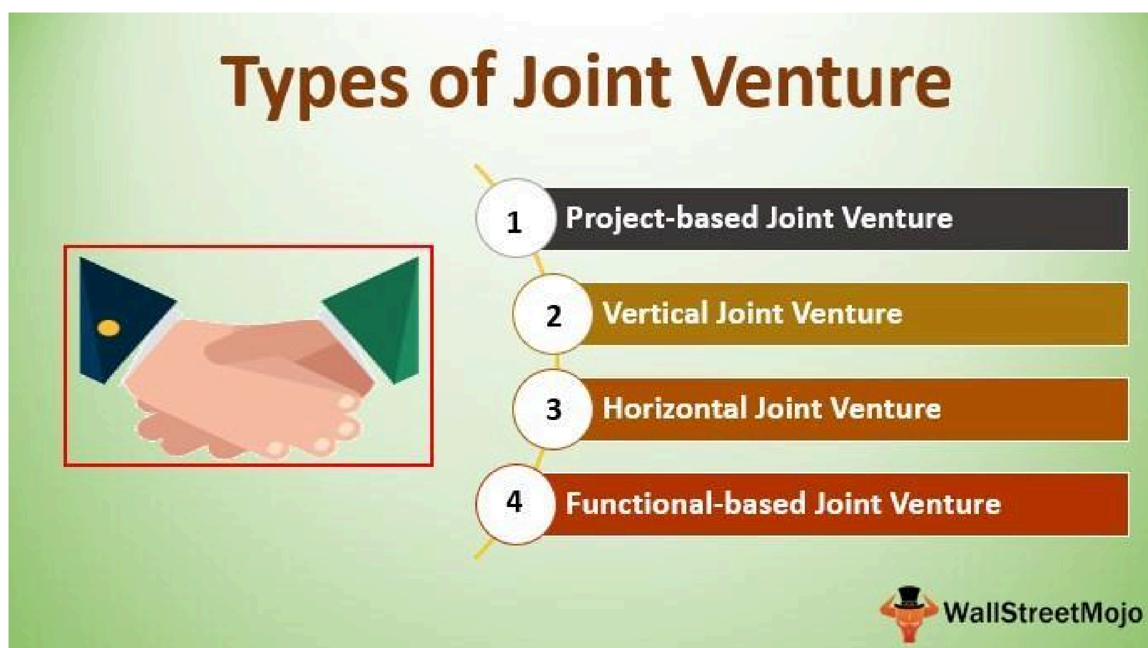
10. Improved economies of scale

A bigger company always enjoy the economies of scale, which again is enjoyed by all the parties in the JV. This refers back to the notion of operational synergy.

There are mainly four types of a joint venture which includes –

1. **Project-based joint venture** – where the joint venture is done with the motive of completing some specific task.
2. **Vertical joint venture** – where the joint venture takes place between the buyers and the suppliers
3. **Horizontal joint venture** – where the joint venture takes place between companies having the same line of business
4. **Functional-based joint venture** – where the joint venture is done with the motive of getting mutual benefit on account of synergy.

Let us discuss each type of joint venture in detail –



#1 – Project-Based Joint Venture

Under this type of Joint Venture, companies enter into a Joint Venture to achieve a specific task, which can be an execution of any specific project or a particular service to be offered together, Assignment, etc. Such collaboration is usually undertaken between companies for an exclusive and specific purpose only and, as such, ceases to exist once the particular project is completed. In other words, these types of Joint Ventures are bound by time or a particular project.

Example

Another example to understand this type of Joint Venture is reproduced below:

Cipla is a traditional pharmaceutical manufacturer and wants to enter the booming business of biocon. On the other hand, Biocon is a biotechnology firm. Cipla intends to utilize the research and development resources of Biocon to develop a particular drug for the treatment of some ailment. Now one way to achieve this objective is to buy Biocon. Still, in that case, Cipla

indirectly is buying many other areas in which Biocon cater to, in which Cipla may not be interested, and this will also result in an expensive way of gaining the research capability that it intends to gain from Biocon.

In order to make it a fruitful and synergize Joint Venture, the two companies, namely Biocon, which has research capabilities, and Cipla, which has in place a widespread marketing network, can come together and enter into a project-based joint venture in which the two businesses come together for this one activity and may not necessarily do anything else together in the future. By doing such a venture, both can gain from each other's resources.

#2 – Functional Based Joint Venture

Under this type of Joint Venture agreement, companies come together to achieve a mutual benefit on account of synergy in terms of functional expertise in certain areas, which together enables them to perform more efficiently and effectively. The rationale companies focus on before entering such Joint Venture is whether the likelihood of performing better is more together than doing it separately and more effectively.

Example

Company A specializes in the formulation business and has various patents trademarked under its name but due to lack of funding company is unable to put such formulation of commercial usage. On the contrary, Company B is a cash-rich Pharma company that lacks in-house patents but holds experience in commercial success and also has adequate funding capacity. Together these two companies can mutually benefit and can complement each other by entering into a Functional Based Joint Venture.

#3 – Vertical Joint Venture

Under this type of Joint Venture, transactions take place between buyers and suppliers. It is usually preferred when bilateral trading is not beneficial or economically viable. Normally in such Joint Ventures, maximum gain is captured by suppliers, while limited gains are achieved by buyers. Under these types of Ventures, different stages of an industry chain are integrated within to create more economies of scale. Usually, Vertical Joint Ventures enjoy a higher success rate and also deepen the relationship between the Buyers and Suppliers, which ultimately help benefit the businesses in offering quality products and services to customers at reasonable prices.

Example

Let's understand the same with the help of an example:

Lincoln Corp has made investments in certain machinery and capital instruments required to produce Buyer specific products. Since the investments are made by Lincoln exclusively to meet the needs of the buyer (let say, Prawn International). By entering into a Vertical Joint Venture with Prawn International, Lincoln Corp can avoid the uncertainty associated with contracts, which are usually for a specified time period only and can lead to discontinued business.

#4 – Horizontal Joint Venture

Under this type of Joint Venture, the transaction happens between companies that are in the same general line of business and that may use the products from the Joint venture to sell to their own customers or to create an output that can be sold to the same group of customers. Managing a horizontal joint Venture is usually cumbersome and often results in disputes as the alliance is between partners, which are into the same line of business. Also, these types of Joint Ventures suffer from opportunistic behavior between the partners due to being in the same general line of business. Under such types of Joint Ventures, the gains are equally shared by both parties.

Example

Let's understand the same with the help of an example:

Base International is an Indian company specialized in steel extrusion business and caters to various industrial units. Frank LLC is a US-based firm specializing in the molding of steel frames which has application in Industrial Units. The two companies decided to enter into a Horizontal Joint Venture under which Frank LLC, the foreign partner, will offer technical collaboration and foreign exchange component while Base International, the Indian counterpart, will make available its site, local machinery, and product parts and together with a new steel extrusion product will be offered by the two companies to its existing clients. Thus by this type of Joint Venture, both firms were able to sell the product in multiple markets and also gain from each other expertise, thereby putting resources to better usage.

Conclusion

The type of Joint Venture entered into is dependent upon the circumstances of each case, and also the type of synergy companies intend to achieve, but no matter whichever type of Joint Venture is opted for, it acts as a stepping stone through which companies can analyze and assess how well they work together and open getaways for future collaboration.

Due Diligence

Due diligence is the investigation or exercise of care that a reasonable business or person is normally expected to take before entering into an agreement or contract with another party or an act with a certain standard of care.

One of the most important and lengthy processes in an M&A deal is Due Diligence. The process of due diligence is something that the buyer conducts to confirm the accuracy of the seller's claims. A potential M&A deal involves several types of due diligence.

Types of Due Diligence

Due diligence (DD) is an extensive process undertaken by an acquiring firm in order to thoroughly and completely assess the target company's business, assets, capabilities, and financial performance. There may be as many as 20 or more angles of due diligence analysis.
The main types of due diligence inquiry are as follows:

1. Administrative DD

Administrative DD is the aspect of due diligence that involves verifying admin-related items such as facilities, occupancy rate, number of workstations, etc. The idea of doing due diligence is to verify the various facilities owned or occupied by the seller and determine whether all operational costs are captured in the financials or not. Admin DD also gives a better picture of the kind of operational cost the buyer is likely to incur if they plan to pursue expansion of the target company.

2. Financial DD

Financial DD aims to provide a thorough understanding of all the company's financials, including, but not restricted to, audited financial statements for the last three years, recent unaudited financial statements with comparable statements of the last year, the company's projections and the basis of such projections, capital expenditure plan, schedule of inventory, debtors and creditors, etc.

The financial due diligence process also involves analysis of major customer accounts, fixed and variable cost analysis, analysis of profit margins, and examination of internal control procedures. Financial DD additionally examines the company's order book and sales pipeline in order to create better (more accurate) projections.
Many acquirers have a separate section of financial analysis focused on the target company's debt situation, evaluating both short-term and long-term debt, applicable interest rates, the company's ability to service its outstanding debt and to secure more financing if needed, along with an overall examination and evaluation of the company's capital structure.

3. Asset DD

Another type of due diligence conducted is asset DD. Asset due diligence reports typically include a detailed schedule of fixed assets and their locations (if possible, physical verification should be done), all lease agreements for equipment, a schedule of sales and purchases of major capital equipment during the last three to five years, real estate deeds, mortgages, title policies, and use permits.

5. Human Resources DD

Human resources due diligence is extensive. It may include all of the following:

- Analysis of total employees, including current positions, vacancies, due for retirement, and serving notice period
- Analysis of current salaries, bonuses paid during the last three years, and years of service
- All employment contracts, with nondisclosure, non-solicitation, and non-competition agreements between the company and its employees. In case there are a few irregularities regarding the general contracts, any questions or issues need to be clarified.
- HR policies regarding annual leave, sick leave, and other forms of leave are reviewed.
- Analysis of employee problems, such as alleged wrongful termination, harassment, discrimination, and any legal cases pending with current or former employees
- Potential financial impact of any current labor disputes, requests for arbitration, or grievance procedures pending
- A list and description of all employee health benefits and welfare insurance policies or self-funded arrangements
- ESOPs and schedule of grants

6. Environmental DD

Due diligence related to environmental regulation is very important because if the company violates any major rule, local authorities can exercise their right to penalize the company, up to and including, shutting it down operationally. Hence, this makes environmental audits for each property owned or leased by the company one of the key types of due diligence. The following should be reviewed carefully:

- List of environmental permits and licenses and validation of the same
- Copies of all correspondence and notices from state and local regulatory agencies
- Verify that the company's disposal methods are in sync with current regulations and guidelines
- Check to see whether there are any contingent environmental liabilities or continuing indemnification obligations.

6. **Taxes DD**

Due diligence in regard to tax liability includes a review of all taxes the company is required to pay and ensuring their proper calculation with no intention of under-reporting of taxes. Additionally, verify the status of any tax-related case pending with the tax authorities.

