

VALUATION OF BUSINESS

(Dr.Rachanaa Datey)

WHAT IS VALUATION?

Valuation refers to the process of determining the present value of a company, investment or an asset. There are a number of common valuation techniques, as described below. Analysts who want to place a value on an asset normally look at the prospective future earning potential of that company or asset.

By trading a security on an exchange, sellers and buyers will dictate the market value of that bond or stock. However, intrinsic value is a concept that refers to a security's perceived value on the basis of future earnings or other attributes that are not related to a security's market value. Therefore, the work of analysts when performing a valuation is to know if an investment or a company is undervalued or overvalued by the market.

Key Highlights

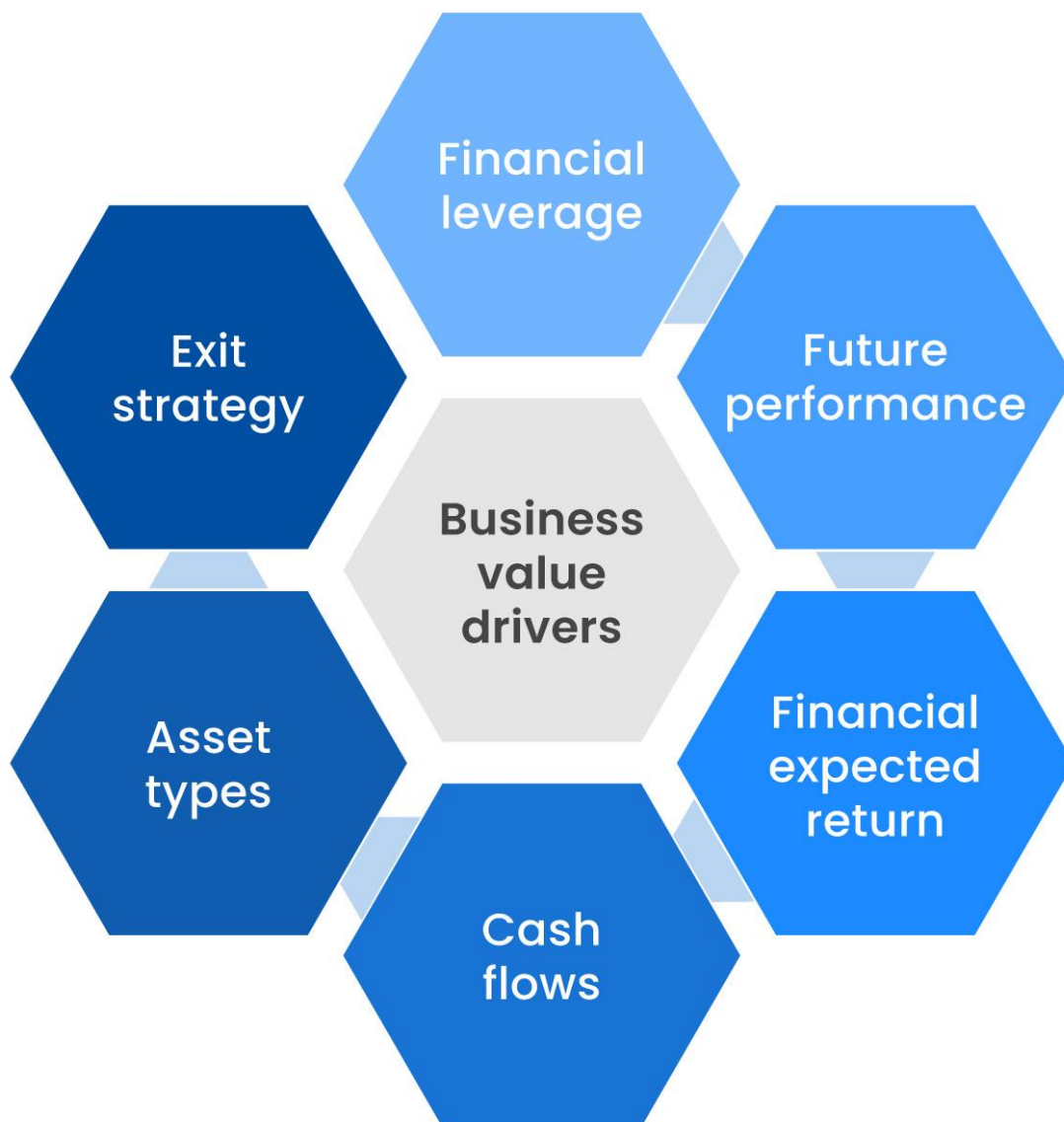
- Valuation is the process of determining the theoretically correct value of a company, investment, or asset, as opposed to its cost or current market value.
- Common reasons for performing a valuation are for M&A, strategic planning, capital financing, and investing in securities.
- The three most common investment valuation techniques are DCF analysis, comparable company analysis, and precedent transactions.

