Special Report

Navigating Early-Stage Valuation

aranca

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Early-stage venture-capital-backed businesses are often characterized by their focus on growth, scalability, disruption, and technological invention, all of which result in significant cash burns. Whether to raise funds, approach an exit (M&A/IPOs), issue securities, conduct fair negotiations, take internal decisions, or to report financials, start-ups may need to get valued for various purposes. It is vital one understands the challenges with start-up valuations, especially when most valuations are based on future cash flows and such companies may lack a concrete business plan or operational history. In addition to the quantitative building blocks and theoretical concepts, an appraiser needs to look for various other qualitative factors that can impact the valuation of a company – such as competitive advantage, business milestones, strength of intellectual property and management team, development stage, operating history, market size and growth potential, etc.

Aranca's diverse solutions portfolio helps clients meet their ever-growing needs and provides in-depth analysis in dealing with valuation issues across different business situations. Aranca possesses a team of seasoned valuation experts who understand complex capital structures and valuation framework for start-ups.

This article will guide you through commonly used valuation methods, factors influencing start-up valuations and challenges to obtaining realistic valuation. There are three standard methodologies: the market approach, the income approach, and the asset approach. The objective of a valuation assignment is not to create an average of the values from each of the three approaches. Instead, the chosen valuation methodology should align with the company's current stage, nature of business, operational history, and the availability of reliable, comparable, and verifiable data required to perform such an analysis. For example, for a revenue generating company, the cost approach is considered the weakest.

Market Approach	Income Approach	Cost Approach	Others
Market Multiple Method	Discounted Cash Flow (DCF) Analysis	Replacement Cost Analysis	The Berkus Method
Precedent Transactions		Liquidation Value	Scorecard Valuation Method
Price of Recent Valuation			

1. Market Multiple Method

This method is based on the economic principle of competition (i.e., in a free market, forces of demand and supply will direct the values of businesses to a particular balance). Valuation under this method entails the application of appropriate market-based multiples based on various financial and non-financial parameters that represent the future financial performance of the subject company. The multiples reflect the rate of return prospective investors can expect on their investment, which will correspond with the inherent risks associated with such investments. The multiples are believed to implicitly factor growth expectations and the level of earnings that the company is expected to generate in perpetuity.

The market approach is theoretically preferable to other approaches because it uses direct comparisons with other companies and relies on data derived from actual market transactions. However, application of the market approach during the valuation of privately held companies is fraught with challenges, especially during the early stages of development when financial information on the company being valued is largely inadequate.

One of the important factors to consider while valuing companies under this method is the selection of 'true' guideline public companies (GPCs) with reasonable effort and cost. It is vital for an analyst to consider all parameters for comparison including but not limited to business model, revenue model, size of business, stage of development, level of technology employed, geography, liquidity, etc. A few examples are stated below:

Parameters	Examples
Revenue Model	SaaS companies are associated with predictable demand, recurring revenue, scalable operations, and long-term contracts, making them an attractive investment option. Investors often attach a premium to such businesses.
Business Model	There is a significant difference between a competitor and a comparable company. The business model, size and product offering are the criteria that differentiate competitors from comparable. In the retail space, the company can operate as a chain of big stores such as Shopper's Stop or as an e-commerce website such as Flipkart. Shopper's Stop is a competitor of Flipkart but cannot be termed as a comparable company.
Size of Business and Stage of Development	The financial metrics of a company are highly impacted by the size and stage of development. Valuation multiples tend to stabilize for a mature company over time due to predictable earnings, established market position, lower perceived risk and volatility, and stable financial structure. Thus, selecting mature companies for the valuation of a young, high-growth start-up may result in a flawed valuation. While P&G (with a market cap of ~$380 billion during May 2024) could be a competitor to an FMCG start-up, it is not necessarily a comparable company due to its huge size.
Geography	It is necessary to identify the locations in which the company has sizeable operations as local demographics, laws, and business environment have an impact on various financial metrics. Deman-supply dynamics in an emerging market may differ from those in a developed country. Geographical factors such as price sensitivity, level of technology acceptance, political economic stability, regulatory risks, and standard of living may influence valuation multiples.
Level of skill required	Complex IT solutions such as virtualization services would command a higher multiple than IT help desks/IT support services.
Level of technology deployed	Companies with proprietary tech-oriented solutions will be valued higher than resellers of third-party products.
Liquidity of Stock	For regional companies that are not heavily traded, an analyst may want to see the traded volume of stock (%) and free float market capitalization (%) to check the liquidity of stock. Weaker liquidity may not accurately indicate market pulse and may not be indicative of the stock's fair value.