- Documentation of tax compliance and potential issues typically includes verification and review of the following:
- Copies of all tax returns – including income tax, sales tax – for the past three to five years
- Information relating to any past or pending tax audits of the company
- Documentation related to NOL (net operating loss) or any unused credit carryforwards of deductions or tax credits

7. Intellectual Property DD

Almost every company has intellectual property assets that they can use to monetize their business. These intangible assets are something that differentiates their products and services from their competitors. They may often comprise some of the company's most valuable assets. A few of the items that need to be looked at in a due diligence review are:

- Schedule of patents and patent applications
- Schedule of copyrights, trademarks, and brand names
- Pending patents clearance documents
- Any pending claims case by or against the company in regard to violation of intellectual property

8. Legal DD

Legal due diligence is, of course, extremely important and typically includes examination and review of the following elements:

- Copy of Memorandum and Articles of Association
- Minutes of Board Meetings for the last three years
- Minutes of all meetings or actions of shareholders for the last three years
- Copy of share certificates issued to Key Management Personnel
- Copy of all guarantees to which the company is a party
- All material contracts, including any joint venture or partnership agreements; limited liability company or operating agreements
- Licensing or franchise agreements
- Copies of all loan agreements, bank financing agreements, and lines of credit to which company is a party

9. Customer DD

As customers or clients are the lifeblood of any business, the types of due diligence invariably include a close look at the target company's customer base, with examination and analysis of the following:

- The company's top customers: those who make the largest total purchases from the company and also the customers who are the "largest" in terms of their total assets – customers that are important regardless of their current level of spending with the company
- Service agreements and corresponding insurance coverage
- Current credit policies; run and review the days sales outstanding metric (DSO) to assess the efficiency of accounts receivable
- Customer Satisfaction Score and related reports for the past three years
- List, with explanations, of any major customers lost within the past three to five years
-

10. Strategic Fit

Acquirers are generally also very careful about exercising due diligence in regard to evaluating how well the target company fits in with the overall strategic business plan of the buyer. For example, a private equity firm considering a new acquisition will ask how well the proposed target will complement the firm's existing portfolio of companies. A large corporation eyeing a possible M&A deal considers how easy (or how difficult) it is likely to be to successfully merge the target company into the buyer's total corporate organization.

The following are some of the key strategic fit issues that acquirers look at and evaluate:

Does the target have important technology, products, or market access that the acquirer lacks and has need of or can make profitable use of?

Does the target have key personnel that represent a substantial gain in human resources?

Assess operational and financial synergies benefits that can be expected from the target's integration with the acquirer

If the target company is to be merged with the acquirer or another firm the acquirer already owns, examine the plan for merging and project how long the merger process will take, and estimate the cost of implementing the actual process of merging the two firms

Determine the best personnel from both the acquirer and the target to manage the merger process

Other areas of due diligence research include IT networks, issues of stocks and/or bonds, research and development (R&D), and sales and marketing. Conducting thorough due diligence is critical to any successful acquisition. Without complete and intimate knowledge of the target company, it is impossible to make the best-informed decisions on mergers and acquisitions.

In a proposed merger or a situation where shares of stock in the acquiring company constitute a major part of the purchase transaction, the target company may look to perform its own due diligence on the acquirer.

What is a Divestiture?

A divestiture takes place when a company sells an asset such as a service, piece of property, or product line. Divestitures allow companies to generate cash flow, eliminate a business segment (product line or subsidiary) that doesn't fit their main objective, lower debt, and increase shareholder value.

Major Reasons for Divestitures or why Companies Divest
Divestitures should be thought of as an integral part of a company's ongoing M&A strategy. Generating value is equally possible by divesting as it is through acquiring. And just as the decision to acquire can be motivated by several different factors, so too can the decision to divest.

Knowing when to let go of a business is important for generating value. Assets are always better sold at the top of the economic cycle rather than the bottom. Similarly, a parent company that decides to divest an asset when they don't need to, rather than we they do, is likely to achieve more in the transaction. In general terms, the reasons to divest tend to fall under one of the following:

1. Not part of core-business

This is the most commonly cited reason among managers for divesting of assets, at least in part because it's the best reason to divest: Essentially, the parent company is moving in a different direction and the asset is no longer a fit with its corporate strategy.

2. The need to generate additional funds

The need to generate additional funds - and avoid the need to sell shareholder equity or issue debt - is a common reason for divesting. There is an obvious overlap between this reason and reason 1 if the additional funds are required to make an acquisition.

3. Lack of internal talent for business

This is one of the less obvious reasons for divesting a business, but the global talent shortage hints that it may become more popular in the coming years. This is more common in service lines, where a lack of human capital may impinge on the company's ability to continue providing the service, forcing them to divest the business unit in question.

4. Opportunistic approach for asset from third party

Another common reason for divesting an asset is because an attractive offer is received from a third party - usually another company from the same industry, or a private equity company. The fact that the asset wasn't being marketed for sale should put the selling company in a better position during negotiations and typically leads to a higher selling multiple.

5. Regulatory environment or tax structure

The specific regulations around a certain industry or product category may mean that the company decides that a divestiture is the best decision. This can be seen where an industry is placed in a higher tax band, or becomes a 'strategic (read: protected) national industry', changing its value for the parent company.

Module 2

ASSET BASED VALUATION

What is Asset Base?

Asset base refers to all the assets held by a company that gives value to thebusiness. The value placed on the assets is not fixed and can fluctuate as thecompanybuysandsellsnewassets.Althoughsuchshiftsinvaluationarenormal,large swings in the value of the assets are often viewed as a red flag by analystsandexternalstakeholders.

Asset Base Value = Total Value of Assets – Total Value of Liabilities

Acompany'sassetbasemayserveas collateral for abankloanorothercredit.

KEY TAKEAWAYS

- There are several methods available for calculating the value of acompany.
- An asset-based approach identifies a company's net assets by subtracting liabilities from assets.

Asset-based Valuation Methods

1. Asset Accumulation Valuation

The asset accumulation method bears a striking superficial similarity to the widely known balance sheet. In the asset accumulation method, all the assets and liabilities of a business are compiled, and a value is assigned to each one. The value of an entity is the difference between the value of its assets and liabilities.

As simple as it sounds, as always, the burden lies in the details. Each asset and liability must be identified carefully. In addition, the asset accumulation method requires an effective way of assigning values to assets and liabilities.
A few of the items typically used during valuation don't always appear on a standard balance sheet. They include internally generated intangible assets like trademarks, patents, as well as trade secrets. The list also contains provisional liabilities, which may comprise compliance costs or unresolved legal cases.

2. Excess Earnings Valuation

On the other hand, the excess earnings approach is a combination of the income and assets valuation methods. Other than evaluating a company's tangible assets and liabilities, the method can also be used to work out a business's goodwill.

To determine goodwill, the earnings of a business are treated like input, and then a connection is drawn to the income method. As a result, the excess earnings method is highly preferred when valuing strong businesses with substantial goodwill.

Typical examples include businesses that offer professional services like accounting and law firms, engineering and medical practices, as well as architectural firms. The excess earnings method is also useful during the valuation of manufacturing enterprises and well-established technology companies.

Advantages of Asset-Based Approach

Following are the advantages of assets based approaches:

1) This is the most-simplistic approach.

2) Figuring out what assets and liabilities to include in the valuation.

3) Choosing a standard of measuring assets value.

4) Determining what each asset and liability is worth.

4) The asset-based approach generally, an appropriate method of valuation where dealing with a controlling interest over a business.

6) Overall control of the business or recent transactions in therespective shares.

7) There is a good understanding of the separate assets and liabilities of company are for the purposes of forming a reliable valuation of its equity.

Disadvantages of Asset-Based Approach

Following are the disadvantages of assets based approaches:

1) The problem of the (accounting) book value of certain assets (asshown on the balance sheet) bearing no relation to their actualmarket value.

2) Critical to the company's production efforts (on a going concern basis), and their replacement or realizable value of these assets significantly in excess of their accounting book value.

3) Asset-based approach is time-consuming. Often there isno'shortcut' to a reliable valuation.

4) It may exclude those assets which are of most importance togenerating revenue.

4) The limitations of focusing only on reported asset values.

5) The value is not simply the net of assets and liabilities, but also future profits/ cash flows, payments of dividends etc., that resultfrom the assets being put into use by labour, are usually drives a business's value.

6) It does not take into account future changes (up or down) in sales or income.

Conclusion

Ananalystmaychoosetousetheasset-basedapproachindividuallyorincongruencewithothervaluationmethods.Variousfactorscomeintoplaywhendecidingwhetherornottovalueabusinessusingthismethod,includingthe

quality of data available, the market participants' acceptance of the approach,and the analyst's degree of confidence in the valuation placed on the business.Under the asset-based approach, tangible and intangible assets are valued withthe assumption of a going concern for the business being valued. The approachis very comprehensive, and it comes as no surprise that it is the generallyacceptedvaluation standard amongnumerousauthorities.

Income Based Valuation/Approach

The earnings approach is essentially guided by the economic proposition that business valuation should be related to the firm's potential of future earnings or cash flow generating capacity. This approach overcomes the limitation of assets-based approach, which ignores the firm's prospects of future earnings and ability to generate cash in business valuation. Earnings can be expressed in the sense of accounting as well as financial management.

According to the income-based approach to determine a business the appraiser must always make an estimation of the elements below :

1) Estimation of business life expectancy.
2) Estimation of future income flows that a business will generateduring its life expectancy.
3) Estimation of discount rate in order to calculate the present value ofthe estimated income flows.

Advantages of Income Based Valuation

The advantages of Income Based Valuation are as follows:

1) It is widely recognised valuation method.

2) It is flexible in addressing companies of many different stages andnatures.

3) It simulates a market price even if there is no active market.

Disadvantages of Income Based Valuation

The disadvantages of Income Based Valuation are as follows:

1) It relies on hypothetical projections.

2) It utilises a discount rate with many variables in determining theappropriate
figure.

Methods of Income Based Valuation/Approach

There are two major variants of this approach:

1) Earnings measure on discounted cash flow basis, and

2) Earnings measure on Capitalization basis

What Is Discounted Cash Flow (DCF)?

Discounted cash flow (DCF) is a valuation method used to estimate the value of an investment based on its expected future cash flows. DCF analysis attempts to figure out the value of an investment today, based on projections of how much money it will generate in the future. This applies to the decisions of investors in companies or securities, such as acquiring a company or buying a stock, and for business owners and managers looking to make capital budgeting or operating expenditures decisions.

KEY TAKEAWAYS

- Discounted cash flow (DCF) helps determine the value of an investment based on its future cash flows.
- The present value of expected future cash flows is arrived at by using a discount rate to calculate the DCF.
- If the DCF is above the current cost of the investment, the opportunity could result in positive returns.
- Companies typically use the weighted average cost of capital (WACC) for the discount rate, because it takes into consideration the rate of return expected by shareholders.
- The DCF has limitations, primarily in that it relies on estimations of future cash flows, which could prove inaccurate.

What Is the Gordon Growth Model (GGM)?