What is Business Valuation?

Company Valuation or Business Valuation, is the process by which the economic value of a business, whether a large or small business is calculated. The purpose

of knowing the business's value is to find the intrinsic value of the entire company - its value from an objective perspective. Valuations are mostly used by investors, business owners, and intermediaries such as investment bankers, who are seeking to accurately value the company's equity for some form of investment.

Business Valuation – Drivers



Although business valuations are mostly used to value a company's equity for some form of investment, it isn't the only reason to have an understanding of a company's value. A company is not unlike most other long-term assets, in that

it's useful to have a handle on how much it is worth. Being in an informed position at all times enables the company's owners to understand what their options are, how to react in different business situations, and how their company's valuation fits into the bigger picture.

REASONS FOR PERFORMING A VALUATION

Valuation is an important exercise since it can help identify mispriced securities or determine what projects a company should invest. Some of the main reasons for performing a valuation are listed below.

1. Buying or selling a business

Buyers and sellers will normally have a difference in the value of a business. Both parties would benefit from a valuation when making their ultimate decision on whether to buy or sell and at what price.

2. Strategic planning

A company should only invest in projects that increase its net present value. Therefore, any investment decision is essentially a mini-valuation based on the likelihood of future profitability and value creation.

3. Capital financing

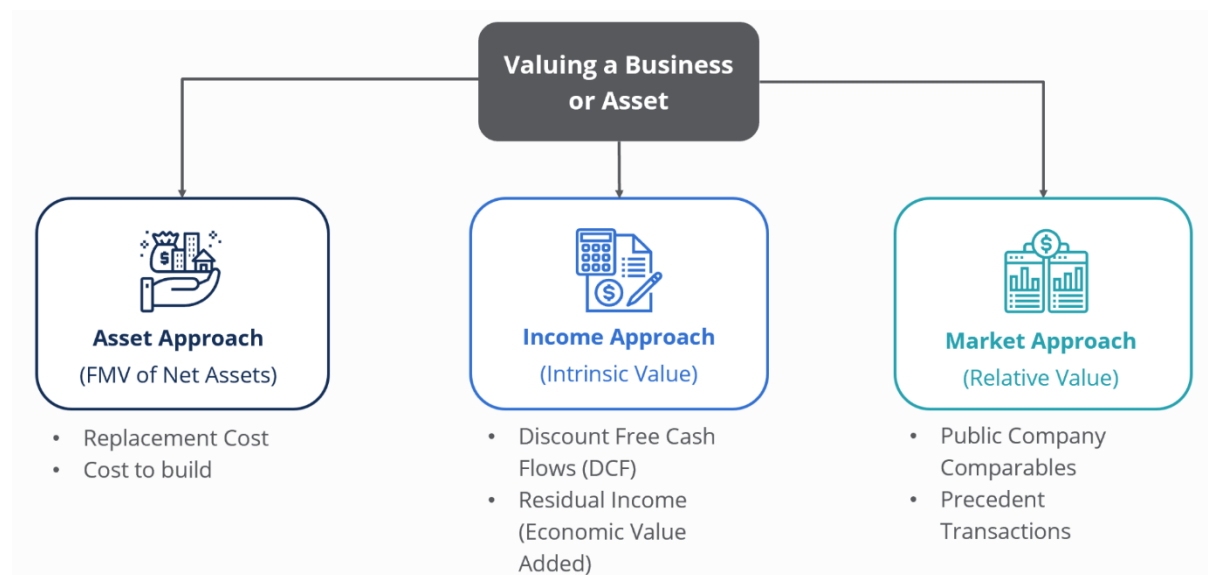
An objective valuation may be useful when negotiating with banks or any other potential investors for funding. Documentation of a company's worth, and its ability to generate cash flow, enhances credibility to lenders and equity investors.