Source: Aranca Analysis

When the subject company has multiple revenue models/business models/service offerings, it is recommended that one follow a sum-of-the-parts (SOTP) approach to essentially capture the true value potential of a business.

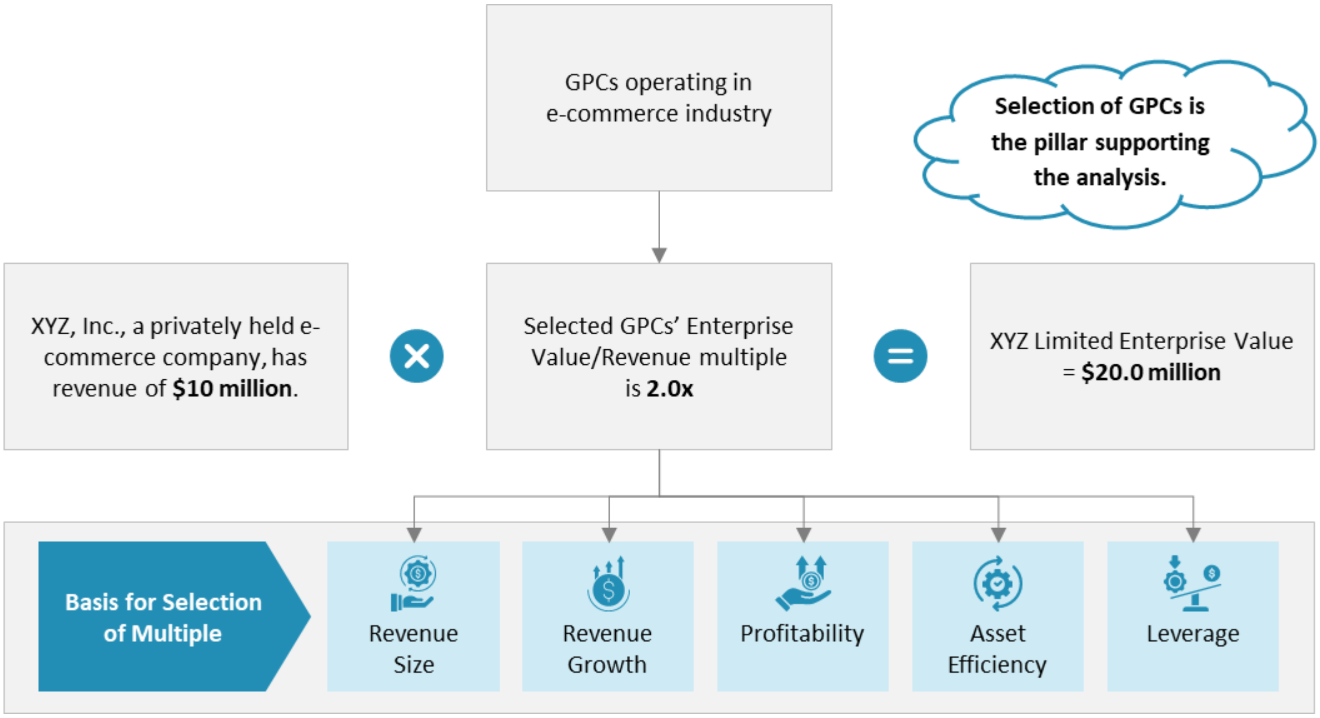
Market Multiples based on financial parameters:

The method entails a comparison of the subject company with publicly traded companies. The comparison is generally based on published data on the public companies' stock price and earnings, sales, or revenues, which are expressed as a fraction known as a "multiple" (i.e., the ratio of enterprise value to EBITDA, gross profit, revenues, invested capital). The selection of the multiple depends on factors such as stability of profits, reliability of earnings, nature of industry, nature of revenue reporting, etc.