The Gordon growth model (GGM) is used to determine the intrinsic value of a stock based on a future series of dividends that grow at a constant rate. It is a popular and straightforward variant of the dividend discount model (DDM). The GGM assumes that dividends grow at a constant rate in perpetuity and solves for the present value of the infinite series of future dividends.

Because the model assumes a constant growth rate, it is generally only used for companies with stable growth rates in dividends per share.

KEY TAKEAWAYS

- The Gordon growth model (GGM) assumes that a company exists forever and that there is a constant growth in dividends when valuing a company's stock.
- The GGM works by taking an infinite series of dividends per share and discounting them back into the present using the required rate of return.
- It is a variant of the dividend discount model (DDM).
- The GGM is ideal for companies with steady growth rates given its assumption of constant dividend growth.

Understanding the Gordon Growth Model (GGM)

The Gordon growth model values a company's stock using an assumption of constant growth in payments a company makes to its common equity shareholders. The three key inputs in the model are dividends per share (DPS), the growth rate in dividends per share, and the required rate of return (RoR).

The GGM attempts to calculate the fair value of a stock irrespective of the prevailing market conditions and takes into consideration the dividend payout factors and the market's expected returns. If the value obtained

from the model is higher than the current trading price of shares, then the stock is considered to be undervalued and qualifies for a buy, and vice versa.

Dividends per share represent the annual payments a company makes to its common equity shareholders, while the growth rate in dividends per share is how much the rate of dividends per share increases from one year to another. The required rate of return is the minimum rate of return investors are willing to accept when buying a company's stock, and there are multiple models investors use to estimate this rate.

The GGM assumes a company exists forever and pays dividends per share that increase at a constant rate. To estimate the value of a stock, the model takes the infinite series of dividends per share and discounts them back into the present using the required rate of return.

Example of the Gordon Growth Model

As a hypothetical example, consider a company whose stock is trading at $110 per share. This company requires an 8% minimum rate of return (r) and will pay a $3 dividend per share next year (D_1), which is expected to increase by 5% annually (g).

The intrinsic value (P) of the stock is calculated as follows:

P = $3 / 0.08 - 0.05 = $ 100

Illustartion: Calculate the present value of share from the follow data:

A company paid a dividend of 23.70 in the previous year

Growth rate of dividend is 8%.

Required rate of return on dividend at 12%.

Solution: Value of Share $(P_0) = \dfrac{D_0(1+g)}{r-g}$

Given, Present dividend (D_0) = ₹3.70,
Required rate of return (r) = 12%,
Growth rate (g) = 8%

$$\text{Value of Share } (P_0) = \frac{3.70(1+.08)}{0.12-0.08} = \frac{4}{0.04} = ₹100$$

Illustration : Calculate the value of share by using Gordon's Model from

XYZ Lad. had earning per share of 10.16 last year.

i) It paid out 52% of its earning as dividend.
ii) It's earning and dividend had grown at 4% per year in the last4years and are expected to grow at the same rate in the long-term
iii) The required rate of return on the stock of XYZ Ltd. is 12 %

Solution: Value of Share $(P_0) = \dfrac{D(1+g)}{r-g}$

Given, Present dividend (D) = ₹5.28
Growth rate (g) = 4%
Required rate of return (r) = 12%

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$$\text{Value of Share} = \frac{5.28\,(1+0.04)}{(0.12-0.04)} = \frac{5.491}{0.08} = ₹68.64$$

Therefore, Value of Share of XYZ Ltd. = ₹68.64

Working Note:

Calculation of Present Dividend:

Present dividend (D) = DPR × EPS

Given, Dividend Payout Ratio (DPR) = 52%,

Earning per share (EPS) = ₹10.16

Present dividend (D) = 0.52 (10.16) = ₹5.28

Illustartion :- Calculate the present value of share from the followingdata:

- ABC Ltd. Company has a book value per share of 137.80.
- Its return on equity is 15%.
- The company is retaining 60% of its earnings. iv) The opportunity cost of capital is 18%.

Solution: Value of Share $(P_0) = \frac{D_1}{r-g}$

Given, Estimated dividends for next period (D_1) = ₹8.27,
Growth rate (g) = 9%
Required rate of return (r) = 18%

$$P_0 = \frac{8.27}{0.18 - 0.09} = \frac{8.27}{0.09} = ₹91.89$$

Working Note:
Calculation of company earnings after a year is expected to be:
EPS_1 = Book value per share × Return on equity = 137.8 × 0.15= ₹20.67

Calculation of company dividend per share after a year is expected to be:
D_1 = (1 – Retention ratio) × EPS_1= (1 – 0.60) × 20.67 = 0.40 × 20.67
= ₹8.27

Calculation of growth rate in dividend:
g = Retention ratio × Return on equity = 0.6 × 0.15 = ₹0.09

Two-Stage Growth Model

The rate of 'Dividend Growth' of a company may not be the same for infinity. Companies, at times, experience a phase of extra-ordinary dividend growth, which is a temporary phenomenon, as the same is generally not sustainable in the long run. When such a phase gets over, the rate of 'Dividend Growth' settles down at a reasonable/constant level. It may, therefore, be concluded that companies generally face a two-stage growth situation, which follow each other alternatively.

In the first stage, the growth of dividend may be at an extra-ordinary pace (super-normal growth rate), which generally takes place when the company's products are in high demand and the company is in an

advantageous position to extract premium from its customers.

In the second stage, the demand for the company's products may comedown at a normal level, which leads to the normal earnings for thecompany and rate of Dividend Growth' may also become normal(normal growth rate).

So, the dividend discount model can be modified to work with more complex patterns of dividend rates. When a two-stage model is used, the first stage is generally considered a supernormal dividend rate while the second stage is generally considered a normal dividend rate which is assumed to be sustainable indefinitely.

Thus, when a two-stage dividend discount model is used, the analyst must make assumptions about the normal growth rate, supernormal growth rate and the number of years of the firm's supernormal growth rate.

The share value of a company experiencing 'Extra-ordinary Growth' in its dividend pay-out (like companies with zero or constant dividend growth) is equal to the present value of the company's expected future dividends. The two-stage dividend discount model is very sensitive to assumed dividend growth rates.

The value of a company with variable rate of dividend growth as mentioned above may be calculated by applying the following equation:

$$P_0 = \sum_{t=1}^{n} \frac{D_0(1+g_1)^n}{(1+r)^n} + \frac{\dfrac{D_0(1+g_1)^n(1+g_2)}{(r-g_2)}}{(1+r)^n}$$

Where,
P_0 = Current price of the equity share,
g_1 = Growth rate of dividends for n year,
g_2 = Growth rate of dividends for years n + 1 and beyond,
D_0 = Dividend expected a year hence,
D_n = Dividend of the equity share at the end of year n,
r = Required rate of return.

The first term shown on the right hand side in the above equation is the present value of a growing annuity, the value of which is equal to:

$$P_0 = D_0\left[\frac{1-\left[\dfrac{1+g_1}{1+r}\right]^n}{r-g_1}\right] + \frac{\dfrac{D_0(1+g_1)^{n-1}(1+g_2)}{(r-g_2)}}{(1+r)^n}$$

Example 6: Dividend on a share during current year ₹20, the face value ₹100. Dividends are expected to grow at a constant rate 10.9% for 5 years and then 8% infinitely. An investor expects a return of 25% p.a. Suggest him at what price he should buy it?

Solution: $P_0 = \sum_{t=1}^{n} \frac{D_0(1+g_1)^n}{(1+r)^n} + \frac{\dfrac{D_0(1+g_1)^n(1+g_2)}{(r-g_2)}}{(1+r)^n}$

Given, Dividend of the previous period (D_0) = ₹20
Growth rate of dividend for n year (g_1) = 10.9%
Growth rate of dividend for years n + 1 and beyond (g_2) = 8%
Maturity period of dividend (n) = 5 years
Required rate of return (r) = 25%

$$P_0 = \frac{20(1+0.109)^1}{(1+0.25)^1} + \frac{20(1+0.109)^2}{(1+0.25)^2} + \frac{20(1+0.109)^3}{(1+0.25)^3} + \frac{20(1+0.109)^4}{(1+0.25)^4}$$

$$+ \frac{20(1+0.109)^5}{(1+0.25)^5} + \frac{\dfrac{20(1+0.109)^5(1+0.08)}{(0.25-0.08)}}{(1+0.25)^5}$$

$$= \frac{20(1.109)^1}{(1.25)^1} + \frac{20(1.109)^2}{(1.25)^2} + \frac{20(1.109)^3}{(1.25)^3} + \frac{20(1.109)^4}{(1.25)^4}$$

$$+ \frac{20(1.109)^5}{(1.25)^5} + \frac{\frac{20(1.109)^5(1.08)}{(0.25-0.08)}}{(1.25)^5}$$

$$= \frac{22.18}{1.25} + \frac{24.5976}{1.5625} + \frac{27.2787}{1.9540} + \frac{30.2521}{2.4414} + \frac{33.5496}{3.0517} + \frac{\frac{20(1.6775)(1.08)}{0.17}}{3.0517}$$

$$= 17.744 + 15.7425 + 13.9604 + 12.3913 + 10.9937 + \frac{213.1412}{3.0517}$$

$$= 70.8319 + 69.8434 = ₹140.6753$$

Example 7: Calculate the present value of the stock from the following formula:

i) A stock is expected to experience supernormal growth in dividend of 10 percent, g_1 over the next five years.

ii) Following this period, dividends are expected to grow at a constant rate of 4 percent, g.

iii) The stock paid a dividend of ₹4 last year.

iv) The required rate of return on the stock is 15%.

Solution: $P_0 = \sum_{t=1}^{n} \frac{D_0(1+g_1)^n}{(1+r)^n} + \frac{\frac{D_0(1+g_1)^n(1+g_2)}{(r-g_2)}}{(1+r)^n}$

Given, Dividend of the previous period (D_0) = ₹4

Growth rate of dividend for n year (g_1) = 10%

Growth rate of dividend for years n + 1 and beyond (g_2) = 4%

Maturity period of dividend (n) = 5 years

Required rate of return (r) = 15%

$$P_0 = \frac{4(1+0.10)^1}{(1+0.15)^1} + \frac{4(1+0.10)^2}{(1+0.15)^2} + \frac{4(1+0.10)^3}{(1+0.15)^3} + \frac{4(1+0.10)^4}{(1+0.15)^4}$$

$$+ \frac{4(1+0.10)^5}{(1+0.15)^5} + \frac{\frac{4(1+0.10)^5(1+0.04)}{(0.15-0.04)}}{(1+0.15)^5}$$

$$=\frac{4(1.10)^1}{(1.15)^1}+\frac{4(1.10)^2}{(1.15)^2}+\frac{4(1.10)^3}{(1.15)^3}+\frac{4(1.10)^4}{(1.15)^4}+\frac{4(1.10)^5}{(1.15)^5}+\frac{\frac{4(1.10)^5(1.04)}{(0.15-0.04)}}{(1.15)^5}$$

$$=\frac{4.4}{1.15}+\frac{4.84}{(1.15)^2}+\frac{4(1.10)^3}{(1.15)^3}+\frac{4(1.10)^4}{(1.15)^4}+\frac{4(1.10)^5}{(1.15)^5}+\frac{\frac{4(1.10)^5(1.04)}{(0.15-0.04)}}{(1.15)^5}$$

$$=\frac{4.4}{1.15}+\frac{4.84}{1.3225}+\frac{5.324}{1.5208}+\frac{5.8564}{1.7490}+\frac{6.4420}{2.0114}+\frac{\frac{4(1.6105)\ (1.04)}{0.11}}{2.0114}$$

$$=3.8261+3.6597+3.5007+3.3484+3.2027+\frac{60.9062}{2.0114}$$

$$=17.5376+30.2805=₹47.82$$

What Is Free Cash Flow to Equity (FCFE)?

