VALUATION APPROACHES TO Mergers & Acquisitions

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THE TYPICAL VALUATION APPROACHES

What are mergers and acquisitions, and why are there so many of them?

Although mergers and acquisitions are lumped together as a term, they represent two different types of transactions:

- **A merger** is the combination of two companies into a single business entity.
- **An acquisition** is the purchase of one business by another.

Although mergers and acquisitions are technically different types of transactions, for accounting purposes they are treated the same. All M&A transactions as the purchase of one company by another.

The evaluation of mergers and acquisitions involves analysis for situations in which one company (the Buyer) offers cash or its own common stock in exchange for the common stock of the other company (the Target). In most situations, this requires the approval of the Target's Board of Directors and shareholders. The exception is a hostile takeover, in which the Buyer acquires enough of the Target's stock to control the company against the wishes of the Target's board and shareholders.

As for why there are so many M&A transactions each year, combining two companies through a merger or acquisition is a business strategy for increasing value through synergy; the two companies combined are expected to be more valuable or profitable than each business operating independently. **There are a variety of synergies that can be realized through an M&A transaction:**

- **Revenue synergies:** Diversification of revenue sources resulting from new or complementary product or service offerings.
- **Operational synergies:** Greater production capacity due to acquisition of additional facilities and employees.

- **Revenue/cost synergies:** Greater market share and economies of scale.
- **Financial synergies:** Decrease in financial risk and reduced borrowing costs.
- **Operational/cost synergies:** Increase in operational efficiency and/or expertise; increase in research and development programs/expertise

In addition to business synergies, a merger or acquisition may be transacted for defensive purposes. This scenario is common when a large, established company sees a threat to future market share due to a smaller competitor's superior product or service offering, or because the smaller company has valuable intellectual property (IP) such as a new technology. Facebook's acquisition of Instagram is a good example.

Merger Analysis

Merger analysis involves the use of models to analyze the financial profile of a merger after the two companies are combined. The primary goal is to determine whether the Buyer's earnings per share will increase or decrease as a result. **An increase in expected earnings is referred to as *accretion*, and this type of merger or acquisition is known as an *accretive acquisition*. A decrease in expected earnings is called *dilution*; this type of merger or acquisition is known as a *dilutive acquisition*.** Accretive acquisitions are much more common for the simple reason that the Buyer's shareholders are unlikely to approve of a purchase that decreases the value of their shares. Ultimately, whether the transaction is accretive or dilutive is a function of the purchase price for the Target, as well as the number of shares issued for raising capital to finance the purchase.

A merger analysis includes these key valuation data points:

- Analysis of accretion/dilution and balance sheet impact
- Analysis of synergies
- Type of consideration offered (cash or stock) and the impact this will have on results
- Goodwill and other balance sheet adjustments
- Transaction costs

These data points are established by answering the following questions:

1. **Who is the Target or Seller?**

- Public or private company
- Percentage of insider ownership vs. publicly held stock

2. **Who is the Buyer?**
    - Strategic buyer (an existing company hoping for synergies)
    - Financial sponsor (a private equity firm hoping to generate returns through a leveraged buyout)
3. **What is the transaction context?**
    - Auction, or privately negotiated sale
    - Friendly or hostile takeover
4. **What are the market conditions?**
    - Acquisition currency (cash or equity)
    - Historic premiums paid for comparable transactions

Each of these data points is used in building the M&A model for the transaction.

Types of Mergers and Acquisitions

There are a variety of types of merger and acquisition transactions. The type of transaction is also taken into account when building the M&A model:

Horizontal Merger	The combination of two companies in the same industry or sector.
Vertical Merger	A company's purchase of its supplier or distributor.

Conglomerate M&A	A company’s purchase of another company in a different industry or business sector.
Friendly Takeover	The purchase of a company with the approval of that company’s Board of Directors and acceptance of an acquisition offer
Hostile Takeover	The acquisition of a target company after that company’s rejection of an acquisition offer, usually accomplished through the buyer’s offer to purchase outstanding shares at a premium from shareholders
Reverse Takeover	A private company acquires a public company, avoiding the initial price offering (IPO) process while gaining access to public markets

Building The M&A Model

With all the data points from the Merger Analysis in hand, the M&A Model can be designed. The typical M&A model includes these steps:

1. **Making acquisition assumptions:** Assumptions about how the merger will be financed (cash, stock, debt, or a combination)
2. **Making projections:** Projections about income for each of the companies in the transaction based on income statements and valuation of each company
3. **Combining the companies:** Combining the income statements of both companies, adding together revenue and operating expenses, and adjusting for debt or cash used to finance the merger

4. **Calculating accretion/dilution:** Combining the net incomes of both companies and dividing by the number of shares outstanding yields the earnings per share of the combined companies. If earnings per share are higher than pre-merger, the deal is accretive; if they are lower, it is dilutive.

