

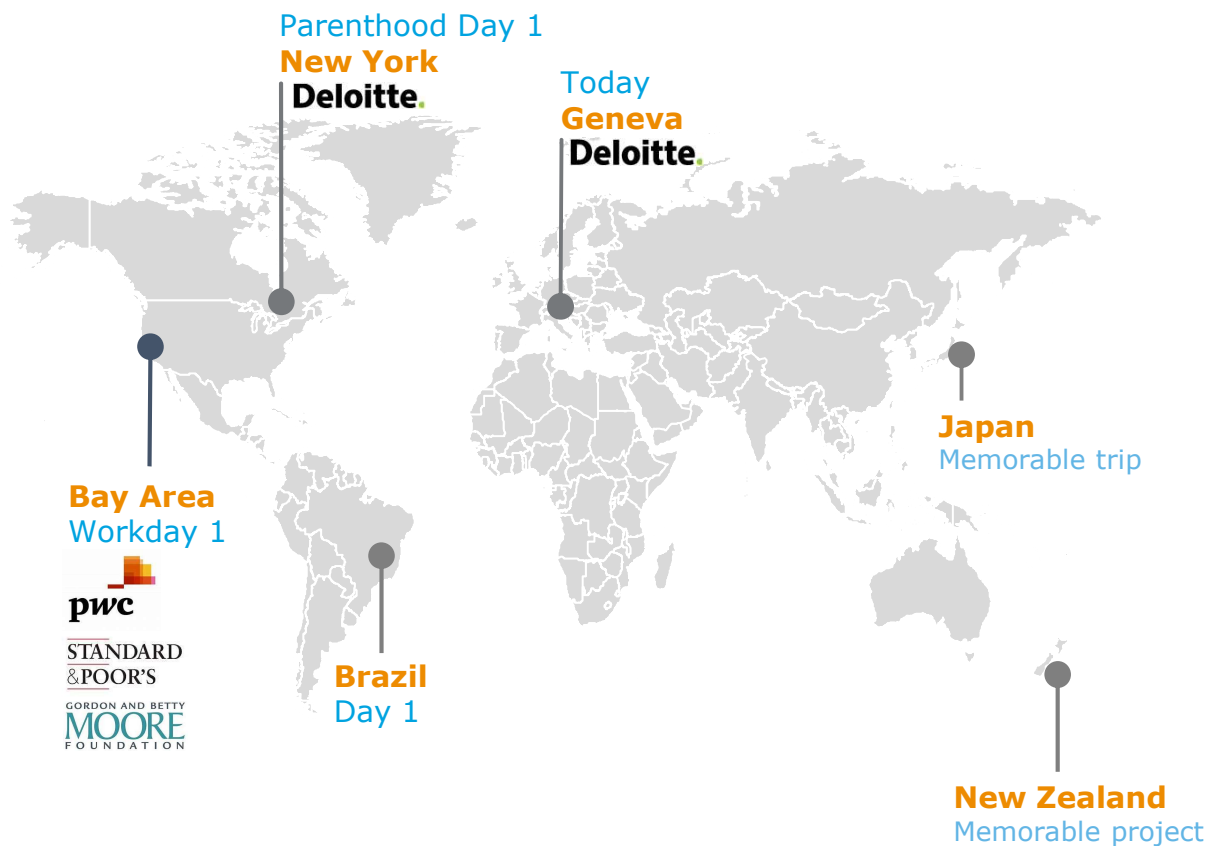
With you today



Igor Heinzer, CFA
Head of Valuation Services
Deloitte AG
igheinzer@deloitte.ch

Presentation credits
Thank you to my colleagues

- **Petar Angelov**
- **Robert Frames**
- **Charlotte Laville**



Ask me about:

Valuation | M&A | Capital Allocation | Stock-Based Compensation

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A Start-Up State of Mind

A Start-Up State of Mind - Part I

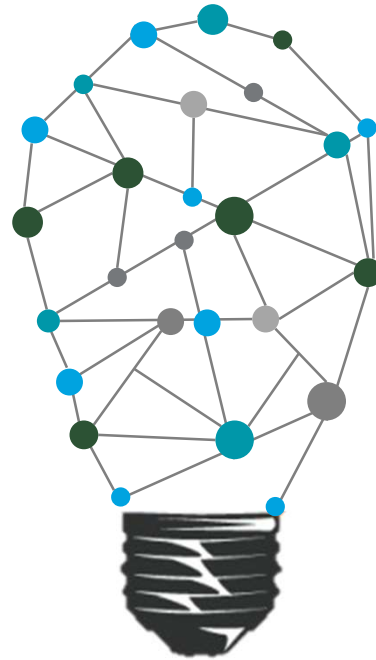
Talk the talk with start-up lingo

Burn Rate / Runway

**East Coast / West Coast
Preferred**

Up Round / Down Round

Unicorn / Decacorn



Cap Stack

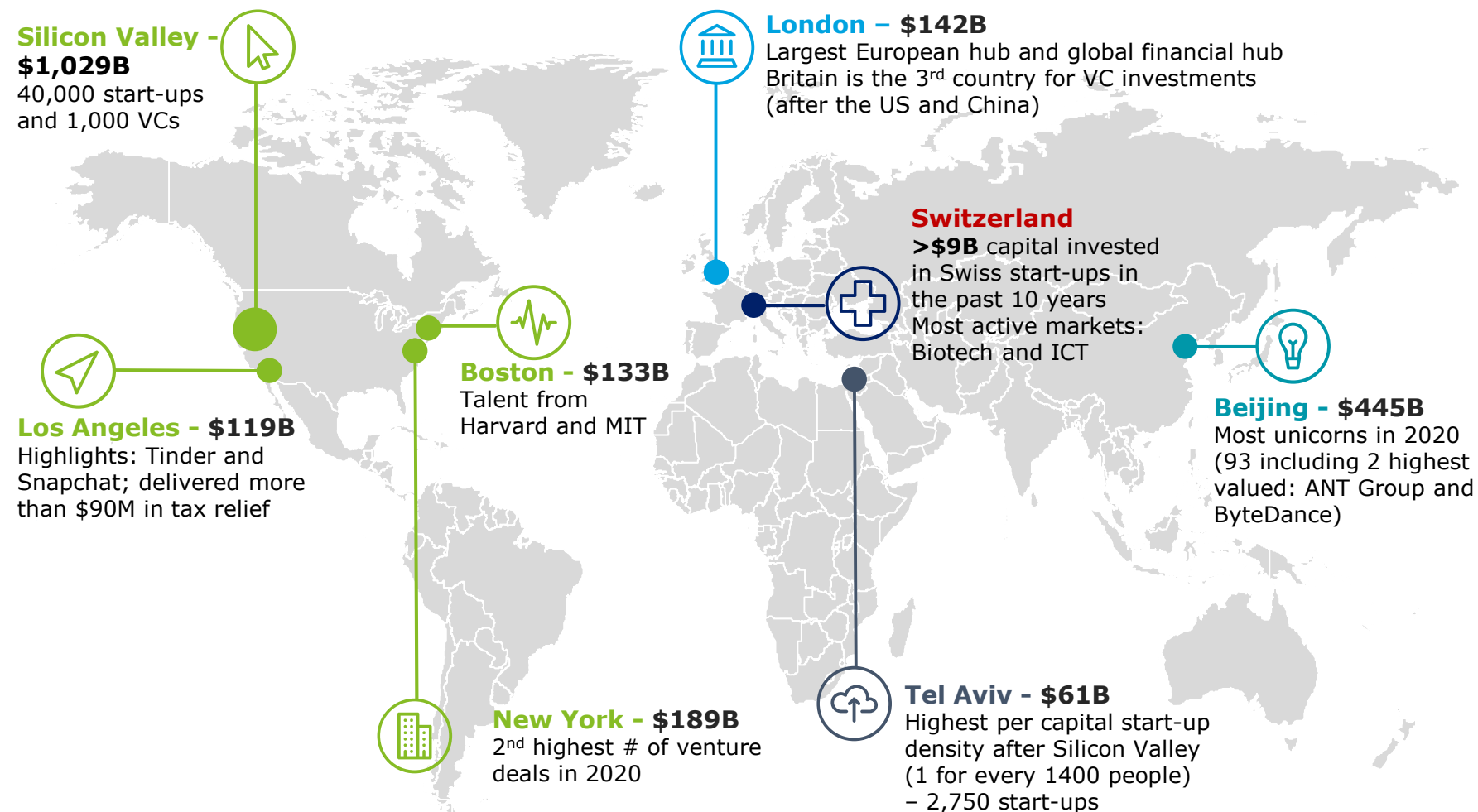
**Pre-Money / Post-Money
/ New Money**

**Scalability /
Cottage Business**

Cheap Stock

A Start-Up State of Mind - Part II

The start-up economy: a global innovation engine valued > \$3.8tn



Sources: Start-Up Genome, 2021 Edition; StartupBlink Global Startup Ecosystem Index 2021; startupticker.ch Swiss Venture Capital Report 2021

A Start-Up State of Mind - Part III

The upside and the downside

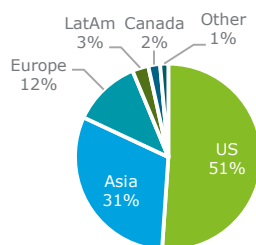


Unicorns – privately held start-up valued > \$1B

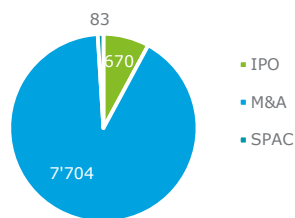
- #848 unicorns worldwide, of which #127 new unicorns (Q3 2021)
- About 1% of start-ups turn into unicorns
- Chinese company Bytedance (developer of TikTok) was the most valuable start-up worldwide @ \$140B (Q3 2021)
- Circa 35 Decacorns worldwide (> \$10B valuation; majority in tech-related fields: fintech, e-commerce, AI, Edtech, etc)

Company	Latest Valuation	Country	Sector	Subindustry
Bytedance	\$140B	China	Mobile & Telecom.	Social
Stripe	\$95B	US	Internet	Payments
SpaceX	\$74B	US	Industrial	Aerospace & Defense
Klarna	\$45.6B	Sweden	Internet	Payments
Canva	\$40B	Australia	Internet	Multimedia & Graphics
Instacart	\$39B	US	Mobile & Telecom.	Food & Grocery
Databricks	\$38B	US	Internet	Data & Document Management
Revolut	\$33B	UK	Mobile & Telecom.	Payments
Nubank	\$30B	Brazil	Mobile & Telecom.	Accounting & Finance
Epic Games	\$28.7B	US	Software	Gaming

Unicorns geographical breakdown



Exit trends in 2021



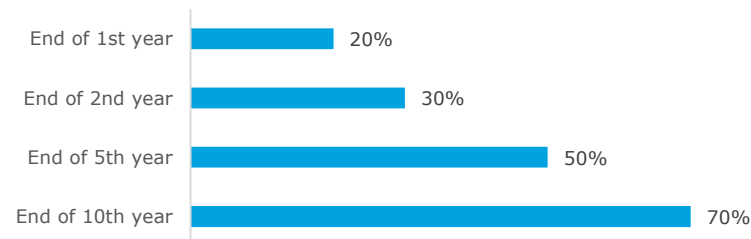
Source: CB Insights venture trends (Q3 2021); Visual Capitalist



Start-up failures – key facts & figures

- 90% of new start-ups fail
- 75% of venture-backed start-ups fail
- Under 50% of businesses make it to their fifth year
- 33% of start-ups make it to the 10-year mark
- Only 40% of start-ups actually turn a profit
- In 30%-40% of the cases, investors lose their whole initial investment
- #1 reason why start-ups fail is due to misreading market demand (42% of cases)
- #2 reason why start-ups fail is due to running out of funding and personal money (29% of cases)
- If a start-up fund has a portfolio of 100 companies, the 10 successful start-ups should more than compensate for the 90 failures

New businesses failure rates



Source: CB Insights, Failory

A Start-Up State of Mind - Part IV

Why all the attention?