Free cash flow to equity is a measure of how much cash is available to the equity shareholders of a company after all expenses, reinvestment, and debt are paid. FCFE is a measure of equity capital usage.

Understanding Free Cash Flow to Equity

Free cash flow to equity is composed of net income, capital expenditures, working capital, and debt. Net income is located on the company income statement. Capital expenditures can be found within the cash flows from the investing section on the cash flow statement.

Working capital is also found on the cash flow statement; however, it is in the cash flows from the operations section. In general, working capital represents the difference between the company's most current assets and liabilities.

KEY TAKEAWAYS

- A measure of equity cash usage, free cash flow to equity calculates how much cash is available to the equity shareholders of a company after all expenses, reinvestment, and debt are paid.
- Free cash flow to equity is composed of net income, capital expenditures, working capital, and debt.
- The FCFE metric is often used by analysts in an attempt to determine the value of a company.
- FCFE, as a method of valuation, gained popularity as an alternative to the dividend discount model (DDM), especially for cases in which a company does not pay a dividend.

These are short-term capital requirements related to immediate operations. Net borrowings can also be found on the cash flow statement in the cash flows from financing section. It is important to remember that interest expense is already included in net income so you do not need to add back interest expense.

The specific definition of Free Cash Flow to Equity (FCFE) is:

FCFE = Net Income + Depreciation Expense – Capital Expenditures – Changes in Working Capital – Principal Debt Repayments + New Debt Issues

This technique attempts to determine the free cashflow that is available to the stockholders after payments to all other capital suppliers and after providing for the continued growth of the firm. Specifically, if the firm is in its mature, constant-growth phase, it is possible to use a model similar to the reduced form DDM:

$$\text{Value} = \frac{FCFE_1}{k - g_{FCFE}}$$

where,

FCFE = The expected free cashflow to equity in Period 1

k = The required rate of return on equity for the firm

g_{FCFE} = The expected constant growth rate of free cashflow to equity for the firm

Example 8: At the end of year 2004, Pitbull Co. owns 51% of the equity of Labrador, an entirely equity-financed company. By agreement with Labrador's shareholders,

Pitbull agrees to acquire the remaining 49% of Labrador shares at the end of year 2009 at a price of ₹25 per share. Labrador also agrees to maintain annual cash dividends at ₹1 per share through 2009.

An analyst makes the following projections for Labrador:

(in ₹ per Share)	2004 (₹)	2005 (₹)	2006 (₹)	2007 (₹)	2008 (₹)	2009 (₹)
Dividends	–	1.00	1.00	1.00	1.00	1.00
Operating cashflows	–	1.25	1.50	1.50	2.00	2.25
Capital expenditures	–	–	–	1.00	1.00	–
Increase (decrease) in long-term debt	–	(0.25)	(0.50)	0.50	–	(1.25)
Net income	–	1.20	1.30	1.40	1.50	1.65
Book value	5.00	–	–	–	–	–

At this same time (end of year 2004,) we wish to compute the intrinsic value of the remaining 49% of Labrador's shares using the alternative valuation models (assume a cost of capital of 10%).

Solution: Since, Pitbull will acquire Labrador at the end of 2009 for ₹25 per share, the terminal value is set – this spares us the task of estimating continuing (or terminal) value. Using the dividend discount model, we determine intrinsic value at the end of year 2004 as:

Intrinsic value

$$= \frac{₹1}{(1.1)^1} + \frac{₹1}{(1.1)^2} + \frac{₹1}{(1.1)^3} + \frac{₹1}{(1.1)^4} + \frac{₹1}{(1.1)^5} + \frac{₹25}{(1.1)^5} = 19.31$$

Next, to apply the free cashflow to equity model, we compute the following amounts for Labrador:

(in ₹ per Share)	2005 (₹)	2006 (₹)	2007 (₹)	2008 (₹)	2009 (₹)
Operating cashflows	1.25	1.50	1.50	2.00	2.25
Less: Capital expenditures	–	–	(1.00)	(1.00)	–
Add/Less: Debt increase (decrease	(0.25)	(0.50)	0.50	–	(1.25)
= Free cashflow to equity	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**

The excess cashflows not needed for the payment of dividends are used to reduce long-term debt. The free cashflows to equity, then, are the cashflows available to pay the dividend requirement of ₹1. Then, using the free cashflows to equity model. Value of the firm can be determined as:

FCFE Value

$$= \frac{₹1}{(1.1)^1} + \frac{₹1}{(1.1)^2} + \frac{₹1}{(1.1)^3} + \frac{₹1}{(1.1)^4} + \frac{₹1}{(1.1)^5} + \frac{₹25}{(1.1)^5} = 19.31$$

The free cashflows to equity model values the cashflows generated by the firm, whether or not paid-out as dividends.

What Is Free Cash Flow to the Firm (FCFF)?

Free cash flow to the firm (FCFF) represents the amount of cash flow from operations available for distribution after accounting for depreciation expenses, taxes, working capital, and investments. FCFF is a measurement of a company's profitability after all expenses and reinvestments. It is one of the many benchmarks used to compare and analyze a firm's financial health.

KEY TAKEAWAYS

- Free cash flow to the firm (FCFF) represents the cash flow from operations available for distribution after accounting for depreciation expenses, taxes, working capital, and investments.
- Free cash flow is arguably the most important financial indicator of a company's stock value.
- A positive FCFF value indicates that the firm has cash remaining after expenses.
- A negative value indicates that the firm has not generated enough revenue to cover its costs and investment activities.

$$FCFF = NI + NC + (I \times (1 - TR)) - LI - IWC$$

where: NI=Netincome

NC=Non-cash charges

I=Interest

TR=Tax Rate

LI=Long-term Investments

IWC=Investments in Working Capital

Dividend Yield Method

Dividend Yield Method It is also known as dividend-price ratio and is calculated by dividing 'dividend per share' by 'price per share'. It can also be obtained by dividing 'total dividend payment by a company in a year' by its 'market capitalisation', provided there is no change in the number of shares. It is indicated as a percentage.

D Symbolically, Cost of equity capital Ke = D / NP * 100 or D / MP * 100

Where,

Ke= Cost of equity capital

D = Expected dividend per share

NP = Net proceeds per share

MP = Market price per share

There is a presumption, while using this method, that for the shareholders (investors), dividends are important and the risk perception about the company remains the same.

Example 9: A company issues 1000 equity shares of ₹100 each at a premium of 10%. The company has been paying 20% dividend to equity shareholders and also expecting to keep same performance in future years. Compute the cost of equity capital will it make any difference if the market price of equity share is ₹160?

Solution: Cost of equity capital $K_e = \frac{D}{NP} \times 100$

Where,

Expected dividend per share (D) = ₹20

Net proceeds per share (NP) = Face value + Premium

= 100 + 10% = ₹110

Cost of equity capital $K_e = \frac{20}{100+10\%} \times 100 = \frac{20}{110} \times 100 = 18.18\%$

If the market price of equity share is ₹160

Cost of equity capital $K_e = \frac{D}{MP} \times 100$

Where,

Expected dividend per share (D) = ₹20

Market price per share (M) = ₹160

Cost of equity capital $K_e = \frac{20}{160} \times 100 = 12.5\%$

Capitalization Method

As per this method, the earnings approach of business valuation is based on two major parameters, i.e., the earnings of the firm and the capitalization rate applicable to such earnings (given the level of risk) in the market. Earnings, in the context of this method, are the normal expected annual profits. Normally to smoothen-out the fluctuations in earnings, the average of past earnings (say, of the last three to five years) is computed.

Apart from averaging, there is an explicit need for making adjustments, to the profits of the past years in extraordinary items (which are not likely to occur in the future), with a view to arriving at credible future maintainable profits. The notable examples of extraordinary/non-recurring items include profits from the sale of land, losses due to sale of plant and machinery, abnormal loss due to major fire, theft or natural calamities, substantial expenditure incurred on the voluntary retirement scheme (not to be repeated) and abnormal results due to strikes and lock-outs of major competing firm(s). Obviously, their non-exclusion will cause distortion in determining sustainable future earnings.

This method can be expressed by following two techniques:

1) Capitalized Cash Flow Technique, and

2) Price Earnings (P/E) Ratio.

Capitalized Cash Flow Technique

The Capitalized Cash flow technique of income approach is the abbreviated version of discounted cash flow technique where the growth rate (g) and the discount rate (k) are assumed to remain constant in perpetuity.

This model is represented as under: Net cash flow in year one

Value of firm= Net cashflow in year one / (k - g)

Price Earnings (P/E) Ratio

The P/E ratio (also known as the P/E multiple) is the method most widely used by finance managers, investment analysts, and equity shareholders to arrive at the market price of an equity share. The application of this method primarily requires the determination of Earnings per Equity Share (EPS). The EPS is calculated as under: EPS = Net earnings available to equity shareholders during the period/Number of equity shares outstanding during the period.

The net earnings/profits are after deducting taxes, preference dividend, and after adjusting for exceptional and extraordinary items (related to both incomes and expenses/losses) and minority interest. Likewise, appropriate adjustments should be made for new equity issues or buybacks of equity shares made during the period to determine the number of equity shares.

The EPS is to be multiplied by the P/E ratio to arrive at the Market Price of equity Share (MPS):

MPS = EPS x P/E ratio

A high P/E multiple is suggested when the investors are confident about the company's future performance/prospects and have high expectations of future returns; high P/E ratios reflect optimism. On the contrary, a low P/E multiple is suggested for shares of firms in which investors have low confidence as well as expectations of low returns in future years; low P/E ratios reflect pessimism.

- The P/E ratio may be derived given the MPS and EPS: P/E Ratio MPS/EPS

Module 3 - Market Based Valuation

Chapter - Market Based Valuation / Comparable Approaches

Introduction

In this approach, value is determined by comparing the subject company or asset with other companies or assets in the same industry, of the same size, and/or within the same region, based on common variables such as earnings, sales, cash flows, etc.