Enterprise Value/ Revenue	Used for companies that exhibit negative earnings or where there is scope for manipulation of profits by a company's management; commonly used for high-growth/early-stage tech companies
Price to Net Book Value (P/B)	Used for capital-intensive industries such as telecommunications, manufacturing, utilities, etc. with significant depreciation and amortization expenses; earnings of companies with different depreciation policies and levels of leverage are not comparable; EV/EBITDA multiple overcomes this shortcoming related to companies
Price to Earnings (P/E)	Used to evaluate mature companies with stable earnings; commonly used for industries where earnings are a key performance measure, such as consumer goods or financial services
Price to Net Book Value (P/B)	Used for businesses such as real estate, banks and insurance companies that have significant tangible or financial assets relative to total investment

Source: Aranca Analysis

Direct application of the performance indicators of public companies may be difficult as public companies are typically in the much later stages of development relative to privately held companies. In such cases, an appraiser may need to make certain adjustments to the selected multiple based on comparison with shortlisted peers on metrics mentioned below. As the subject company advances its business to add more product offerings with improving comparability with peers, this approach would be more applicable.



Source: Aranca Analysis

Market Multiples based on non-financial parameters/KPIs specific to industry:

In some industries, certain industry-specific non-financial and operating metrics are also used instead of common financial metrics. This could be the "number of monthly active users" in case of social medial applications, "average value per sign-up/average value per active vehicle" in case of car rental companies, "production capacity" in the manufacturing sector and "transaction value" in the payment processing industry.

Buy-Now-Pay-Later Companies				
Sr No.	**Companies**	**EV ($ mn)**	**GMV ($ mn)**	**EV/GMV**
1	affirm	4,607	15,500	0.30x
2	zip	2,015	5,920	0.34x
3	sezzle	61	1,743	0.03x
4	splitit	59	431	0.14x

Source: Aranca Analysis; Data as of August 31, 2023; EV: Enterprise Value; GMV: Gross Merchandise Value

While fundamental approaches are still preferred, this approach indicates value that can be used to cross-validate findings and arrive at a more accurate valuation range. The use of such metrics may also be suitable for valuation of companies in very early stages of development with no profit/revenue and operating in industries where such metrics are generally accepted.

2. Precedent Transactions

M&A Multiples

Another variant of the market approach is the guideline transaction multiple (GTM) method, which considers the ratio of total price paid for the public or private company to its earnings/revenue in recent mergers & acquisitions (M&A) transactions between unrelated parties. M&A transactions must be analyzed based on qualitative factors to assess comparability with the subject company.

Factors	Indications	Impact on Multiple
Timing of Deals	Economic boom	↑
Geographic locations	Stringent regulatory environment	↓
Revenue and business model	Recurring revenue models	↑
Company size and stage	Small size, early stage with high risks	↓
Growth and profitability	Strong earnings growth and efficient profit margins	↑
Leverage	Increased financial risk (high D/E for a loss-making company)	↓
Nature of synergistic benefits	Strategic advantages	↑
Market conditions	Favorable investor sentiment	↑

Source: Aranca Analysis

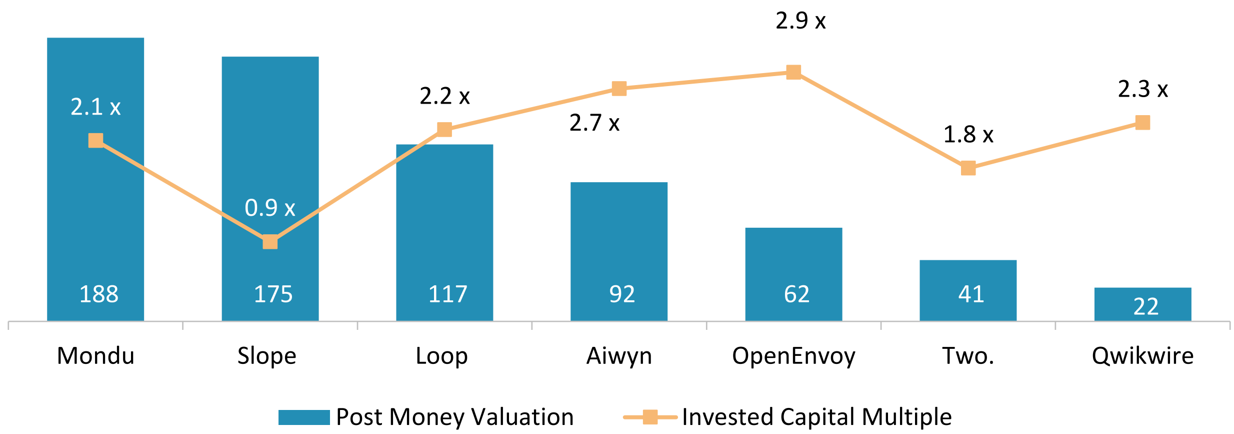
This method is mostly used in combination with the income approach and other methods. M&A transaction multiples, to some extent, include the strategic or synergistic value attributable to synergies available to the specific buyer, not available to most other market participants. To that extent, an M&A transaction may provide a better indication of the "investment value" (i.e., value for that specific buyer) than the "fair market value" (i.e., value to the hypothetical, rational financial buyer).