Stellar Successes



Funding: \$ 9.89B | 2009 to 2020
Exit: **IPO** in December 2020
Market Cap: \$ 86B @ IPO, \$113B today



Funding: \$ 328M | 2013 to 2016
Exit: **Acquired** in 2018
Purchase Price: \$ 1.62B

Costly Failures



Funding: \$ 1.05B | 2005 to 2017
Liquidation: September 2018



Funding: \$ 1.75B | 2018 to 2020
Launch/Crash: April to December 2020

Ones to Watch



Funding: \$ 1.97B | 2013 to Today
Valuation: \$ 7B pending new round
Prospects: Listing

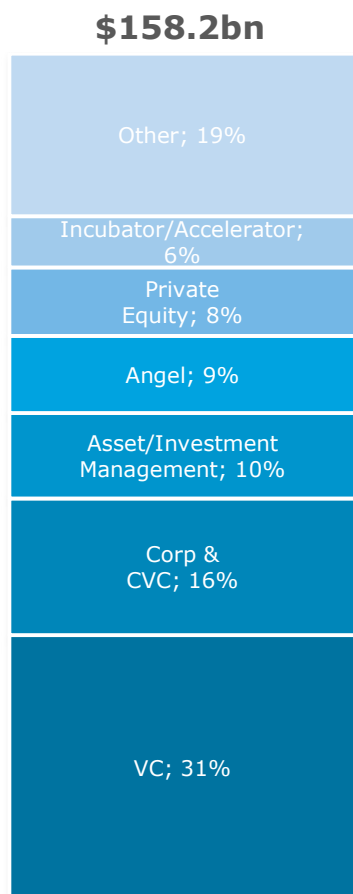


Funding: \$1.85B | 2016 to Today
Valuation: \$ 33B (July 21)
Prospects: Listing (higher rev target)

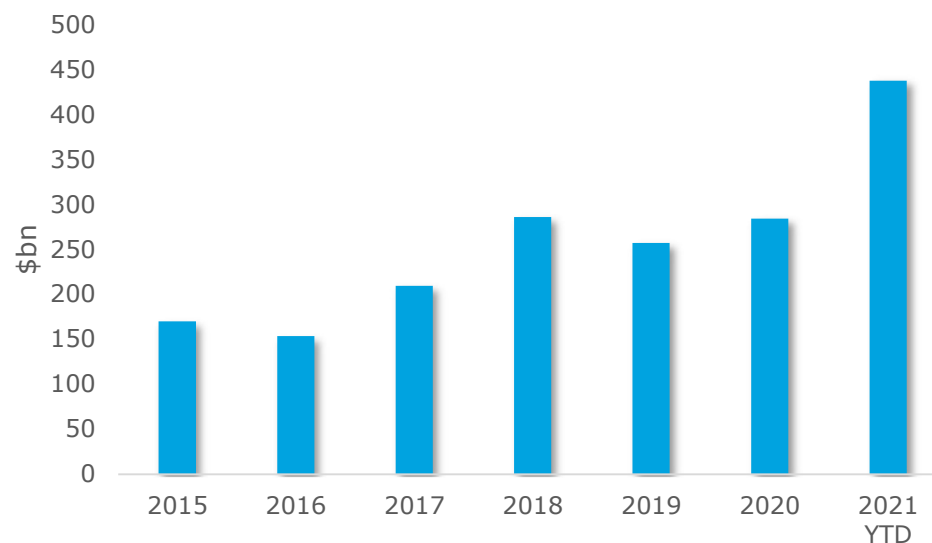
A Start-Up State of Mind - Part V

A dense and highly-capitalized web of investors

VC leads investor deal share in Q3'21, in line with historical trends



Global funding through Q3 blows past prior years



Global: Top 5 investors in Q3'21 by company count

Company	Company Count	Country
Sequoia Capital China	96	China
Tiger Global Management	86	US
SoftBank Group	79	Japan
SOSV	75	US
Insight Partners	73	US