This approach is based on the premise that the value of any asset can be estimated by analyzing how the market prices 'similar' or 'comparable" assets. The basic belief here is that it is impossible or extremely difficult to estimate the intrinsic value of an asset, and therefore, the value of an asset is whatever the market is willing to pay for it. Most valuations in the Stock Market are relative valuations.

In general, market multiples are calculated by taking the market price indicated for the comparable company and dividing this by some sort of financial metric for that company, such as revenue, net

income (i.e., earnings), Earnings Before Interest and Taxes (EBIT), or Earnings Before Interest, Taxes, Depreciation, and Amortisation (EBITDA).

One of the most commonly referred to multiples in the press and by investors is what is referred to as a PE multiple, or price to earnings multiple (P/E).

The P/E multiple of a public company, or as implied by a market transaction, is calculated by taking the implied market value of equity and dividing this by the earnings of the company.

The denominator of the P/E ratio represents a measurement of a return available to equity holders, since the earnings of a company are stated after interest expense, which is a measurement of return related to debtholders.

Valuation of Market Multiples

A valuation multiple is the ratio of firm value or equity value to some aspect of the firm's economic activity, such as cashflow, sales, or EBITDA. The table below lists the most common multiples used to value firms, together with the terminology that is used to describe the multiple:

Table: Multiples Used in Finance

Quantity	×	Multiple	Terminology = Value
Cashflow	×	Firm value/Cashflow of firm	"Cashflow multiple" = Value of firm
EBITDA	×	Firm value/EBITDA of firm	"EBITDA multiple" = Value of firm
Sales	×	Firm value/Sales value of firm	"Sales multiple" = Value of firm
Customers	×	Firm value/Customers	"Customer multiple" = Value of firm
Earnings	×	Price per share/Earnings	"Price-earnings ratio" = Share price

Steps in Market Based Valuation

The following steps have to be followed in carrying out market basedvaluation:

1) Identify comparable assets and obtain market values for these assets.

2) Convert these market values into standardized values, since the absolute prices cannot be compared. This process of standardizingcreates price multiples.

3) Compare the standardized value or multiple for the asset being analyzed with the standardized values for comparable asset, adjusting for any differences between the firms that might affect the multiple, to judge whether the asset is under or overvalued.

Types of Market Based Valuation

- Comparable Company Method
- Comparable Transaction Analysis Method

Comparable company analysis and comparable transactions analysis are multiples-based methods for determining value in relation to a set of peers. This means that a company's value is calculated as a multiple of a metric such as earnings or, more importantly in most cases, Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA).

EBITDA is a proxy for cashflow, but the two are not identical. In multiples valuation, EBITDA is generally used because it can be calculated using only the income statement, whereas cashflow also requires information from the balance sheet. The most common multiples are Enterprise Value to EBITDA (EV/EBITDA); Price to Earnings (P/E); and Price to Book (P/B).

Comparable Company Method

It is also known as Market Multiple Technique. This approach is based on argument which states that similar assets must trade at similar prices. The comparable approach is helpful when the assets being valued is not traded but one can find an equivalent asset that is traded or whose value is known by some alternative and reliable method.

Comparable companies analysis involves the comparison of operating metrics and valuation multiples for public companies in a peer group (the comparable "universe") to those of a target company. For example. Peers may be grouped based on any number of criteria, such as industry focus, company size, or growth characteristics. This approach referred to as Direct Comparison Approach.

The critical issue in comparable approach is to find the similarities inthe assets being compared and the asser being valued. Assumption: Economic logic tells that similar assets should sell atsimilar price.

Formula: The direct comparison approach is reflected in a simple formula
VT = XT * (Vc/Xc)

Where,

VT = appraised value of the target firm of asset
XT= observed variable for the target firm that supposedly drives value
Vc = observed value of the comparable company or firm
Xc= observed value for the comparable company

Illustration 1: If the typical takeover premium is 20% what is the ABC Company's value in a merger using the comparable company approach?

ABC Company	Value (in million) (in rs.)	Average of Comparables	Average
Earnings Cash flow	10 million 12 million	P/E of comparables P/CF of comparables	30 times 25 times

Book value of equity	50 million	P/BV of comparables	2 times
Sales	100 million	P/S of comparables	2.5 times

Solution: Assuming that the average of the values from the different multiples is most appropriate:

Using Comparables Multiples	Value (₹) (in million)	Estimated Stock Value (₹) (in million)
Earnings	10	$10 \times 30 = 300$
Cashflow	12	$12 \times 25 = 300$
Book value of equity	50	$50 \times 2 = 100$
Sales	100	$100 \times 2.5 = 250$

Average of Estimated Stock Values = Total of Estimated Stock Value/No. of Multiples

= (300 + 300 + 100 + 250)/4 = ₹237.5 million

Estimated takeover price of the ABC Company = Average of Estimated Stock Values × Takeover Premium

= ₹237.5 million × 1.2 = ₹285 million

Note: The multiplier of 1.2 is from the takeover premium: 1 + 0.20 = 1.2)

Example 2: Find the value of Viaan Ltd. on the base of comparable companies approach, which is a prospective target, from the following information:

Particulars	A Ltd.	B Ltd.	C Ltd.
Market/Net Income	30	35	40
Market/Book Value	2.56	2.40	3.00
Market/Sales	2.46	2.32	2.92

The current sales of Viaan Ltd. are ₹300 lac, Book value of equity ₹250 lac and Net Income is ₹50 lac.

Solution:

Particulars	A Ltd. (₹)	B Ltd. (₹)	C Ltd. (₹)
Market/Net Income	= 30 × 50 lac = 1,500 lac	= 35 × 50 lac = 1,750 lac	= 40 × 50 lac = 2,000 lac
Market/ Book Value	= 2.56 × 250 lac = 640 lac	= 2.40 × 250 lac = 600 lac	= 3.00 × 250 lac = 750 lac
Market/Sales	= 2.46 × 300 lac = 738 lac	= 2.32 × 300 lac = 696 lac	= 2.92 × 300 lac = 876 lac

According to all the three types of value C Ltd. is the prospectus target for Viaan Ltd.

Steps in Applying Comparable Company Approach

The steps involved in this approach are:

1) Analyze the Economy: The first step in the comparable company approach is to analyze the economy. The following factors and forecasting their growth rates: Gross national product, industrial production, agricultural output, inflation, interests rates, balance of payment, exchange rate and government budgets.

2) Analyze the Industry: This analysis should focus on the following: i) The relationship of the industry to the economy as a whole.

ii) The stage in which the industry is in its lifecycle. iii) The profit potential of the industry.

iv) The nature of regulation applicable to the industry.

v) The regulating competitive advantages of procurement of rawmaterials, production costs, marketing and distributionarrangement, and technological resources.

3) Analyze the Subject Company: The third step is to carry-out an in depth analysis of the competitive and financial position of Subject Company. The key aspects to be covered in this examination areas
follows:

i) Product portfolio and market segments covered by the firm,

ii) Availability and cost of inputs,

ii) Technological and product capability,

iv) Market image distribution reach and customer loyalty,

v) Product differentiation and economic cost position,

vi) Managerial competence and drive, vii) Quality of human resources,

viii) Competitive dynamics,

ix) Liquidity leverage and access to funds, and

x) Turnover margins and return on investments.

4) Select Comparable Companies: Select the companies which are similar to the subject company in terms of lines of business, nature of market served, scale of operations and so on.
5) Analyze the Financial Aspects of the Subject and Comparable

Companies: Once the comparable companies are selected the historical financial statements of the subject and comparable companies must be analyzed to identify similarities and differences and make adjustments so that they put on a comparable basis. Adjustments may be required for differences in inventory valuation method, for intangible assets for off balance sheet items and so on. The purpose of these adjustments is to normalize the financial statements.

Choose the Observable Financial Variable: The ratios multiples that are commonly used in the direct comparison methodare as follows:

i) Firm value to book values of assets,

ii) Firm value to PBIDT,

iii) Firm value to PBIT,

iv) Equity value to equity earnings (P-E multiple), and v) Equity value to net worth (market-book ratio).

7) Value the Subject Company: The final step this process is to decide where the subject company fits in relation to the comparable companies. This is essentially judgmental exercise. Once this is done, appropriate multiples may be applied to the financial numbers of the subject company to estimate its value.

Advantages of Comparable Company Approach

Following are the advantages of comparable company approach:
1) It is popular because it relies on multiples that are easy to relate to and can be obtained easily and quickly.

2) This approach need no elaborate assumptions.

3) This approach is market based hence free form individual biases.

Disadvantages of Comparable Company Approach

Following are the disadvantages of comparable company approach:

1) Multiples are amenable to misuse and manipulation,

2) The choice of "Comparable" companies is subjective, and

3) The multiples used in this approach reflect the valuation errors(over-valuation or under-valuation) of market.

Comparable Transaction Analysis/Method

is also known as Transaction Multiple Technique. With thetransaction multiple approach, similar acquisitions or divestitures are identified, and the multiples implied by their purchase prices are used to assess the subject company's value. This technique is similar to the market multiple technique; however, the following should be noted. The greatest impediment in finding truly comparable transactions is the absence of available information on private transactions. In addition to the lack of information on the sales of private companies, the available information in public transactions may be outdated. There is no rule of thumb for the appropriate age of a comparable transaction, although one should be aware of the competitive market at the time of the transaction and factor any changes in the marketplace environment into the analysis. The more recent the transaction, the better this technique, with all other things being equal.

A comparable transaction analysis focuses on M&A transactions in which comparable companies were acquired. A comparable transaction analysis is similar to a comparable company analysis in relation to using multiples. However, comparable transactions include control premiums (and expected synergies) and so the multiples will generally be higher than for comparable companies and more reflective of a reasonable price to be paid for the acquisition of a target company. In this analysis, as with the previous analysis, it is important to compare only companies in the same industry, or companies that exhibit the same business characteristics.

Example 3: Suppose an analyst has gathered the following information on the target company, the MNO Company:

MNO Company	Value (₹) (in million)	Comparables	Average
Earnings	10	P/E of comparables	15 times
Cash flow	12	P/CF of comparables	20 times
Book value of equity	50	P/BV of comparables	5 times
Sales	100	P/S of comparables	3 times

Estimate the value of the MNO Company using the comparable transaction analysis, giving the cash flow multiple 70% and the other methods 10% each.

Solution:

Comparables' Transection Multiples	Value (₹) (in million)	Estimated Stock Value (₹) (in million)
Earnings	10	$10 \times 15 = 150$
Cash flow	12	$12 \times 20 = 240$
Book value of equity	50	$50 \times 5 = 250$
Sales	100	$100 \times 3 = 300$

Value of MNO

$= (0.7 \times 240) + (0.1 \times 150) + (0.1 \times 250) + (0.1 \times 300) =$ ₹238million

Steps in Comparable Transaction Analysis/Method

Following steps are involved in comparable transaction analysis/ method:

1) Find similar transactions that have occurred in the recent past. It is important to use recent transactions because the underlying market condition is the determining factor in valuation. Using transactions that occurred during different market trends will skew the metrics and provide an unsupportable company value. Once again, a larger sample will provide more accurate data for the analysis. In addition, investment bankers also do sensitivity analyses by taking snapshots of the market at three different economic levels.