4. Securities investing

Investing in a security, such as a stock or a bond, is essentially a bet that the current market price of the security is not reflective of its intrinsic value. A valuation is necessary in determining that intrinsic value.

COMPANY VALUATION APPROACHES

When valuing a company as a going concern, there are three main valuation techniques used by industry practitioners: (1) DCF analysis, (2) comparable company analysis, and (3) precedent transactions. These are the most common methods of valuation used in investment banking, equity research, private equity, corporate development, mergers & acquisitions (M&A), leveraged buyouts (LBO), and most areas of finance.



Motives for Business Valuation



Internal Motives

- Acceptance of new share holders, and their required equity contribution.
- Change in the legal form of the company.
- Management contracts and remuneration based on equity ownership (e.g. share options).
- Enable company to create incentives based on value creation.
- Understand company's value determinants.
- Understand whether the company's capital structure is maximising its value given the prevailing market environment.
- Acceptance of new share holders, and their required equity contribution.



External Motives

- Establishing tax bands and other corporate taxation issues.
- Determination of insurance premiums.
- Determining a valuation for IPO.
- Private placement valuation.

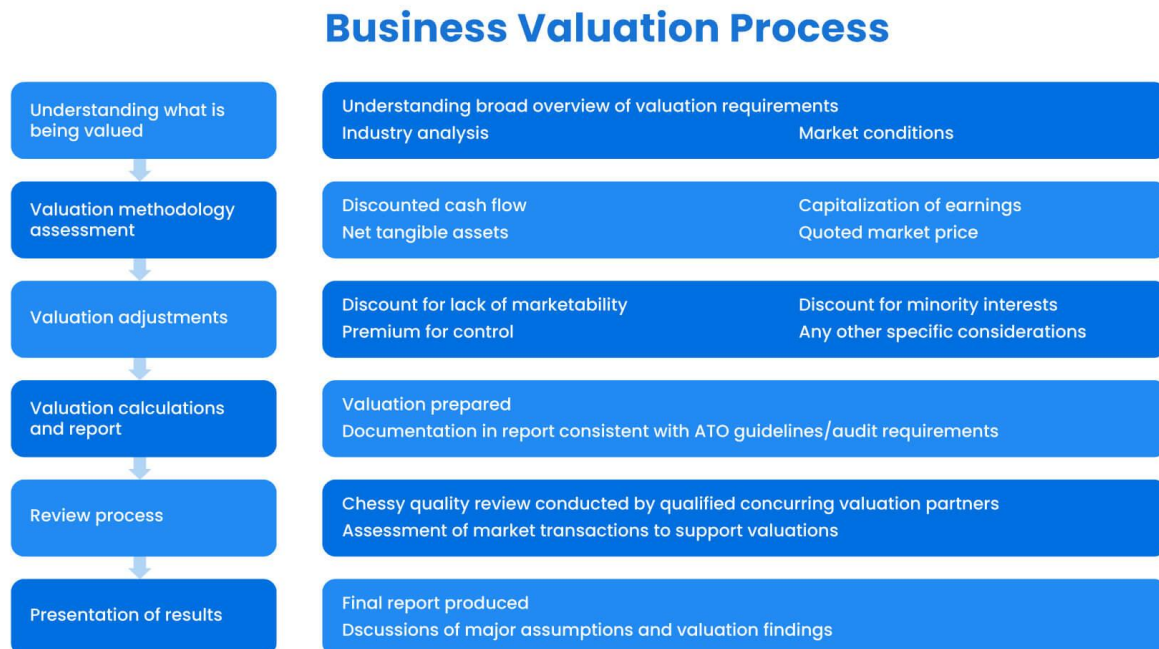


Mixed Motives

- Purchase or sale of the company, partly or fully.
- Transferral of company ownership.
- Privatization or going public.
- M&A transactions of all kinds.
- Understanding the company's value relative to its stock market valuation.
- Equity issues.
- Loan and credit collateral.

THE BUSINESS VALUATION PROCESS

Every business valuation process differs based on which method you choose to evaluate.



Whatever method you use, the final aim is to find the company's intrinsic value.

