# Building Startup's Guide to

# Early-Stage Valuations

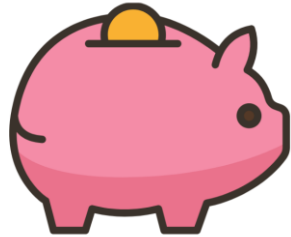**BuildingStartups.net**

# Why Early-Stage Valuations are so
# Complicated?

Unlike mature companies where there are simple accounting metrics to value a company, early-stage valuations are a lot more fluid and are biased by many factors.

They rarely have significant assets, and the ones that exist are highly uncertain

Their future revenues are hard to predict because uncertainty is very high

Market share and value is unknown or very small

Their value is perceived very differently by different people

## Important note:

A valuation is based on assumptions and is only an approximation of the value of a startup. The only real value is the one agreed between a seller and a buyer at a fair deal

BuildingStartups.net

Building Startups

# Early-Stage Valuations

# Methods

**This guide covers 10 different methods for early-stage startups valuation.**

1. Berkus
2. Scorecard
3. Risk Factor Summation
4. Venture Capital
5. Book Value / Asset based
6. Cost to Duplicate

Pre-Revenue
-------------------------------------------
Post-Revenue

7. Discount Cash Flow (DCF)
8. Comparables
9. First Chicago
10. 409A

# Pre-Revenue Valuations

# Berkus

**Invented by Dave Berkus, this method is a quick, empirically grounded method used for pre-revenue startups. It takes 5 areas of risk for the startup and give a value (up to $500K for each), giving a max valuation of $2M for pre-revenue startups and up to $2.5M if there's some sales.**

**The max value (the $2.5M), as well as the amount for each area (the $500K) can be changed depending on your location, industry etc. (different benchmark)**

| Characteristic | Add to Pre-money Valuation |
|---|---|
| Sound Idea (basic value) | Up to $0.5 million (or 20% of benchmark) |
| Quality Management Team (reducing execution risk) | Up to $0.5 million (or 20% of benchmark) |
| Prototype (reducing tech risk) | Up to $0.5 million (or 20% of benchmark) |
| Strategic Relationships (reducing market risk) | Up to $0.5 million (or 20% of benchmark) |
| Product Rollout or Sales (reducing production risk) | Up to $0.5 million (or 20% of benchmark) |
| Total Pre-Money Valuation | Up to $2.5 million (or your selected benchmark) |

Building Startups

# Scorecard

Similar to the Berkus method, but a more flexible. In the scorecard method you:

1. Find the avg. pre-money valuation of similar startups (stage, geography, industry etc.)
2. You determine the individual weighted average for each area of comparison (the weighting can be changed based on your need)
3. You multiply resulting factor (addition of all the weighted factors) by the average valuation to get a specific valuation for your startup

This method is very common with Angel Investors and is sometimes referred to as The Bill Payne method.

**Weights**

**Comparison to Benchmark**

| Comparison Area | Max | Target Startup | Weighted Factor (Max*Target) |
|---|---|---|---|
| Strength of the Management Team | 30% | 125% | 37.5% |
| Size of the Opportunity | 25% | 150% | 37.5% |
| Product/Technology | 15% | 90% | 13.5% |
| Competitive Environment | 10% | 100% | 10.0% |
| Marketing/Sales Channels/Partnerships | 10% | 75% | 7.5% |
| Need for Additional Investment | 5% | 75% | 3.75% |
| Other (e.g. great customer feedback, locale) | 5% | 75% | 3.75% |
| TOTAL RESULT | | | 113.5% |

**Resulting Factor**

Building Startups

# Risk Factor Summation

This is another pre-money valuation method. This time we take the average pre-money valuation of our industry and adjust it according to 12 risk factors.

**Average of
Pre-money Startups
In your industry/market**

**+**

**12 Factors
Risk assessment
Correction
(compared to the avg. startup)**

---

**Value of
your
startup**

**The Risk Assessment Factors are:**
1. Risk of management
2. Stage of the business
3. Political/Legislation risk
4. Supply chain and manufacturing risks
5. Sales and marketing risks
6. Capital raising risk
7. Competition risk
8. Risk of technology
9. Risk of litigation
10. International risk
11. Risk of reputation
12. Exit value risk

For each factor you assess your startup's risk on a -2 to 2 scale and apply the following correction

| Rating | Risk Rationale | $ Adjustment to Pre-Money Valuation |
|--------|----------------|-------------------------------------|
| +2 | Extremely Positive Mitigation | Add $500,000 |
| +1 | Positive Mitigation | Add $250,000 |
| 0 | Neutral | Add/Minus Nothing |
| −1 | Negative Mitigation | Minus $250,000 |
| −2 | Extremely Negative Mitigation | Minus $500,000 |

Building
Startups

# Venture Capital

The VC method is based on the VC expected rate of return for an investment (the riskier the investment, the higher expected rate of return) in a pre-revenue startup. It is used by VCs to calculate their equity demands in a funding round.

## How to use:

1. Determine the terminal value (the expected exit amount)
2. Define your expected rate of return (in a multiple, i.e. 20x, 10x etc.)
3. Calculate the current post-money valuation by dividing the terminal value by the expected rate of return.
4. Calculate the pre-money valuation by subtracting the amount on capital you are planning to invest right now from the post-money valuation from #3.
5. And account for dilution down the road by multiplying the pre-money valuation from #4 by the percent of expected dilution down the road to get a new pre-money valuation.
6. The relative part of the capital invested from the pre-money valuation is the expected equity a VC will require.