2) Determine what metrics will be used in the comparison. It is important, especially with new economy/technology companies, to determine what the comparison will be based on. Many technology companies (whose assets include high percentages of IP) do not have positive earnings or even EBIT.

3) A fairly simplistic spreadsheet will provide the analyst with a low, base, and high range of price valuation for the company once these steps have been completed.

Advantages of Comparable Transaction Analysis/ Method

The advantages of Comparable Transaction Analysis/Method are as follows:

1) There is no need to estimate takeover premium as it is derived fromthe comparable transaction.

2) Estimates are derived from the market value rather than assumptions and estimates about the future.

3) Using prices of recent transactions reduces the litigation risk forboth companies' Board of Directors and managers regarding themerger transaction's pricing.

Disadvantages ofComparable TransactionAnalysis/ Method

The disadvantages of comparable transaction analysis/method are as follows:

1) What if the values in recent transactions were not accurate?

2) There may not be enough data (comparable transactions).

3) It is difficult to incorporate any specific plans for the target (e.g.,merger synergies or changing capital structures).

Advantages of Market Based Valuation Following are the advantages of market based valuation:

1) Market based valuation is much more likely to reflect market perceptions and moods than DCF valuation.

2) Market based valuation generally requires less information than DCF valuation.

Disadvantage of Market Based Valuation

Market Based Valuation may require less information in the way in which most analysts and portfolio managers use it. However, this is because implicit assumptions are made about other variables that would have been required in a DCF valuation. To the extent that these implicit assumptions are wrong the relative valuation will also be wrong.

FAIR VALUE METHOD

There are some accountants who do not prefer to use Net Assets Method or Capitalisation Yield) Method for ascertaining the correct value of shares. They, however, prescribe the Fair Value Method which is the mean of Intrinsic Value Method and Yield Value Method.

The same provides a better indication about the value of shares than the

earlier two methods.

This method is the combination of both the above methods.

Fair Value of Share= Intrinsic Value+ Yield Value/2

Example 4: The Following is the Balance Sheet of Ganesh Ltd. as on 31st March 2018:

Liabilities	₹(In lac)	Assets	₹ (In lac)
Shares Capital (of ₹100 each fully paid up)	100	Land and Building	40
Reserves and Surplus	40	Plant and Machinery	80
Sundry Creditors and Other Liabilities	30	Marketable Securities	10
		Stock	20
		Debtors	20
		Cash and Bank	5
	170		170

Profit before tax for current year end amount to ₹64 lac, including ₹4 lac as extraordinary income. Besides, the firm has earned interest income of ₹1 lac in current year from investments in marketable securities. It is not usual for the firm to have excess cash and invest in marketable securities.

However, an additional amount of ₹5 lac per annum, in terms of advertisement and other expenses will be required to be spent for the smooth running of the business in the years to come.

Market value of land and buildings, plant and machinery are estimated at ₹90 lac and ₹100 lac respectively. In order to match the re-valued figures of these fixed assets, additional depreciation of ₹6 lac is required to be taken into consideration. Effective corporate tax rate may be taken at 30 per cent. The capitalisation rate applicable to business of such risks is 15 per cent.

Calculate:

i) From the above case, compute the value of business, value of equity and price per equity share based on capitalisation method.

ii) Also determine the value of business as per the net assets method. Assets are to be valued at market value for this purpose and the value of goodwill is also to be considered which is ₹6 lac as per the valuation of goodwill.

iii) Determine the fair price of an equity share. The fair price of an equity share is to be taken as an average of prices estimated according to the capitalisation method and net assets method.

Solution:

i) **Computation of Value of Business, Value of Equity and Price per Equity Share as per Capitalisation Method**

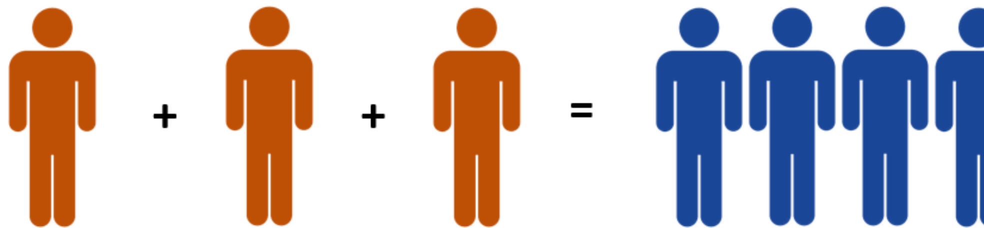
Particulars	(₹ in lac)
Profit before Tax	64
Less: Extraordinary Income	4
Less: Interest on Marketable Securities (not likely to accrue in future)	1
Less: Additional Expected Recurring Expenses	5
Less: Additional Depreciation	6
Expected Earnings before Taxes	48
Less: Taxes (0.30)	14.40
Future Maintainable Profits after Taxes	33.60
Divided by Relevant Capitalisation Factor	0.15
Value of Business (₹33.60 lac/0.15)	**224.00**
Value of Equity (₹224 lac – ₹30lac external liabilities)	**194.00**
Price per Equity Share (₹194 lac/1lac)	**194**

ii) **Determination of Value of Business and Net Asset Value per Share as per Net Assets Method**

Particulars	(₹ in lac)
Land and Buildings	90
Plant and Machinery	100
Goodwill	6
Marketable Securities	10
Stock	20
Debtors	15
Cash and Bank Balance	5
Total Assets	246

Synergistic mean

The term synergistic is derived from synergy, which refers to the benefit that results from the merger of two agents who want to achieve something that neither of them would be able to achieve on their own. The term is mostly used in mergers and acquisitions (M&A), where two companies merge to form one company that can generate more revenues or streamline the two companies' operations and save on costs.



Additional value created through **Synergy**

Types of synergistic effects

Corporate synergy refers to the benefits that two firms are expected to gain when they merge or when one firm acquires another. The synergistic effect of such transactions often forms the basis of the negotiations between the seller and the buyer.

The following are the main types of synergies that corporations enjoy:

Marketing synergy

Marketing synergy refers to the marketing benefits that two parties in an M&A transaction may enjoy when promoting their products and services. These synergies include information campaigns, marketing tools, research and development, as well as marketing personnel.

For example, an IT company may acquire a smaller IT company that lacks infrastructure but has a strong marketing and PR department. The smaller company has qualified personnel, marketing tools, and experience in selling their products that can help the larger IT company boost its public image and formulate new marketing strategies to win more customers.

Revenue synergy

When two companies merge, they often become synergistic by virtue of generating more revenues than the two independent companies could produce on their own. The merged company may gain access to more products and services to sell through an extensive distribution network.

The company will also benefit from a larger number of sales representatives to sell more products than they previously owned before the merger. Also, the merged company will incur fewer costs of marketing and distribution due to the corporate synergies.

Financial synergy

The combined entity also stands to benefit from various financial synergies such as access to debt, tax savings, and cash flow. A merged company achieves a strong asset base inherited from the former companies, which allows the company to access credit facilities and use the combined assets as collateral. It reduces the level of gearing since the company can use debt rather than equity that reduces the percentage of ownership stakes of the founders/owners.

Also, the merged company may enjoy more tax breaks and pay less tax than the two former companies before the merger. Lastly, when a cash-rich company acquires a cash-starved company, the former can invest in the revenue-generating projects of the latter.

Management

When two companies merge, there is a reorganization of the management teams. Depending on the goals and character of the management team members, the synergistic effect may be positive or negative. When the management teams of both parties to the merger work in harmony, the company will experience better service delivery, proper utilization of resources, improvement in employee motivation, and more opportunities for growing the business. A merger can also reduce job duplication and multiple levels of management.

However, when the team members are in constant conflicts with each other, it can result in decreased quality of products and services, reduced efficiency of operations, and poor utilization of resources.

Concept of Exchange Ratio

Large acquisitions almost always involve an exchange of shares, in whole or in part. The advantage of this method of financing is that the acquirer does not part with cash and does not increase financial risk by raising new debt. It is also possible that the acquirer can 'bootstrap' earnings per share if it has a higher P/E ratio than the acquired entity.

For example, Cost of Merger: Share Exchange Suppose A offers 16,000 shares (12,00,000/75) instead of 12,00,000 cash. The cost appears to be 3,00,000 as before, but because B's shareholders will own part of A, they will benefit from any future gains of the merged entity. Their share will be (16,000/(16,000 + 1,00,000)), or 13.8%.

Further, suppose that the benefits of the merger have been identified by A to have a present value of 24,00,000 (i.e., A thinks that B is really worth 79,00,000+ 4,00,000, or 713,00,000). Therefore, the combined entity of A and B is worth 75,00,000+ 13,00,000, or 88,00,000.

What is the true cost of merger to the acquirer's shareholders?

Estimate of Post-Acquisition Prices		
Particulars	**A**	**B**
Proportion of ownership in merged entity	86.2%	13.8%
Market value: ₹88,00,000 × proportion of ownership	₹75,85,600	₹12,14,400
Number of shares currently in issue	1,00,000	60,000
Price per share	75.9	20.2

What we are attempting to do here is to value the shares in the entity before the merger is completed, based on estimates of what the entity will be worth after the merger. recognizes the split of the expected benefits which will accrue to the The valuation of each entity also combined form once the merger has taken place.

The true cost can now be calculated:

Particulars	₹
60,000 shares in B at 20.2	12,12,000
Less: Current market value	9,00,000
Benefits being paid o B's shareholders	3,12,000

Share Exchange Ratio (Swap Ratio)

The Share Exchange Ratio (SER) or the swap ratio indicates the number of shares of the acquiring company to be given to the former target company's shareholders in exchange of their holdings.

It is calculated as: Syner The

$$SER = \frac{P_t \text{ (Target's share price)}}{P_a \text{ (Acquirer's share price)}}$$

The SER can be ≤ 1 or 21, depending upon the valuations done for the shares or the negotiations done for the M&A deal. The stock market. often influences the SER, just to have a check that the SER is not biased to any of the companies in the deal.

It is very common that the prices of both the companies' stocks adjustimmediately following the announcement of any M&A deal. Generally,it is found that the target's shares will increase by somewhat less thanthe announced price as the arbitrageurs buy the target's stocks inanticipation of a completed transaction.

The difference between the purchase price and the announced price is the potential profit. At the same time, the current share price of the acquiring company may decline due to dilution of its EPS, or due to anticipated slower growth rate of the EPS of the combined entity.

Due to these reasons, immediately after the acquisition announcements, investors may consider lower P/E ratio on the acquiring company's EPS and afterwards the same effect is perceived for the combined entity's" EPS.

Methods of financing mergers and acquistions

Mergers and Acquisitions are parts of the natural cycle of business. A merger or acquisition can help a business expand, gather knowledge, move into a new market segment, or improve output. However, these opportunities come with expenses for both sides. Standard merger deals typically involve administrators, lawyers, and investment bankers even before the total acquisition cost is considered. Without a virtual dataroom and a sizable amount of cash on hand, a company will have to find alternate methods of Financing M&A. Below is a detailed look at the best financing options available today as well as information on the ones to avoid.