Funding Deal Multiples

This method considers recent funding transactions in similar industry, geography, and stage of development (Series Seed to Series E) as that of the subject company being valued. 'Valuation' to 'Invested Capital (till date)' multiples of shortlisted transactions are evaluated to arrive at the valuation of the subject company. Below is an example of Series A post-money valuation to invested capital multiples in B2B Payments space in 2023.

B2B Payment Vertical

Series A deals in 2023



Source: Aranca Analysis

This method is typically used in the case of pre-revenue start-ups wherein other valuation methods are ruled out after carefully assessing qualitative factors such as financing history, progress in the business, timeline to commercialization, etc.

3. Price of Recent Transactions

Implied Post-Money Valuation of Recent Funding Round

Although highly limited in use, implied post-money valuation based on the latest preferred financing is an alternate method under the market approach, used to determine the Equity Value of a company. The post-money equity value of a company can be calculated as below:

Source: Aranca

For example, XYZ Company recently completed its Series C funding round, securing $10 million in investment. As per the agreement, investors acquired a 25% stake in the company. This implies that the value of 25% ownership is $10 million. By extrapolating this percentage, we can determine the company's total value to be $40 million ($10 million divided by 25%). Therefore, the post-money valuation of XYZ company stands at $40 million. The pre-money valuation, accordingly, stands at $30 million.

However, the implied post-money valuation method assumes all classes of equity (preferred and common stock) are equally valuable. For instance, referring to the previous example, the company has an equity value of $40 million with 8 million shares outstanding. Going by basic mathematics, each share seems worth $5 ($40 million / 8 million), but this is not really the case in all companies. This is primarily because preferred shareholders may have a liquidation preference (LP) that gives them priority economic rights over other shareholders. With an LP right, common shareholders will see any return only if preferred shareholders receive their LP. Considering the claims held by different securities on a company's cash flows, it would be detrimental to assume all assets (shares) have the same value.

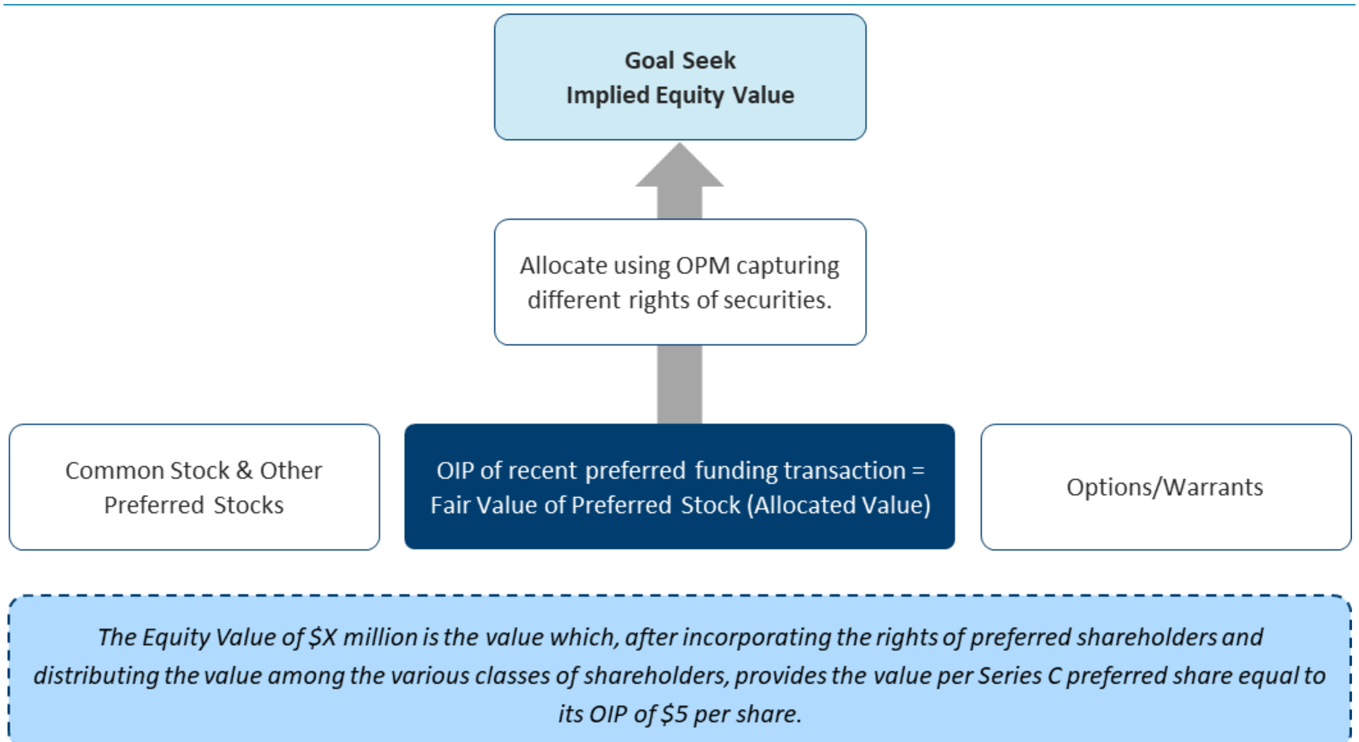
While post-money valuation is generally used to gauge equity value along with other valuation methods, it may not be used explicitly disregarding the rights associated with the securities.