A Stepwise Journey

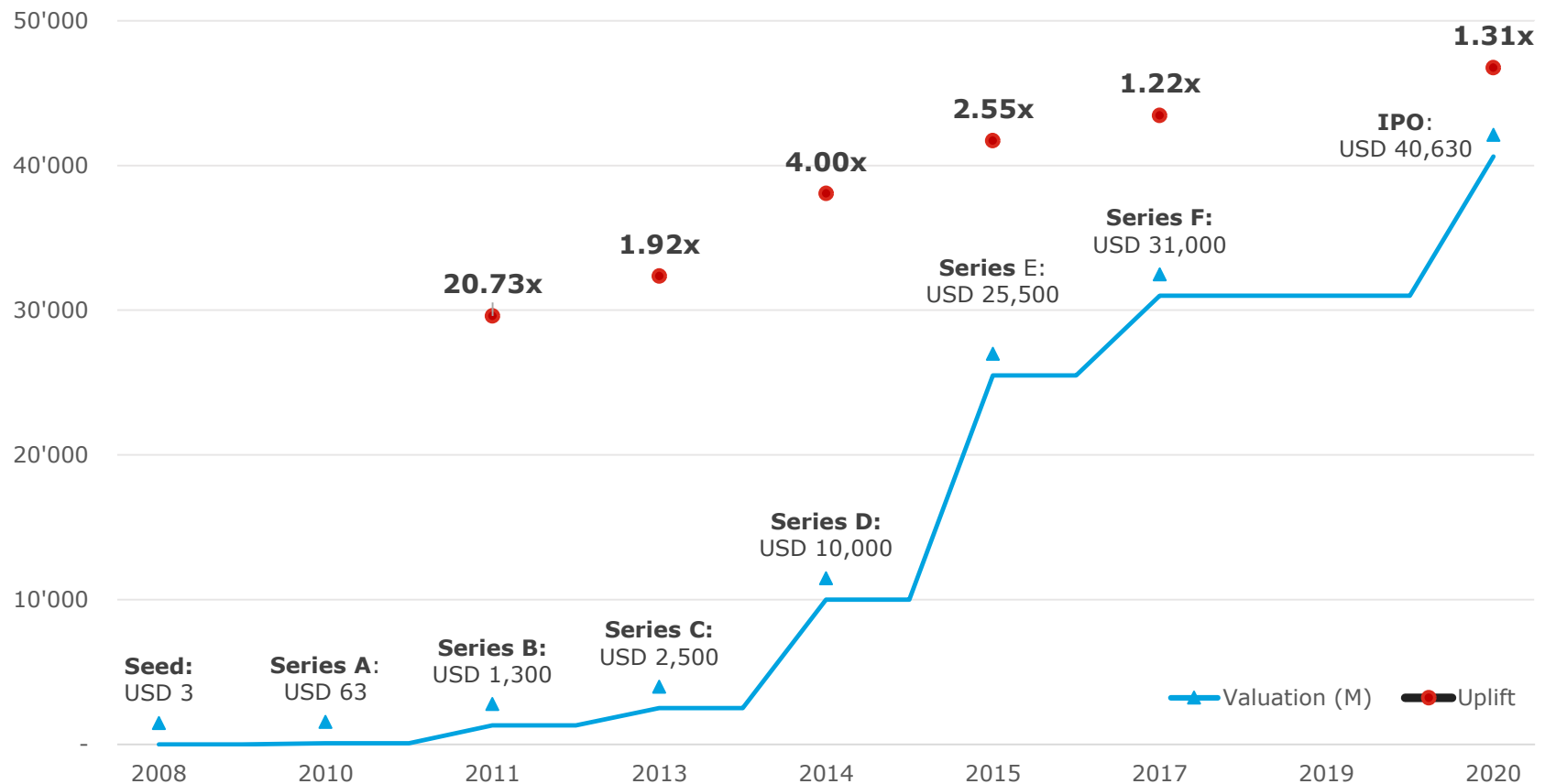
Stones, Stacks & Falls

The Start-Up Journey

Milestones are critical anchor points for management & investors



Airbnb Valuation History 2008 to 2020 (USD million)



Source: Pitchbook

The Start-Up Journey

A successful journey often results in a complex capital structure

Stages of Development*

1st

Idea, plan or initial product development; incomplete management team; seed capital.

3rd

Certain milestones achieved (alpha & beta testing); strategic partners or VCs continue to finance development.

5th – 6th

Has revenues, breakeven or positive cash flows; a liquidity event can occur in these stages.

2nd

No revenue but expense history as products developed; VCs provide second or third round of financing.

4th

Additional key developments; initial customer orders & revenue; initial IPO talks with banks.