Depending on the company, whether private or public, entrepreneurs or individuals conducting the business valuation process, the method can differ. For example, should a company be measured based on its assets, its future free cash flows, recent transactions for comparable companies, or the sum of its real options? More often than not, valuation professionals seek to use a combination of these to arrive at an answer.

The valuation methods they use are summarized in the table below

Business Valuation Methods

Asset-based	<ul style="list-style-type: none">• Book value method• Adjusted net assets method• Replacement method• Liquidity method
Income-based	<ul style="list-style-type: none">• Discounted dividend method• Discounted cash flow method (DCF)• Discounted future earnings method
Comparables	<ul style="list-style-type: none">• Average cost method• Swiss method• Berlin method• Excess earnings method• Stuttgart method
Mixed	<ul style="list-style-type: none">• Comparable transactions method• Multiples method
Alternatives	<ul style="list-style-type: none">• Real options values• Time lag methods

More often than not, business valuation professionals use at least two methods when valuing companies, the most common being the DCF method and comparable transactions. These methods are popular because they're widely understood, but also because the underlying numbers are easier to obtain. In the case of real options valuation, for example, the numbers which underpin the value of the business are far more difficult to objectively ascertain.

Business Valuation Methods

1. Discounted Cash Flow Analysis
2. Capitalization of Earnings Method
3. EBITDA Multiple
4. Revenue Multiple
5. Precedent Transactions
6. Liquidation Value / Book Value
7. Real Option Analysis
8. Enterprise Value
9. Present Value of a Growing Perpetuity

1. Discounted Cash Flow Analysis

Discounted cash flow analysis uses the inflation-adjusted future cash flows to project a value for the business. The thinking behind DCF Analysis is that free cash flows are what endow shareholders with value and only that number that matters.

The problem then arises of how to accurately project discounted free cash flows (FCF), using a weighted average cost of capital (WACC) several years into the future. Even small differences in the metrics, growth rate, the perpetual growth rate and the cost of capital can lead to significant differences in valuation, fueling criticism of the method.

$$DCF = CF_1 / (1+r)^1 + CF_2 / (1+r)^2 + \dots + CF_n / (1+r)^n$$

Where, CF_1 = The cash flow for year one, CF_2 = The cash flow for year two, n = Number of years, r = Discount rate

For example, let's consider a company with projected FCF of \$1 million for the next 5 years. Assuming a discount rate of 10%, the company's future cash flows amount to approximately \$3.79 million.

2. Capitalization of Earnings Method

The capitalization of earnings method is a neat, back-of-the-envelope method for calculating the value of a business, which in fact is used by DCF Analysis to calculate the perpetual earnings (i.e. all those earnings that occur after the terminal year of the DCF Analysis being performed).

Sometimes called the Gordon Growth Model, this method requires that the business have a steady level of growth and cost of capital. The numerator, usually the free cash flow, is then divided by the difference between the discount rate and the growth rate, expressed as fractions to arrive at an approximation of a valuation.

$$\text{Market Capitalization} = \text{CF}_1 / (r - g)$$

Where, CF₁ = Cash flow in the terminal year, r = Discount rate, g = Growth rate

For example, consider a company with projected FCF of \$1 million in the terminal year, a discount rate of 10%, and a growth rate of 5%. Using the capitalization of earnings method, the value of the company would be approximately \$20 million.

3. EBITDA Multiple

The EBITDA multiplier is an excellent solution to the arbitrary nature of most valuation methods. Even Aswath Damodaran, the father of modern valuation, says that any valuation of a business should follow the law of parsimony: the most simple of two (or more) competing theories should hold sway in an argument.

On this basis, the EBITDA multiple - the multiplication of this year's EBITDA figure by a multiplier agreeable to both the buyer and seller - is an elegant solution to the valuation dilemma.

Even those who consider this method too simplistic tend to use it as a guide for their valuations, underlining its strength.

4. Revenue Multiple

This method can be used in those circumstances where EBITDA is either negative or isn't available for some reason (usually because sales figures are the only ones available when researching firms to acquire through online search).

Again, while you might say it's just a benchmark - others would argue, with some justification, that the total sales of a business is the most important benchmark of all.

5. Precedent Transactions

This method may incorporate the EBITA and revenue multipliers or any other multiple that the practitioner wishes to use. As the title suggests, here the valuation is derived from comparable transactions in the industry.