Backsolve or Reverse Option Pricing Method (OPM) Valuation at Latest Preferred Financing

While post-money valuation represents one of the possible outcomes (successful exit), it is important to acknowledge other scenarios as well that might enforce the use of other economic rights held by preferred instruments. The Backsolve approach, a recent solution on the horizon, seems to address several concerns of appraisers.

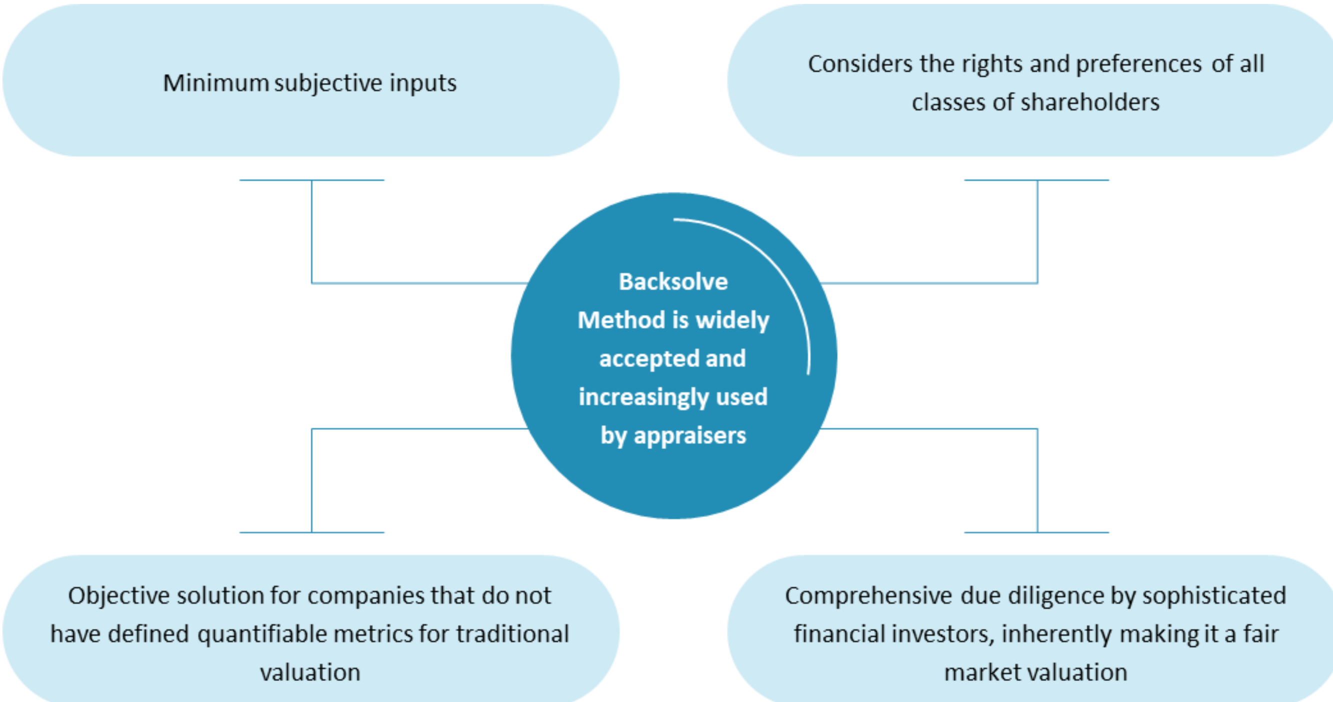
Venture-capital-backed private companies frequently complete transactions that involve issuing stock to raise funds. The recent preferred funding is a strong benchmark for the fair market value of the preferred shares issued in the round. The Backsolve Method uses the original issue price (OIP) of the company's latest preferred funding transaction as the primary input.