Example: Post IPO



Liquidity Event

- IPO / SPAC
- Acquisition
- Dual Track

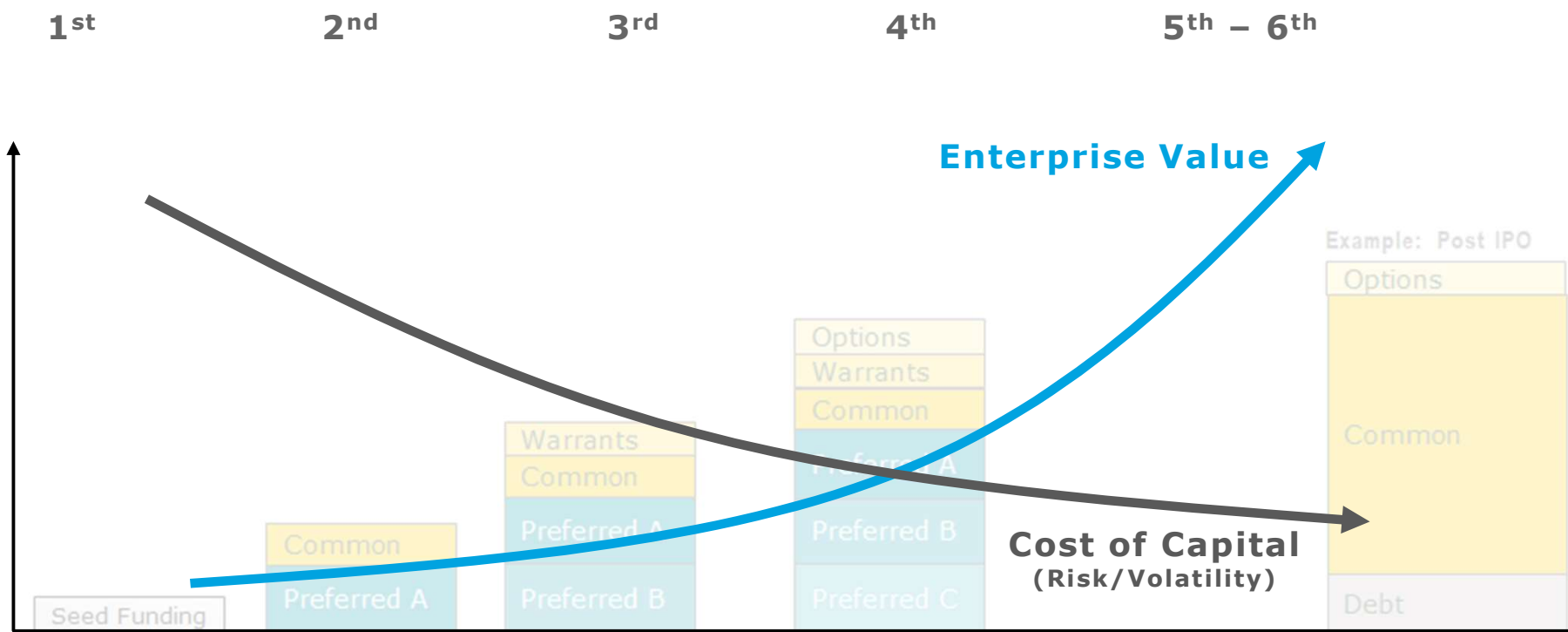
Capital Stack

* Source: AICPA Practice Aid "Valuation of Privately-Held-Company Equity Securities Issued as Compensation"

The Start-Up Journey

Milestones reduce risk, attract funding and validate commercials

Stages of Development



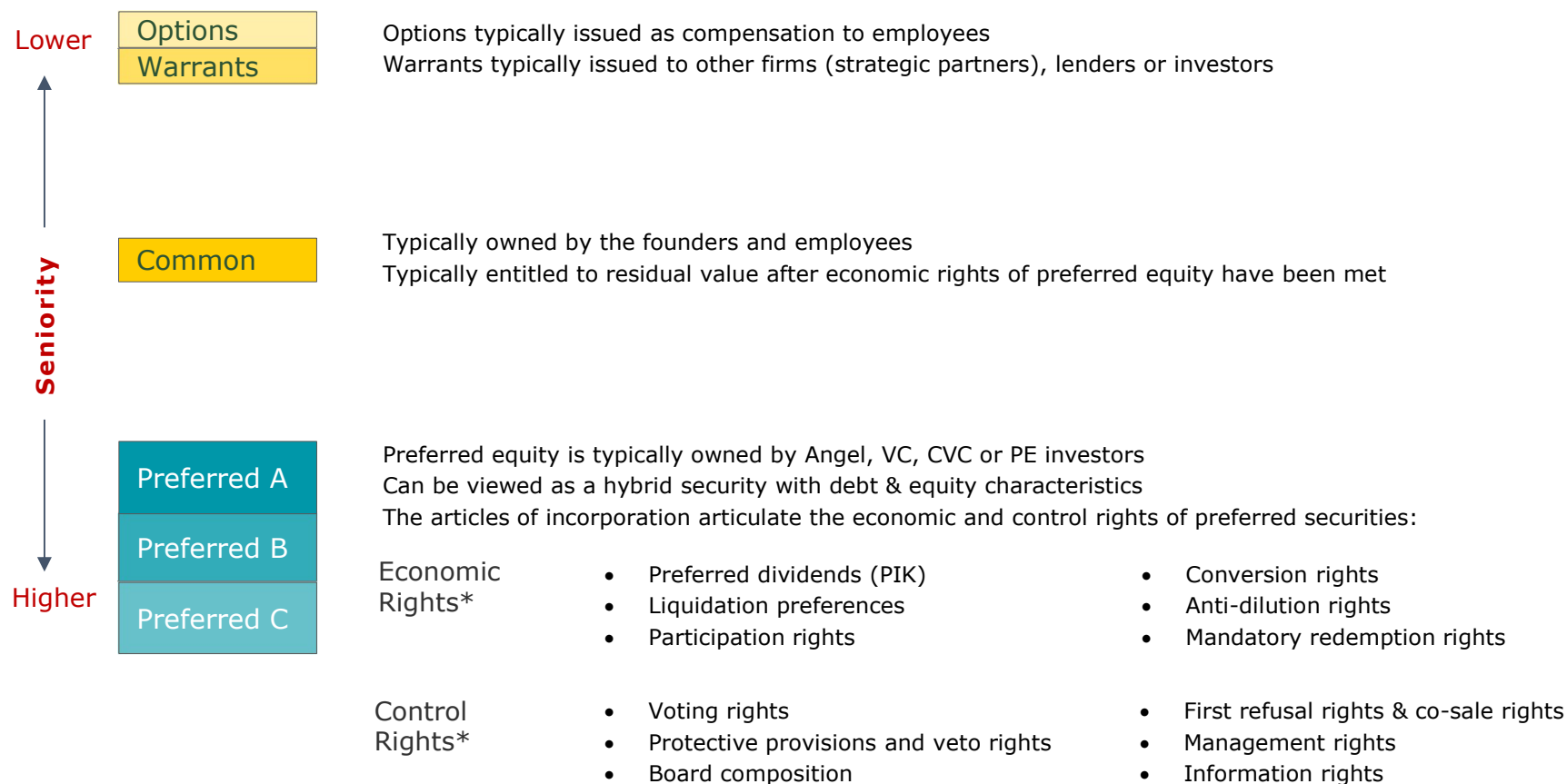
VC Rates of Return*



*Sources: AICPA, November 2019, Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies
James L. Plummer, QED Report on Venture Capital Financial Analysis (Palo Alto: QED Research, Inc., 1987).
William A. Sahlman, Howard H. Stevenson, Amar V. Bhide, et al., "Financing Entrepreneurial Ventures," Business Fundamental Series (Boston: Harvard Business School Publishing, 1998).