Once the M&A Model is determined, the next step is settling the purchase price of the Target.

<u>Determining The Purchase Price</u>

The typical Buyer in an M&A transaction wants to benefit by increasing value for its shareholders. To take over the Target company, either fully by purchasing all shares or in part by acquiring enough shares to gain control, the Buyer is willing to pay a *control premium*. This is the price paid over and above the market price for the Target. For example:

Company A offers Company B Rs.20 per share to acquire Company B. Company B's share price prior to announcement of the offer is Rs.16 per share. Company A's offer represents a 20% premium over the current market price.

In the evaluation of mergers and acquisitions, determining the purchase price for the Target is a key consideration; the control premium that will be paid is also critically important.

To determine the amount of the control premium, recent comparable transactions involving the purchase of similar companies are often examined.

The fair value of the Target company will also be determined through one or more of the three standard valuation approaches: the Market, Income, or Cost approaches—although the Cost approach is rarely used as a merger and acquisition valuation method.

Once the value of the Target is established, management of the Buyer and Target will negotiate to reach agreement on the purchase price and control premium.

<u>Calculating Goodwill And Adjusting The Balance Sheet</u>

Goodwill is the premium paid by the Buyer to acquire the Target. In the transaction, some portion of the Target's assets are often "written up" or increased in value. This appears as an increase in intangible assets on the Buyer's balance sheet. Transaction and financing fees are added to the amount designated as goodwill.

Goodwill is a long-term asset that is never depreciated or amortized unless an impairment is found; in that case, a portion of the goodwill is “written off” as a one-time expense.

Other adjustments to the Buyer’s balance sheet accounts might also need to be made—for example, to account for aligning current value and market value of inventory.

Although M&A transactions can be complex and involve some unique considerations, merger and acquisition valuation methods are the same as the approaches used for other business valuation purposes. Ultimately, what is most important is to seek the services of valuation experts to establish a fair and reasonable value for the purchase of the company being acquired.

<u>Importance of valuation in M&A</u>

Irrespective of the purpose for which a merger or acquisition takes place, their main aim is to help entities expand their size and value in the market. After a merger or acquisition takes place, the value of the entities involved equals the sum of their independent values. However, it often happens that mergers and acquisitions tend to have a negative impact on the entities involved due to incorrect estimation of entity value. Though there are precise approaches and methodologies to estimate the value of an entity but when they are put to practical use it becomes a complex process. Therefore, it becomes significantly important to determine the right value of entities in mergers and acquisitions with the right approach and methods to avoid financial downfalls.

<u>Need for valuation</u>

During mergers and acquisitions, the intended purpose of the valuation is identified so that the calculated value matches with the required purpose. Few instances where the valuation is done based on the purpose are:

- Corporate Restructuring;
- Calculating the consideration for the sale of business or acquisition;
- Liquidation of the company;
- Calculating the consideration for sale or purchase of equity stake;
- During family separation, there is a need to calculate the value of assets and businesses owned by such a family;

- The portfolio value of investments is calculated by the virtue of Private Equity Funds or Venture Funds;
- Purchase or sale of intangible assets such as rights, patents, trademarks, copyrights, brands, etc;.
- For the purpose of getting listed on the Stock Exchange, calculating the fair value of the shares is required;
- Calculating the fair value of shares for providing Employee Stock Ownership Plan following the Employee Stock Ownership Plan guidelines.

Indian laws impacting valuation

Valuation of entities is subject to the following Indian laws, authorities and actions –

- Companies Act, 2013
- Foreign Exchange Management Act, 1999
- Securities Exchange Board of India and Stock Exchanges
- Competition Commission of India
- Stamp Duty
- Income Tax
- Takeover Regulations
- Indirect Tax
- Accounting Standards

Valuation Approaches

To determine the value of a business, there are three different approaches i.e, Asset-based approach, Income approach and Market approach. Either a single approach or a combination of the three approaches can be employed while determining the value.

- **Asset-Based Approach**
- This approach states that the buyer shall not pay more value for the purchase of an asset where a similar asset of the same value could be bought. The asset-based

approach focuses on the net asset value of an entity. The net asset value is determined by subtracting total liabilities from total assets. The said approach is employed for valuation in a going concern company as well as the company on a liquidation basis. This approach is also employed when a target company has tangible assets.