Backsolve Approach



Source: Aranca

It is rightly called the "Backsolve" method as it first computes the value that can be allocated to each security (including the issuances of the latest round) such that the allocated value per share (new issuance/latest preferred round) is exactly equal to the OIP The equity value resulting from this iterative process (goal-seek) to match the allocated value to the OIP is the implied equity value of the company as of the valuation date. The Backsolve method works on the principles of the Option Pricing Model (OPM).

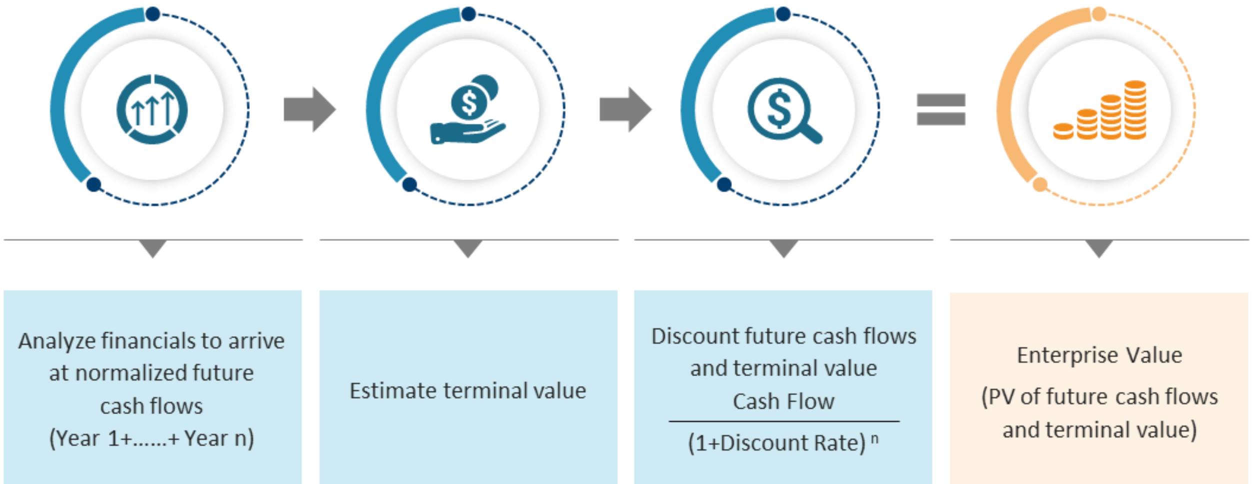


These transactions should generally be considered while estimating the fair value of various securities within an enterprise. However, as these transactions may include multiple value drivers or strategic components, it is necessary to consider the specific transaction dynamics (timing, investor profile, structure, pricing, rationale, robustness of negotiations, etc.) to understand their relevance while estimating fair value.

While venture capital (VC) funds are often regarded as savvy investors, there are examples where prominent venture capitalists have overestimated the value of a business. Cases such as SoftBank's investment in WeWork, Theranos' $700 million fundraising from notable VCs, and the failures of once promising ventures – such as Jawbone, Quibi, Homejoy, and Juicero – are well documented. It is advisable to assess the fairness of the transaction before assigning weightage to the Backsolve method.