Exchanging Stocks

This is the most common way to finance a merger or acquisition. If a company wishes to acquire or merge with another, it is to be assumed the company has plentiful stock and a solid balance sheet. In the average exchange, the buying company exchanges its stock for shares of the seller's company. This financing option is relatively safe as the parties share risks equally. This payment method works to the buyer's advantage if the stock is overvalued. Here, the buyer will receive more stock from the seller than if they'd paid in cash. However, there's always the risk of a stock decline, especially if traders learn about the merger or acquisition before the deal is finalized.

Debt Acquisition

Agreeing to take on a seller's debt is a viable alternative to paying in cash or stock. For many firms, debt is a driving force behind a sale, as subpar market conditions and high interest costs make it impossible to catch up on payments. In such circumstances, the debtor's priority is to reduce the risk of additional losses by entering into a merger or acquisition with a company that can pay the debt. From a creditor's standpoint, this is a cheap way to acquire assets. From the seller's point of view, sale value is reduced or eliminated. When a company acquires a large quantity of another company's debt, it has greater management capabilities during liquidation. This can be a significant incentive for a creditor who wants to restructure the company or take possession of assets such as business contacts or property.

Paying in Cash

A cash payment is an obvious alternative to paying in stock. Cash transactions are clean, instantaneous, and do not require the same high level of management as stock transactions. Cash value is less dependent on a company's performance except in cases involving multiple currencies. Exchange rates may vary substantially, as seen in the market's response to the British pound after the UK voted to leave the European Union. While cash is the preferred payment method, the price of a merger or acquisition can run into the billions, making the cost too high for many companies.

Initial Public Offerings

An initial public offering, or IPO, is an excellent way for a company to raise funds at any time, but an impending merger or acquisition is an ideal time to carry out the process. The prospect of an M&A can make investors excited about the future of a company, as it points to a solid long-term strategy and the desire to expand. An IPO always creates excitement in the market and, by pairing it with an M&A, a company can spur investors' interests and increase the early price of shares. Additionally, increasing an IPO's value with a merger or acquisition can increase existing share prices. However, market volatility makes this a risky way to finance a venture. The market can drop as quickly as it rises, and a new company is more susceptible to volatility. For these reasons, the popularity of the IPO is declining with each passing fiscal year.

Issuance of Bonds

Corporate bonds are a simple, quick way to raise cash from current shareholders or the general public. A company may release time-definite bonds with a predetermined interest rate. In buying a bond, an investor loans money to the company in hopes of a return, but bonds have one big disadvantage: once they're bought, the money can't be used until the bond's maturation date. The security makes bonds popular with long-term, risk-averse investors. Today, companies are taking advantage of low U.S. interest rates to fund M&A. However, the trend is tied closely to the cost of borrowing, and bond issuance is only a good value if the buyer can cheaply access credit and has a clear goal.

Loans

It can be costly to borrow money during a merger or acquisition. Lenders and owners who agree to an extended payment arrangement will expect a reasonable rate for the loans they make. Even when interest is relatively low, costs can quickly add up during a multimillion-dollar M&A. Interest rates are a primary consideration when funding a merger with debt, and a low rate can increase the number of loan-funded transactions.

In Conclusion

Where cash is not an option, there are many other ways to finance a merger or acquisition, many of which result in an effortless, lucrative, and quick transaction. The best method for a firm to use depends on the buyer and the seller, their respective share situations, asset values, and debt liabilities. Each method of funding a merger or acquisition comes with its own hidden fees, commitments, and risks, and it is the buyer's and seller's responsibility to practice Due Diligence during a transaction. However, for most companies, the results make all the effort worthwhile by creating a more diverse, stronger firm that can cover the cost of M&A with funds to spare.

Module 4

What Is an Intangible Asset?

An intangible asset is an asset that is not physical in nature. *Goodwill*, brand recognition and *intellectual property*, such as patents, *trademarks*, and copyrights, are all intangible assets. Intangible assets *exist in opposition to tangible assets*, which include land, vehicles, equipment, and inventory.

Meaning and Definition of Intangible Assets

Intangible assets are long-lived non-physical rights or resources that possess a determinable future use value, and are specifically developed or acquired for the production or distribution of external goods and or services. In simple words, it can be defined as identifiable non-monetary assets that cannot be seen, touched or physically measured, which are created through time and/or effort and that are identifiable as a separate asset.

According to Accounting Standard (AS) 26, 'Accounting for Intangible Assets', an intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.

Reasons to Conduct Intangible Asset Valuation The reasons behind a company conducting a valuation process of intangibles are determining factors, both to establish the valuation. methodology to be applied, and the expected results of this process.

Following are the different reasons to conduct intangible asset valuation:

1) Strategy Formulation: In order to formulate a strategy, it is fundamental to establish the available resources, the existingrelations between the intangibles and other resources, and theconnection between intangibles and the performance.

2) Strategy Assessment and Execution: Intangibles are part of the inputs that a company has to use to develop a specific business strategy, but they are also outputs once the strategy is implemented.

3) Defining Compensation Systems: The majority of companies have realized that trusting only in financial measures may encourage operations to be seen from a short-term perspective, particularly if the incentive systems are linked to them. The incentive systems need to be established according to the way the company is managed with the purpose of increasing its capacity to generate value in the future, which is going to depend in great part on the development of its intangibles.

4) Strategic Development, Diversification and Expansion: In order to better exploit their resources many companies plan to diversify, merge or join in partnership agreements with other companies. Lev suggests that the network economies and synergies associated to research and development (R&D) investments and other intangibles are very important. Diversification generates value in the presence of intangibles such as R&D or advertising, but in turn destroys value in other cases.

5) Communicating the Value of the Company's Resources to Stakeholders: The lack of information on a firm's intangibles has anegative effect due to:

i) Insider trading;

ii) Excessive volatility and undervaluing of firms; and

iii) An increase in the cost of capital. In general, the dissemination of information about intangibles has a positive impact on the image of the company.

Recognition of an Intangible Asset An intangible asset

should be recognised if, and only if:

1) It is probable that the future economic benefits that are attributable to the asset will flow to the enterprise; and

2) The cost of the asset can be measured reliably.

An enterprise should assess the probability of future economic benefits using reasonable and supportable assumptions that represent best estimate of the set of economic conditions that will exist over the useful life of the asset. An enterprise uses judgement to assess the degree of certainty attached to the flow of future economic

benefits that are attributable to the use of the asset on the basis of the evidence available at the time of initial recognition, giving greater weight to external evidence.

Types of Intangible Assets

Six types of intangible assets designated by the Financial Accounting Standards Board (FASB) are as follows:

1) Marketing-Related Intangible Assets: Marketing-related intangible assets are used to market or promote products or services. Trademarks e or trade names are words, phrases, or symbols that distinguish or identify a company or its products. They can be renewed indefinitely for periods of 10 years at a time. Internet domain names and company names also qualify as marketing-related intangibles.

2) Customer-Related Intangible Assets: Customer-related intangible assets result from interacting with outside parties. They include customer lists, order and production backlogs, and customer relationships. Even customer relationships through contracts would be considered customer-related intangible assets.

3) Artistic-Related Intangible Assets: Artistic-related intangible assets give ownership rights to plays, literary works, musical works, pictures, photographs, and video and audiovisual material. A copyright protecting these ownership rights is federally granted for the life of the creator plus 70 years.

4) Contract-Related Intangible Assets: Contract-related intangible assets come from the value of rights arising from contractual arrangements, such as franchises, licensing agreements, construction permits, broadcast rights, and service or supply contracts.

5) Technology-Related Intangible Assets: Technology-related intangible assets arise from innovations or technological advances. A patent gives its holder the exclusive right to use, manufacture, and sell a product or process for a period of 20 years without any interference or infringement by others. Accountants amortize technology-related intangible assets over their legal life or useful life, whichever is shorter. Patented technology, computer software and mask works, unpatented technology, databases including title plants and trade secrets, such as secret formulas, processes, recipes are technology related intangible assets.

6) Goodwill: Unidentifiable intangible asset that arises from factors such as customer satisfaction, quality products, skilled employees, and business location. Goodwill is only recognized in business combinations.

Valuation of Goodwill

The valuation of goodwill essentially means that the calculation of these intangible assets is used to determine the remaining value of a company in the event it is purchased. The valuation of a business takes into account different parameters such as the reputation of its owners, efficiency in the management, the situation in the market, and special advantage if any.

The need for valuation of goodwill arises from a range of different scenarios

In Partnership - If partners retire, expire, or are newly admitted, there is a need for goodwill valuation. It also becomes important in case of alterations in profit-sharing ratio or amalgamation.

In Company - In the instance of amalgamation of a company or acquiring controlling interest, another would require goodwill valuation.

In Sole Proprietorship - Purchase considerations of selling off business are some of the situations where the valuation of goodwill is needed.

Methods for Valuation of Goodwill

A company adopts the valuation method consistent with the market practices of the trade and the position maintained by it. The different methods of valuation of goodwill are mentioned below.

Average Profits Method

The average profits method primarily takes the following two forms -

Simple Average

Here, the goodwill is evaluated by the calculation of average profit against the number of years purchased.

Goodwill = Average profit X Number of years of purchase

Weighted Average

This method is usually used in the instances of alterations of profit while also focusing on the current year’s profit. It calculates the previous year’s profit for obtaining the valuation.

Goodwill = Weighted Average Profit X Number of years of purchase

Super Profits Method

The super profit method of valuation of goodwill covers the excess of the maintainable profits in the future as opposed to the normal profits. The formula is indicated below.

Goodwill = Super profit X Number of years of purchase

(Super profit = Average / Actual profit – Normal profit

Normal profit = (Capital employed X Normal rate of return) / 100)

The super-profits method can be undertaken by either of the two following methods.

Annuity Method of Goodwill

The annuity method in the valuation of goodwill uses the average super profit over a specific number of years. The current value of an annuity is found on the basis of a discounted amount of super profit at the established rate of interest.

Purchase Method by Number-of-Years

Super profits in a definite number of purchase years are evaluated for establishing goodwill.

Capitalisation Method

In the goodwill capitalization method, there are two ways in which the calculation can be done.

Average Profits Method

The calculation covers the deduction of its actual capital that has been employed from the average profits of the capitalized value. It is undertaken based on the normal rate of return.

Goodwill = Capitalised Average profits – Actual capital employed

(Capitalised average profits = Average profits X 100 / Normal rate of return

Actual capital employed = Total assets (excluding goodwill) – Outside liabilities)

Super Profits Method of Valuation of Goodwill

In these methods, super profits are directly capitalized for the valuation of goodwill.