So, for example, if widget makers have been trading at multiples of somewhere between 5 and 6 times EBITDA (or net income, or whatever indicator is chosen), Widget Co. would establish its value by performing the same iterative process.

The problem that then arises, is how similar are companies to others, even in their own industry?

Thus, for our money, this is more of a barometer of the market than a valuation method per se.

6. Book Value/Liquidation Value

The liquidation value is what Warren Buffett claims to have always looked at when seeing if businesses are overvalued on the stock market or not. This value is the net cash that a business would generate if all of its liabilities were paid off and its assets were liquidated today. In a sense, calling this a valuation method for a business is a misnomer - this only gives you the value of part of the business. But, to paraphrase Buffett, it allows you to see the 'margin of error' that you have with a valuation.

The logic goes that, even if everything goes wrong in management and the company's sales fall dramatically after the acquisition, it can always fall back on the liquidation value.

7. Real Option Analysis

Proponents of real options analysis look at businesses as nothing more than a nexus of real options: the option to invest in opportunities, the option to utilize spare capacity, the option to hire more salespeople, etc. Bringing together these options is the basis behind real options analysis for valuation. This is most effective for firms with uncertain futures, usually those who aren't yet cash generative: startups and mineral exploration firms, for example. Of the valuation methods on this list, it's by some distance the most complicated but its proponents include McKinsey and several of the world's most prestigious business schools.

8. Enterprise Value

Enterprise Value (EV) is a method to measure the company's total market value where we not only consider the company's equity but also its debt obligations and cash reserves. By including debt, we can provide a more accurate picture of a company's value, especially in the context of mergers or acquisitions, as it represents the total cost to acquire the company's operations.

$$EV = \text{Market Capitalization} + \text{Total Debt} - \text{Cash and Cash Equivalents}$$

For example, if a company has a market capitalization of \$50 million, total debt of \$20 million, and cash reserves of \$5 million, its enterprise value would be \$65 million (\$50M + \$20M - \$5M).

9. Present Value of a Growing Perpetuity

The Present Value (PV) of a Growing Perpetuity is a valuation method which is used to estimate the total value of cash flows that continue indefinitely and grow at a constant rate. It's often applied in situations where cash flows are expected to continue indefinitely, such as in perpetuity. We can calculate the present value of a growing perpetuity with:

$$PV = C / (r - g)$$

Where, C = Cash flow at the end of the first period. r = Discount rate, g = Growth rate

For example, if a company generates a cash flow of \$1 million at the end of the first period, and the discount rate is 8%, with a growth rate of 3%. Then the present value of the growing perpetuity would be \$20 million.

HOW TO PICK THE RIGHT VALUATION METHOD?

The previous section discussed how most business valuation professionals use at least two methods of valuation, and also that the valuation (the output) will ultimately only be as good as the numbers used to achieve it (the inputs).

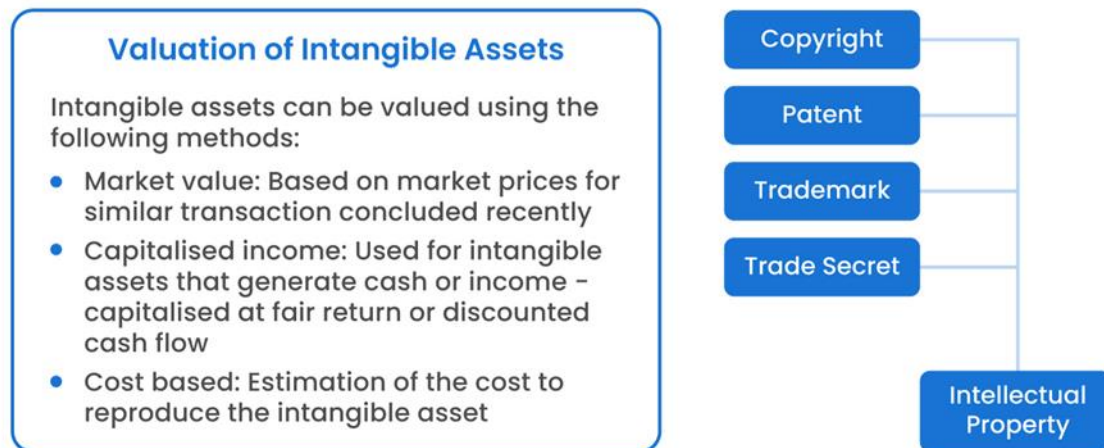
After conducting a preliminary analysis of the company, whoever is conducting the valuation chooses the method, which is most suitable to the business and its industry.