Cap Stack Securities

Rights & preferences serve as the basis for exit payoffs



* Source: AICPA Practice Aid "Valuation of Privately-Held-Company Equity Securities Issued as Compensation"

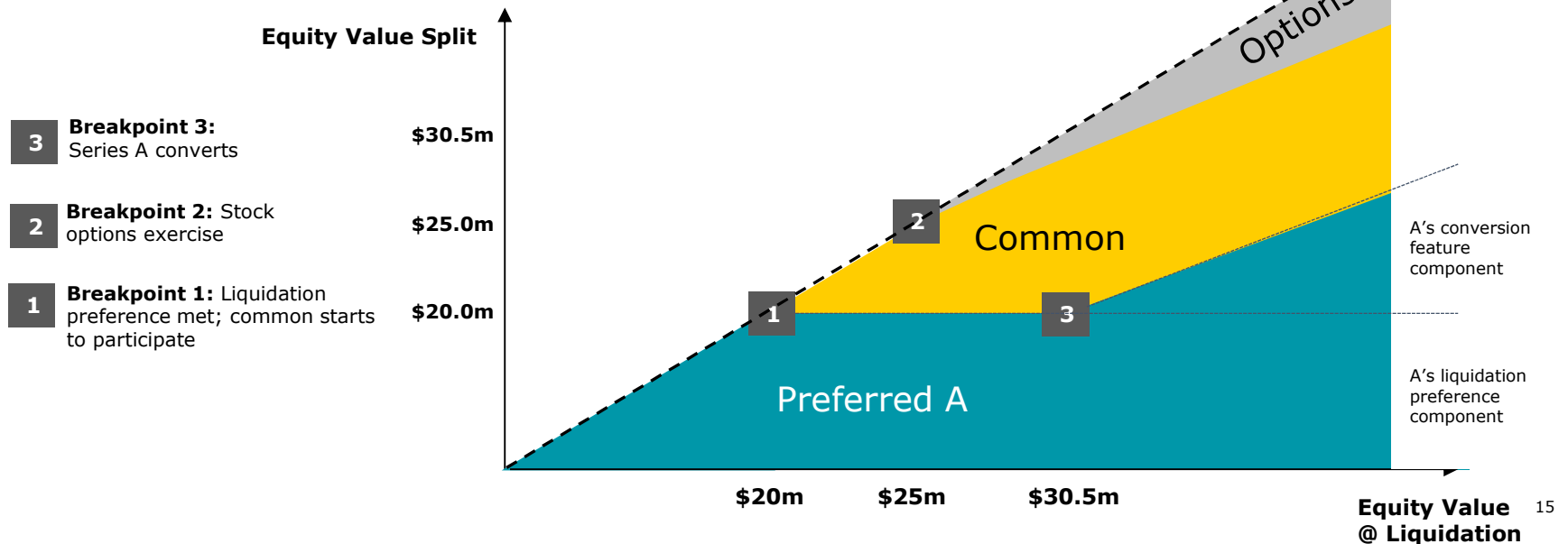
Liquidity Event Waterfall

The payoff from the equity waterfall reflects rights & preferences

Cap Stack Summary

Options	Common	Preferred A	Capital Structure	Number of Shares	Liquidation Preference or Exercise Price	Seniority	Participating?	Conversion Ratio
			Series A Preferred	10,000,000	\$2.00	1	No	1:1
			Common Stock	5,000,000	n/a	2	n/a	
			Common Stock Options	500,000	\$1.00	2	n/a	

Equity Waterfall (Breakpoint Diagram)