Goodwill = Super profits X 100 / Normal rate of return

Meaning and Definition of Amalgamation

When two or more companies carrying on similar business go into liquidation and a new company is formed to takeover their business, it is called amalgamation. Minimum three companies are involved in amalgamation. In other words, amalgamation refers to the formation of a new company by taking over the business of two or more existing companies carrying similar type of business.

In amalgamation, two or more companies are liquidated and a new company is formed to takeover the business of liquidating companies. The companies which go into liquidation are called vendor or amalgamating companies where as the new company which is formed to takeover the business of liquidating companies is called purchasingor amalgamated or transferee company. There may be amalgamationeither by "transfer of two or more undertakings to a new company or bythe transfer of one or more undertakings to an existing company".

According to Halsbury's Laws of England, "Amalgamation is a blending of two or more existing undertakings into one undertaking, the shareholders of each blending company becoming substantially the shareholders in the company which is to carry on the blended undertakings.

There may be amalgamation either by transfer of two or more undertakings to a new company or by the transfer of one or more undertakings to an existing company".

According to AS-14, Accounting for Amalgamation, issued by Institute of Chartered Accountants of India, Amalgamation means an amalgamation pursuant to the provisions of the Companies Act, 2013 or any other statute which may be applicable to companies and includes merger'. This standard is mandatory in nature and is applicable w.e.f. 1.4.1995.

Definitions

The following terms are used in this standard with the meanings specified:

(a) Amalgamation means an amalgamation pursuant to the provisions of the Companies Act, 2013 or any other statute which may be applicable to companies and includes 'merger'.

(b) Transferor company means the company which is amalgamated into another company.

(c) Transferee company means the company into which a transferor company is amalgamated.

(d) Reserve means the portion of earnings, receipts or other surplus of an enterprise (whether capital or revenue) appropriated by the management for a general or a specific purpose other than a provision for depreciation or diminution in the value of assets or for a known liability.

Types of Amalgamation

Amalgamation in the Nature of Merger Amalgamation in the nature of merger is an amalgamation which satisfies all the following five conditions:

1) **Transfer of All Assets and Liabilities:** All the assets and liabilities of the transferor company (i.e., the company which is amalgamated into another company) become, after amalgamation, the assets and liabilities of the transferee company (i.e., the company into which a transferor company is amalgamated). On amalgamation, asset and liabilities of Transferor Company are transferred to realisation account.

2) **Same Equity Shareholders Holding 90%**: Shareholders holding atleast 90% of the face value of the equity shares of the transferor company (other than the equity shares already held therein, immediately before the amalgamation, by the transferee company or its subsidiaries or their nominees) become equity shareholders of the transferee company by virtue of the amalgamation.

3) **Purchase Consideration in Equity Shares:** The consideration for the amalgamation receivable by those equity shareholders of the transferor company who agree to become equity shareholders of the transferee company is discharged by the transferee company wholly by the issue of equity shares in the transferee company, except that cash may be paid in respect of any fractional shares.

4) **Same Business**: The business of the transferor company is intended to be carried-on, after the amalgamation, by the transferee company.

5) **Recording of Assets and Liabilities at Book Values:** No adjustment is intended to be made to the book values of the assets and liabilities of the transferor company

when they are incorporated in the financial statements of the transferee company except to ensure uniformity of accounting policies.

Accounting Treatment for Amalgamation in the Nature of Merger

1) In preparing the balance sheet of Transferee Company after amalgamation, all the assets and liabilities of the transferor and transferee company will be added line by line except share capital.

2) The difference between the purchase consideration paid by the transferee company to the transferor company and the share capital of the transferor company should be adjusted with reserves.

3) If the purchase consideration is more than the share capital of the transferor company, then the excess shall be debited to reserves, if reverse is the case, then credited to reserves.

Amalgamation in the Nature of Purchase

If any one or more of the conditions specified for merger are not satisfied, the amalgamation is in the nature of purchase. For example, A Ltd. acquires the business of B Ltd. with no intention to continue such business; it is a purchase and not merger. Similarly, shareholders of B Ltd. holding 90% of the share capital do not become shareholders of A Ltd.; the amalgamation is only in the nature of purchase. Such amalgamation result in acquisition of one company by another company. As a consequence, the equity shareholders of the transferor company normally do not continue to have a proportionate share in the equity of the transferee company. In this case normally there is no intention to continue the business of the company which is acquired.

Accounting Treatment for Amalgamation in the Nature of Purchase

1) In the books of the transferee company assets and liabilities (except fictitious assets and reserves & surplus) shall be recorded at the value at which they are taken over by the transferee company from the transferor company.

2) If the purchase consideration exceeds the net assets taken over (Net assets = Agreed value of assets less Agreed value of liabilities), the difference will be debited to goodwill account which is to be amortised over a reasonable period of time generally not exceeding five years and if reverse is the case then the difference is credited tocapital reserve.

3) To fulfil the requirement of maintenance of statutory reserves, the transferee company maintains such reserves created by transferor company for some more years in its books:

Amalgamation Adjustment A/c Dr.

To Statutory Reserve A/c

4) In case of, amalgamation in the nature of purchase, investmentallowance reserve, development allowance reserve, export allowancereserve, etc. are entered in the books of purchaser company

5) If amalgamation is in the form of purchase, the General reserve orProfit and loss A/c balance will not be shown in the balance sheet.

Difference between Amalgamation in the Nature of Merger and Amalgamation in the Nature of Purchase

Basis of Difference	Amalgamation in the Nature of Merger	Amalgamation in the Nature of Purchase
1) **Transfer of Assets and Liabilities**	There is transfer of all assets and liabilities.	There need not be transfer of all assets and liabilities.
2) **Equity Shareholders Holding 90%**	Equity shareholders holding 90% equity shares are same in both the companies.	Equity shareholders need not be same in both the companies.
3) **Purchase Consideration**	Purchase consideration is discharged wholly by issue of equity shares (except cash for fractional shares).	Purchase consideration need not be discharged wholly by issue of equity shares.
4) **Same Business**	The business of the transferor company is intended to be carried-on by the transferee company.	The business of the transferor company need not be intended to be carried-on by the transferee company.
5) **Recording of Assets and Liabilities**	The assets and liabilities taken-over are recorded at their existing carrying amounts except where adjustment is required to ensure uniformity of accounting policies.	The assets and liabilities taken-over are recorded at their existing carrying amounts or on the basis of their fair values.

6) **Recording of Reserves of Transferor Company**	All reserves are recorded at their existing carrying amounts and in the same form.	Only statutory reserves are recorded at their existing carrying amounts. Other reserves are not recorded at all.
7) **Recording of Balance of Profit and Loss Account of Transferor Company**	The balance of P&L A/c should be aggregated with the corresponding balance of the transferee company or transferred to the General Reserve.	The balance of P&L A/c losses is identify and is not recorded at all.
8) **Difference between the Purchase Consideration and Share Capital/Net Assets of Transferor Company**	The excess of the purchase consideration over the share capital of transferor company is debited to reserves and the excess of share capital over purchase consideration is credited to reserves.	The excess of purchase consideration over the net assets is treated as Goodwill and the excess of net assets over purchase consideration is treated as Capital Reserve.

Purchase Consideration

The purchase consideration (PC) refers to the cash and non-cash payments made to the shareholders of the transferor company by the transferee company.

As per AS 14, the purchase consideration is, "the aggregate of shares and other securities issued and the payment made in the form of cash and other assets by the transferor company to the shareholders of the transferee company".

As per AS 14, the purchase consideration includes only payment made toboth the shareholders of the transferor company by the transferee company.

It does not include any payment made to the debenture holders, creditors orpayment of any liabilities of the transferor company.

For calculating purchase consideration, it is necessary to understand the meaning of some technical terms such as:

1) Business: Business includes all assets and all liabilities, i.e., assets less liabilities.

2) **All Assets**: All assets include cash and bank balances also.

3) **Trade Liabilities and Liabilities:** Trade liabilities refer to those liabilities which are incurred on account of goods of the business Trade liabilities include trade creditors, and bills payable.

On the other hand, Liabilities include financial liabilities and liabilities for expenses, i.e., bank overdraft, debentures, outstandingexpenses, provision for taxation provident fund, etc.

4) Accumulated Profits: Insurance fund, general reserve, dividendequalisation reserve, accident fund, workmen compensation fundare accumulated profits. i) Insurance Fund: Every company insures for certain risks for which it has to pay premium. At the time of amalgamation, any balance in the fund represents accumulated profits,, as no more risks are to be met out of such fund.

i) General Reserve and Dividend Equalisation Fund: A company creates general reserve for strengthening the general financial position of the company. Dividend equalisation fund is created for maintaining the rate of dividend during years of inadequate profits.

iii) Accident Fund and Workmen Compensation Fund: These funds are created by a company to meet any liability on these accounts. If there no liability, these funds represent is accumulated profits.

5) Accumulated Losses: Accumulated losses include: i) Debit balance of Profit and Loss Account,

ii) Preliminary expenses, underwriting commission,

iii) Premium on redemption of preference shares and debentures.

These losses are transferred to equity shareholders.

6) **Provisions**: Provisions like provision for doubtful debts, provision for depreciation, investment fluctuation fund and provision for investments may be shown on the assets side by way of deduction from the particular assets or on the liabilities side. These provisions are transferred to realisation account.

Goodwill = Purchase Consideration - Net Assets

Capital Reserve = Net Assets - Purchase Consideration

Purchase Consideration = Agreed Value of Assets Taken Over - Total Liabilities taken over for all the amalgamating company (old company)

Valuation Of Human Resources

(1) Historical Cost Method:

This method is based on costs incurred or recruitment, training, familiarization etc. It is developed by Rensis Likert. This is a very simple method based on traditional principles of accounting. Under this method an attempt is made to have a proper match between cost and revenue.

The plus point of this method is that the organization can show the value of human capital in its balance sheet and profit and loss account, the weak point of this method is that it fails to fulfill the need of developing a system of HRA based on systematic valuation of human resources.

(2) Replacement Cost Method:

Under this method the replacement cost of existing personnel is estimated. Replacement cost includes the cost of recruitment, training and opportunity cost for the intervening period. This serves the purpose of making valuation of human resources periodically. It helps in planning for human resources in future. The difficulty in this method is that the value differs from person to person making it difficult to find identical replacement of the present human assets.

(3) Economic Value Method:

The payment made to the human resources till their retirement are calculated and appropriately discounted to get their present economic value.

(4) Standard Cost Method:

This method is in improvement over replacement cost method. Under this method the standard costs of recruitment, training and development are developed and established every year to overcome complications in calculations. There costs represent the value of human resources for accounting. It is easy for implementation and control.

(5) Present Value Method:

Under this method the net contributions of employees to the earning of the organisation are discounted to have present value of human resources.

(6) Current Purchase Power Method:

In this method the historical costs are converted into current purchasing power of money with the help of index numbers.

(7) Opportunity Cost Method:

Under this method the value of human asset is determined in their alternative use or the next best alternative use. This value forms the basis for valuation of human asset of organisation. For calculation of opportunity cost bidding method is used. But it is difficult to decide bid or offer.