There is no question that the biggest determinant of the valuation method used is available information. To take the example of comparable transactions, without

any reasonably comparable transactions, there is no way that this valuation method can be conducted.

Here is an example of intangible assets valuation.

Business Valuation – Intangible Assets



VALUING INTANGIBLE ASSETS

Even transactions in the same space from several years before cannot be considered accurate representations of a company's value in the current environment.

In a similar vein, even the most commonly used valuation method, the DCF method, requires users to forecast free cash flows to a predetermined point in the future. Only in the most extreme cases - for example, a company with a remarkably small number of clients and pre-agreed contracts - is this feasible.

HOW TO PICK THE RIGHT VALUATION METHOD?

But information is just one of the factors which should determine which is the right valuation method to choose. The others are as follows:

Type of the company

If a company is asset-light, such as is the case with many service companies, it makes little sense to use the net-asset valuation method. Similarly, if most of a company's value is in its branding or IP, it may make little sense to use the discounted cash flow method.

Size of the company

Larger companies tend to be applicable for a larger number of valuation methods. Small companies, with less information, are usually only subject to a handful of valuation methods. Bear in mind too that different valuation considerations are at play for each (e.g., higher valuation multiples for larger companies).

Economic environment

Regardless of which method is chosen, it's never a bad idea to consider the economic environment that the company faces. But in more positive economic conditions, it's important to be somewhat conservative when valuing in the understanding that all business cycles come to an end.

End users

A further consideration for valuing a company is what the end user requires the valuation for. Some buyers will only look at the value of a company's fixed asset value, be that technology, real estate, or even trucking. Others will only be interested in cash-flow generating potential (as is the case with most buyers of SAAS platforms).

HOW TO CARRY OUT A SUCCESSFUL VALUATION OF A COMPANY

There are a few ways in which a valuation professional can ensure that, whatever the valuation method they choose, they'll arrive at a number which approximates intrinsic value.

SUCCESSFUL VALUATION FACTORS



Successful valuation factors are:

Objective

A valuation which is heavily influenced by an opinion can be regarded as just that - an opinion.

Holistic

The valuation should consider as much as possible; not just a company's assets or its cash flows, but also its environment, and other internal and external factors.

Simplistic

Holistic does not mean detail for the sake of detail. Valuing Amazon doesn't require making projections about the future prices of cardboard packaging.

Justifiable

Anyone reading the valuation should be able to arrive at the same conclusion as the individual conducting the valuation based on the information provided.

Business valuation providers

Business valuation is the bread and butter of investment banks and M&A intermediaries.

Even if a company has the wherewithal to conduct their own business valuation, it pays to hire a third party specialist for the expertise that they bring to the task. Even legal firms now typically have an in-house valuations expert.

Depending on the valuation method(s) used by the business valuation providers, the company can change the inputs over time to see how their valuation evolves. Accredited business valuation providers can also ensure reliable and accurate valuations. These specialists adhere to industry standards and bring valuable insights to the table, enabling companies to make informed decisions regarding their valuation strategies.

CLOSING REMARKS

The minute-by-minute fluctuation of the stock prices reflect the reality that there can never be a true consensus on a company's valuation: everybody has their own.

FACTORS THAT AFFECT'S BUSINESS VALUE



What links all of the methods mentioned here is that their users have, at one time or another, plugged numbers into a model which gave a number they thought was erroneous, only to replace the numbers moments later to arrive at a number they considered 'more reasonable'. The best advice is to use as many measures as possible to arrive at a valuation. The more insights you can garner on its revenues,

EBITDA, free cash flows, assets and real options, the better a perspective you gain of the company's true value.

The Bottom Line

A company valuation or business valuation is the practice of calculating an objective dollar value for a business or concern. Experts will examine its assets and liabilities, cash flows, earnings, or other metrics to determine the company's market value.

Business valuation is often determined as part of a merger or acquisition but it can also be used by investors or for tax purposes. A company can be valued in several ways so there's no single number that accurately represents a company's exact value.