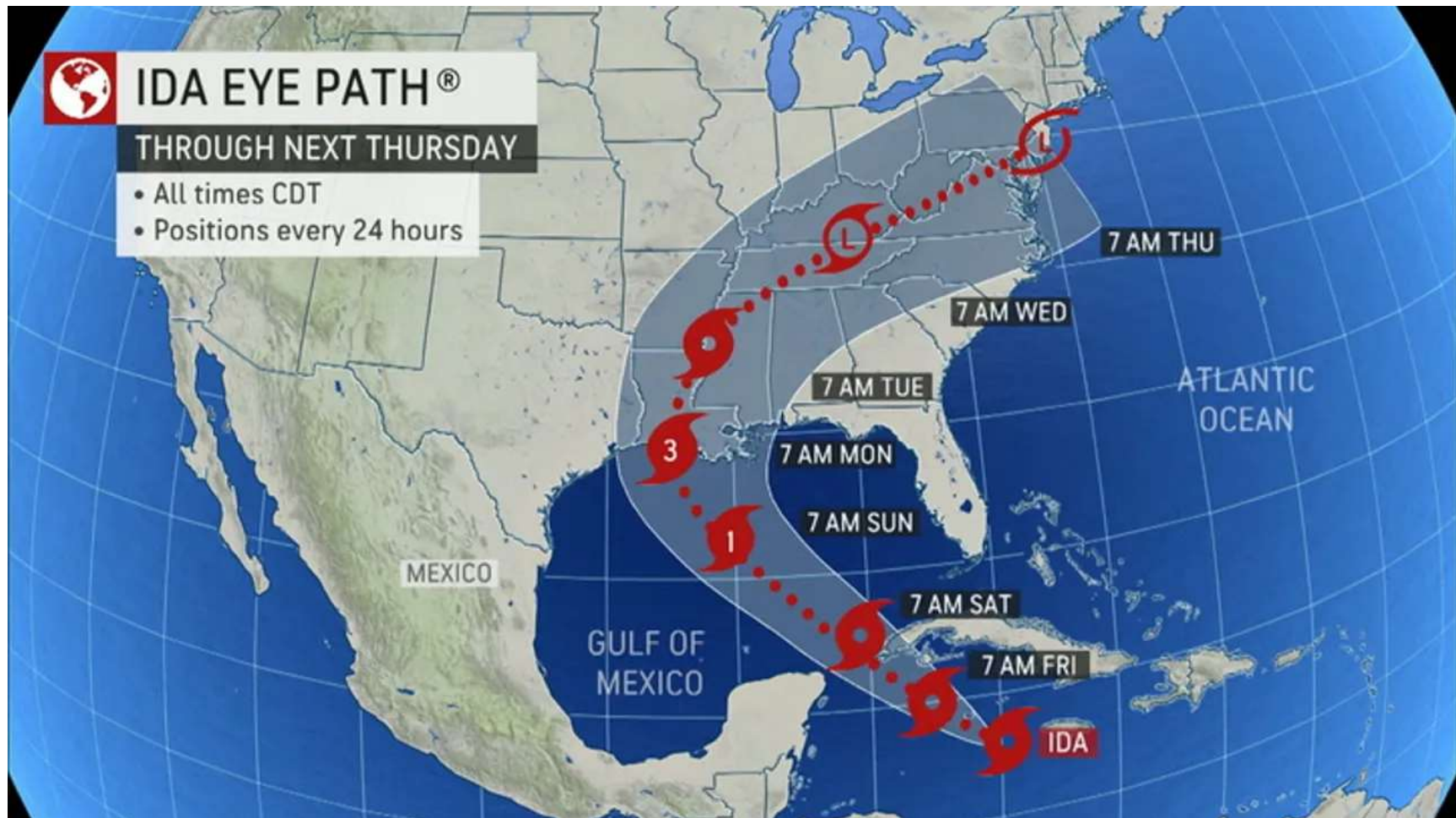


Valuation Considerations

Hurricanes and Hockey Sticks

Valuation in the face of uncertainty

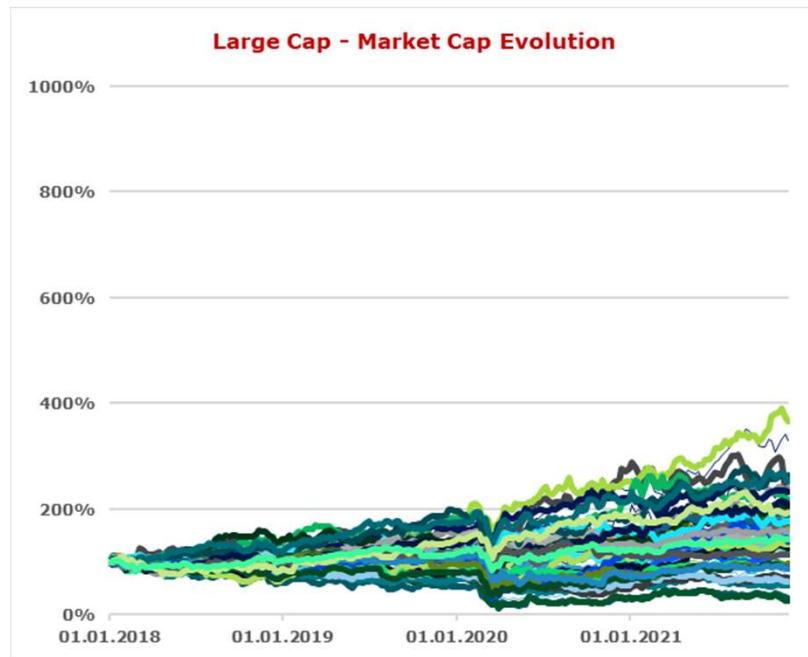
A start-up's "cone" of uncertainty is wide, driven by technical, operational and commercial unknowns



Source: AccuWeather (Aug 2021)