- **Income Approach**
- The income approach states that the value of the acquisition candidate must be worth the future benefit of its revenue channels, discounted to the current value post reflecting the investment risk and time value of money. Both net cash flow and dividends form income inflows while determining the value of the acquisition candidate. This estimation is known as economic income. Capitalization rate or discount rate is applied to the economic income for valuation. While the capitalization rate represents a particular period's income channel, the discount rate represents the total return an investor expects to get based on the invested amount.
- **Market Approach**
- The market approach states that during the process of valuation the valuator must thoroughly search for such companies in the market that are similar to the acquisition candidate. A minority interest market value is provided in the market approach. The market approach helps the valuator to adjust multiple results acquired from a minority interest value to a control interest value. The relationship between the book value or an identified revenue stream and the gross purchase price is represented by the multiplier.

METHODS OF VALUATION

Based on the above-mentioned approaches there are specific methods for estimating the value of an acquisition candidate.

- **Net Asset Method**
- This method comes under the asset-based approach. It determines the fair market value of every asset and liability on the date of valuation. In this method, the equity value is estimated based on adjusted assets minus the liabilities adjusted. Usually, the underperforming assets are brought by the acquiring company through this method.
- **Excess earnings treasury method**
- This method comes under the asset and income-based approach. It differentiates among intangible assets and adjusted net tangible assets. The estimation of intangible

value is done by capitalizing those earnings of the company that are more than the earnings relating to a reasonable return on the fair market value of its net assets. The total value of the company is calculated by combining the tangible net adjusted assets at fair market value with the intangible value as estimated above. The excess earnings treasury method makes use of the average returns on equity from similar companies or industry averages to estimate a reasonable return while determining the right capitalization rate.

- **Excess earnings reasonable rate method**
- This method comes under the asset and income-based approach. In this method, a reasonable rate of return is applied to the adjusted net assets. The estimation of intangible value is done by capitalizing those earnings of the company that are more than the earnings relating to a reasonable return on the fair market value of its net assets. To estimate the total value of the company, the intangible value is combined with the fair market value of the adjusted net assets.
- **Capitalization of earnings method**
- This method comes under the income approach. This method is used to determine the value of a profitable company when the investor aims to facilitate an annual return on investment over reasonable compensation of the owner. The future estimated earnings are determined and divided by a capitalization rate to obtain a value. In this method, no separation is done between the tangible and intangible assets. This method is not appropriate for capital-intensive companies.
- **Discounted Cash Flow (DCF) method**
- This method comes under the income approach. It is also known as the Discounted Earning Method (DEM). In this method, to determine the value of a company, its earnings are defined. The earnings here may refer to post-tax cash flow and cash flow from operations. In this method, the capitalization rate is used. The assumption in this method is that the total value of the company is estimated by determining the current value of the projected future earning and the current value of the terminal value. The valuator in this method must be satisfied that the projected earnings are backed by the assumptions of the management and constitute reasonable future earnings.
- **Price/Earnings ratio method**

- This method is a combination of income and market approach. In this method, market comparisons are used to estimate the multiple to be applied against post-tax earnings. A weighted average price/earnings ratio of similar publicly traded companies helps in capitalizing the future estimated net income (post-tax). The main problem in making market comparisons is finding publicly traded companies that are similar to the targeted company. This method is generally used to determine the value of large and diversified companies.
- **<u>Dividend-paying capacity method</u>**
- This method is a combination of income and market approach. It is usually employed to determine the value of large companies that pay dividends. A five-year weighted average of dividend yields of five similar companies helps in capitalizing the future estimated dividend to be paid or that can be paid. When the valuation of larger and diversified companies is required, this method is put to use.
- **Guideline method**
- This method is based on the market approach. It draws a qualitative and quantitative comparison between the targeted company and the public companies (guideline companies) that are similar to it. The evaluator must be satisfied that the public companies and the target company carry out similar functions, have similar products and services and are based in the same geographic location. The required adjustments to the financial statements of the public companies held for comparison must be made by the valuator.
- **Direct market data method**
- This method is based on the market approach. It uses the sales transactions of an entity to compare with the acquisition candidate. However, it is not an easy task to compare the sales transaction as they often get consummated due to favourable purchase terms, acquired synergies, etc. Therefore, the valuator is required to adjust the direct market data used for a premium or discount.
- **<u>Rule of thumb method</u>**
- This method is based on the market approach. It is derived from the direct market data method. A formula is determined based on industry-wide experiences in the marketplace. This formula is used to ascertain the relations between the sales price and the operational unit of measurement regarding a particular industry. The method does not include risks that have the materialistic capability to affect the value.

However, this method provides an effective test to check whether the value estimates determined from other methods are appropriate or not.