4. Discounted Cash Flow Analysis

DCF is one of the widely used methods for valuing companies and entails three broad steps:

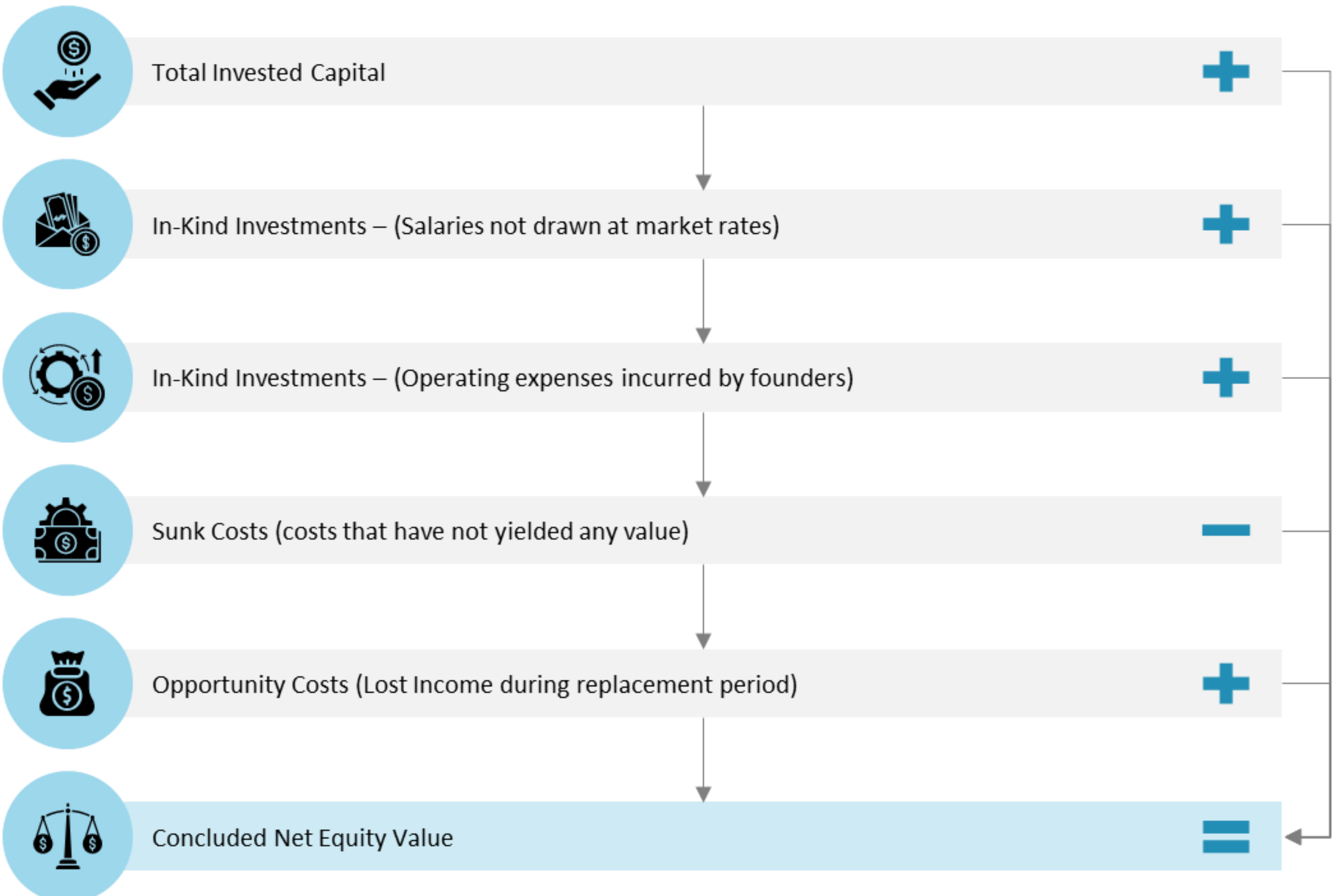


Suitability of income approach

- The DCF method relies on free cash flows that eliminate manipulation in reported earnings and the impact of different accounting policies. Irrespective of whether a cash outlay is capitalized as an asset on the balance sheet or classified as an operating expense in P&L, Free Cash Flows to Firm is a true indicator of the money left over for investors.
- Furthermore, key changes in business strategy over the forecast period can be appropriately captured in a DCF analysis, which may not be possible with other methods.
- However, there is a high degree of subjectivity involved in DCF analysis. The valuation is highly sensitive to variability in key assumptions such as terminal value, perpetual growth rate, discount rate, and future cash flows. Hence, while weighing DCF, factors such as reliability of financial forecasts as well as the magnitude and materiality of assumptions required to build them should be thoroughly analyzed.