3. $PoMV = \dfrac{TR}{ROI}$

4. $PrMV = PoMV - Inv$

5. $DPrMV = PrMV * D$

6. $Equity = \dfrac{DPrMV}{Inv}$

TR – Terminal Value
ROI – Expected Multiple
PrMV – Pre Money Valuation
PoMV – Post Money Valuation
Inv – Required Investment
DM – Dilution (in %)
DPrMV – Diluted pre money valuation

Some investors like to discount the Terminal Value to the present using the following formula:

$$TV_{Cur} = \dfrac{TV_{Future}}{(1+r)^n}$$

Where:
n - is the life span of the investment (or time to exit)
r – is the rate of adjustment (or interest rate)

Building Startups

# Book Value

The book value, or assed based valuation is a simple valuation method for pre-revenue startups. Unlike other methods, this method only look at the present value and not the future potential of a startup.

## How to use:

1. Take the total assets (tangible and intangible) of the startup.
2. And subtract from it the total liabilities the startup have.
3. The result is your valuation.

$$ \text{Total Assets} - \text{Total Liabilities} = \text{Valuation} $$

# Cost to Duplicate

Similar to the book value valuation, this method also look at the current assets of the business. The difference between the two methods is that in the cost to duplicate method we calculate how much will it cost to re-build the startup (without its intangible assets) to its current state. The amount we get to is our valuation.

# Post-Revenue Valuations

# Discounted Cashflow (DCF)

Another method to valuate startups is based on it's future earning potential. This method is good only if you can confidently predict the future cashflow of a startup.

The idea is that tomorrow's cashflow is worth less than today's cashflow.

The concept is to take the future cashflow predictions of n years (the lifetime of an investment) and adjust their value for today based on an agreed discount rate.

A common value for the discount rate is the startup's WACC (weighted average of working capital)

## Discounted Cash Flow Formula

The formula for DCF is:

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_n}{(1+r)^n}$$

where:

$CF_1 =$ The cash flow for year one

$CF_2 =$ The cash flow for year two

$CF_n =$ The cash flow for additional years

$r =$ The discount rate

Building Startups

# Comparables

In this method we look at similar startups (industry, stage, sales) and at what condition have they raised money as a multiple of certain KPIs (like revenue, EBITDA, MAU, ARR etc.)

## How to use:

1. Select comparable startups
2. Identify KPIs for comparison
3. Find relevant M&A or exit values
4. Identify KPI values for these startups at M&A or exit
5. Compare KPI values to your startup and calculate a factor of comparison (the ratio between values of the comparison KPI)
6. Multiply the exit values found in #3 by the factor calculated at #5 to get your startup's valuation.
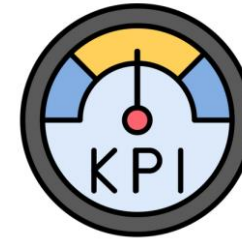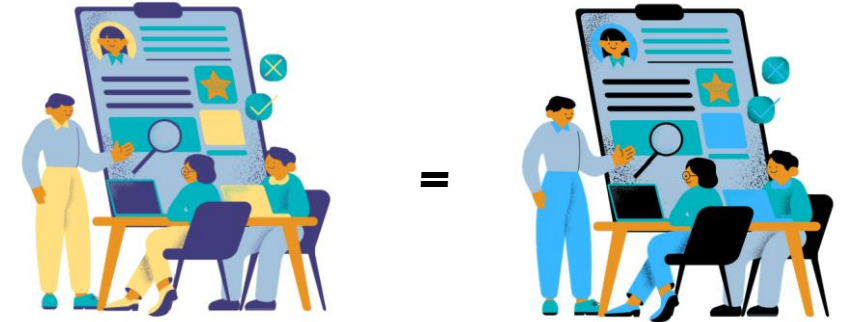
# First Chicago

**This method is a combination of DCF and Comparables in the way that it combines different outcomes based on their probabilities to give an overall valuation.**

## How to use:

1. Take 3 scenarios (bad, average, good) and perform a DCF analysis for each.
2. Define a probability for each scenario (should add to 1 or 100%)
3. Use the probability to weigh the different valuations to get a final valuation.

$$V = P_{bad}DCF_{bad} + P_{avg}DCF_{avg} + P_{good}DCF_{good}$$

**A possible shortcut is to use a VC method instead of DCF**

# 409A Valuation

409A is an IRS code section that is trying to prevent executives from taking advantage of equity loopholes. It's a 3$^{rd}$ party valuation of the Fair Market Value (FMV) of a startups.

Its purpose is to evaluate the value of the common stocks of a startup and therefore happen before stocks or options are granted to employees. They should be done at least **once every 12 months** or **when a material event happen in the startup**.

Since this is an IRS requirement, the parties which perform such a valuation are sticking to what's called a defensible valuation. That's a valuation that they can defend if an IRS audit happen.

This means that the valuation will probably be on the lower side of the possible range.

## Common 409A Valuation method include:
- Market approach: valuators use the OPM backsolve and make adjustment to extrapolate the common shares value from the preferred shares the investors get.
- Comparables (as described earlier)
- DCF
- Asset approach (especially for early-stage startups)

# Which Method Should You Use?

# It Depends...

There is no one right method as all methods are based on assumptions and your familiarity with the market/industry.

Having said that, some methods are better for specific stages as with the pre-revenue or post-revenue separation.

Our recommendation is to try a few suitable methods and average the valuations to get a final number.

Building Startups

# Do you want to

# Help in fundraising

# For your startup?

## Let's talk, I am here to help...

You can schedule **a virtual coffee**
You can also **send me an email**
and a **WhatsApp message**
and learn more **on our website**

Building
Startups