5. Cost Approach – Replacement Cost Method

Under the Cost Approach, the value of an asset is equal to the total cost that would be required to create an asset with comparable economic utility. Similarly, the value of a company is equal to the amount that a new entity with equivalent economic utility would need to invest to achieve a similar stage of operational development and generate similar economic benefits as the subject company. In effect, this includes capital invested in the company so far. This capital could be in cash or in-kind investments made in the company. This method entails estimation of the fair value of each of its specific individual assets (tangible and intangible) and liabilities.



Suitability of cost approach

- Where the company being valued has huge and significant investments in tangible assets or where earnings generated from operations are insignificant relative to the value of its operating assets (for example, real estate companies and start-ups).
- Where the company being valued is yet to achieve commercial success and market acceptance. Until the company reaches a development stage, which can indicate the acceptability of the product by potential customers, the amount required to replace the existing company serves as a benchmark for its value.
- Where the company being valued is likely to be liquidated. The value under these circumstances may generally be below the book value owing to the distressed state of operations and liquidation costs.

6. Berkus Method

This method, designed by renowned angel investor Dave Berkus, is typically used for pre-revenue-stage start-ups. The Berkus Method uses both qualitative and quantitative factors to arrive at a valuation based on five elements. A maximum monetary value of $500K can be assigned to each element to arrive at a pre-money valuation range of $2.0-2.5 million for the start-up. Berkus sets the revenue hurdle number at $20 million in fifth year in business.

The Berkus Method	
5 Criteria for a business expected to reach >=$20 million in revenue by year 5	**Max Value that can be earned**
1. Sound idea (basic value)	Up to $500K
2. Prototype (reduces technology risk)	Up to $500K
3. Quality management team (reduces execution risk)	Up to $500K
4. Strategic relationships (reduces market risk)	Up to $500K
5. Product rollout or sales (reduces production risk)	Up to $500K
Pre-Money Valuation for a Start-Up	**Max $2-2.5 million**

Source: Aranca Analysis

7. Scorecard Method

Also known as the Bill Payne valuation method, the scorecard valuation method is widely preferred by angel investors for pre-revenue-stage start-ups. In this method, the target company is compared with similar start-ups in the industry. The selected set should be sufficiently representative of the target company's circumstances and trajectory. The Scorecard Method adjusts the average valuation of comparable startups by assessing the startup's strengths and weaknesses. This method can provide insights into factors justifying the pre-money valuation of start-ups.

- The first step is to determine the average pre-money valuation for comparable pre-revenue startups.
- The next step is to compare the startup with other startups in the same region on factors such as the stage of development, business sector, market size, technology readiness, geographic location, quality of management team and other qualitative factors.
- Each major factor is assigned a weight based on its level of importance. For example, technology readiness could attract a higher weightage (>50%) for a SaaS company while sales channel could attract a lower weightage (<10%).
- Companies in the list are then evaluated against each of the factors and assigned a score. Based on the weighted average score, valuation range for the subject company can be determined (i.e., if it should be closer to the high or low end of a range).

Sample Scorecard Analysis: Considering the weighted average score of ABC, Inc. vis-à-vis comparable companies, it should command a valuation towards the higher end of the range.

Company Name	Round of Funding	Pre-Money Val ($ Mn)	Post-Money Val ($ Mn)	Percentile Rank	Weighted Score	Technology Readiness	Government Backing
		Weights				85%	15%
ABC, Inc	Series A			100%	6.8	7.5	3
Company A	Series A	725	1,000	67%	6.0	7.0	0
Company B	Series A	90	101	17%	5.1	6.0	0
Company C	Series A	2,000	2,410	83%	6.3	6.5	5
Company D	Series A	1,030	1,460	0%	4.3	5.0	0
Company E	Series A	954	1,200	33%	5.5	6.5	0
Company F	Series A	529	624	33%	5.5	6.5	0
Mean		888.0	1,132.5				
Median		839.5	1,100.0				
Quartile 1		577.9	718.2				
Quartile 3		1,011.0	1,395.0				
High		2,000.0	2,410.0				

Source: Aranca Analysis

Conclusion

Obtaining realistic start-up valuations has always been a vexing process. Relying on theoretical concepts without a thorough assessment of the financial realities of a company's business, current market dynamics, and regulatory changes may result in inaccurate valuations. It is important to ensure adherence to a rigorous and comprehensive process so that each approach is considered, compared, and used to form the final valuation. This will help navigate the challenges of startup valuations effectively.

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