The cone in practice

Smaller and earlier-stage businesses exhibit a wider cone

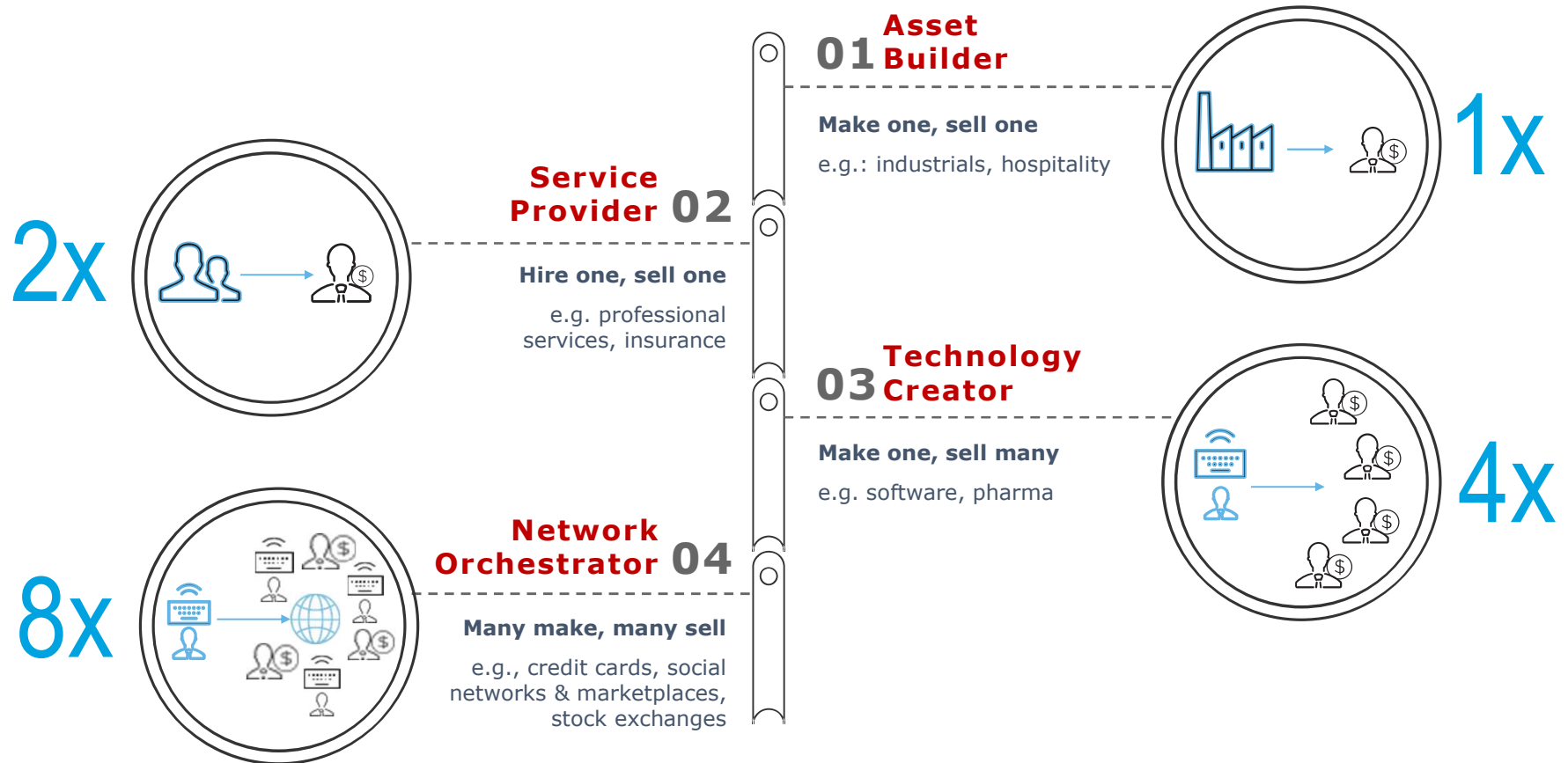


Market caps normalized to 100% as of 01.01.2018 for 50 large cap and 50 small cap companies

Source: CapIQ

Value driver: scalability

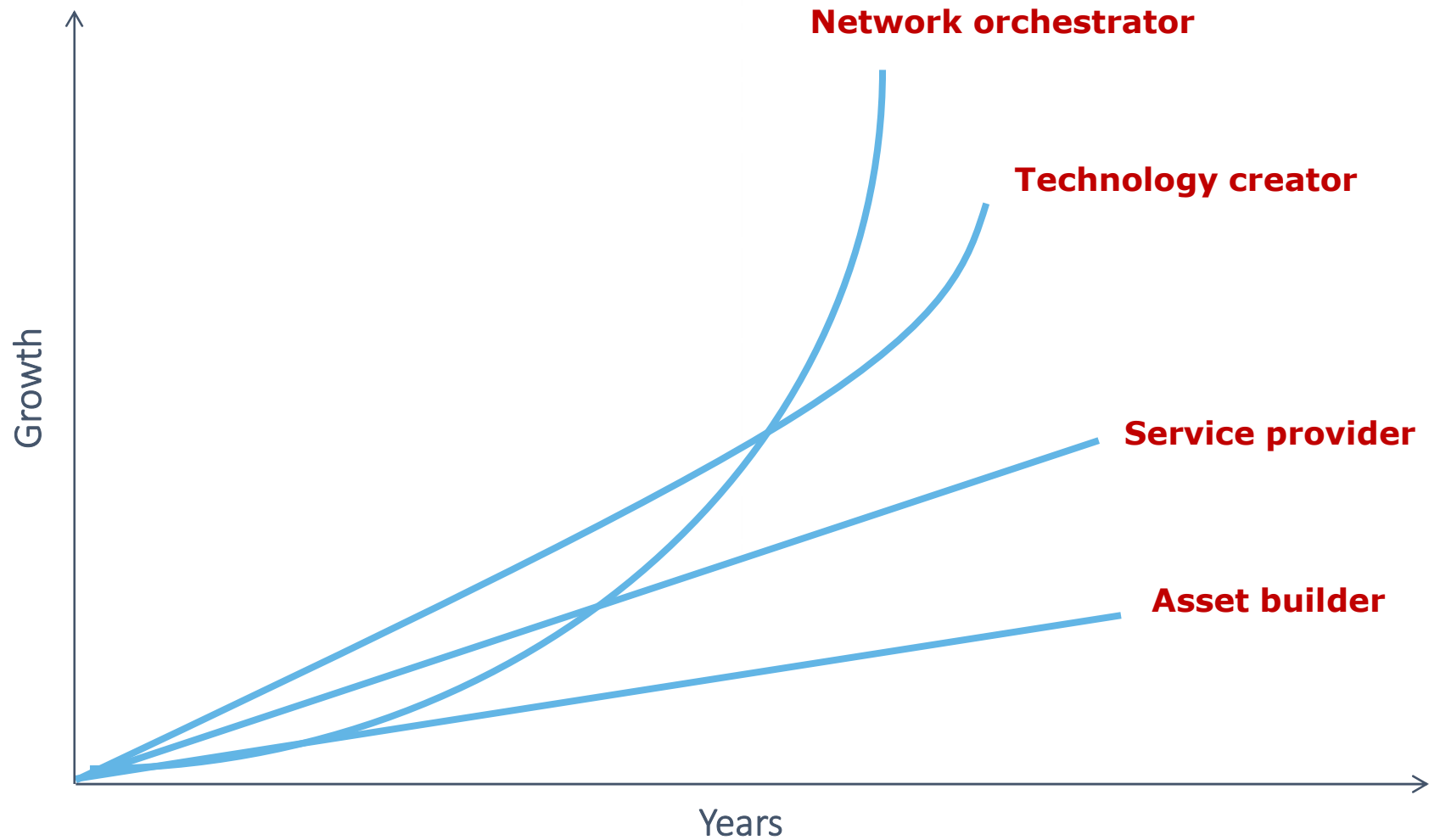
Business models and value multiplier



Source: adapted from a presentation given at **CFO VISION 2014: Navigate your World** by Deloitte & Touche LLP, OpenMatters and Deloitte Financial Advisory Services LLP (OpenMatters is now called AIMatters)

Value driver: scalability

Consider effort, constraints and time needed to scale

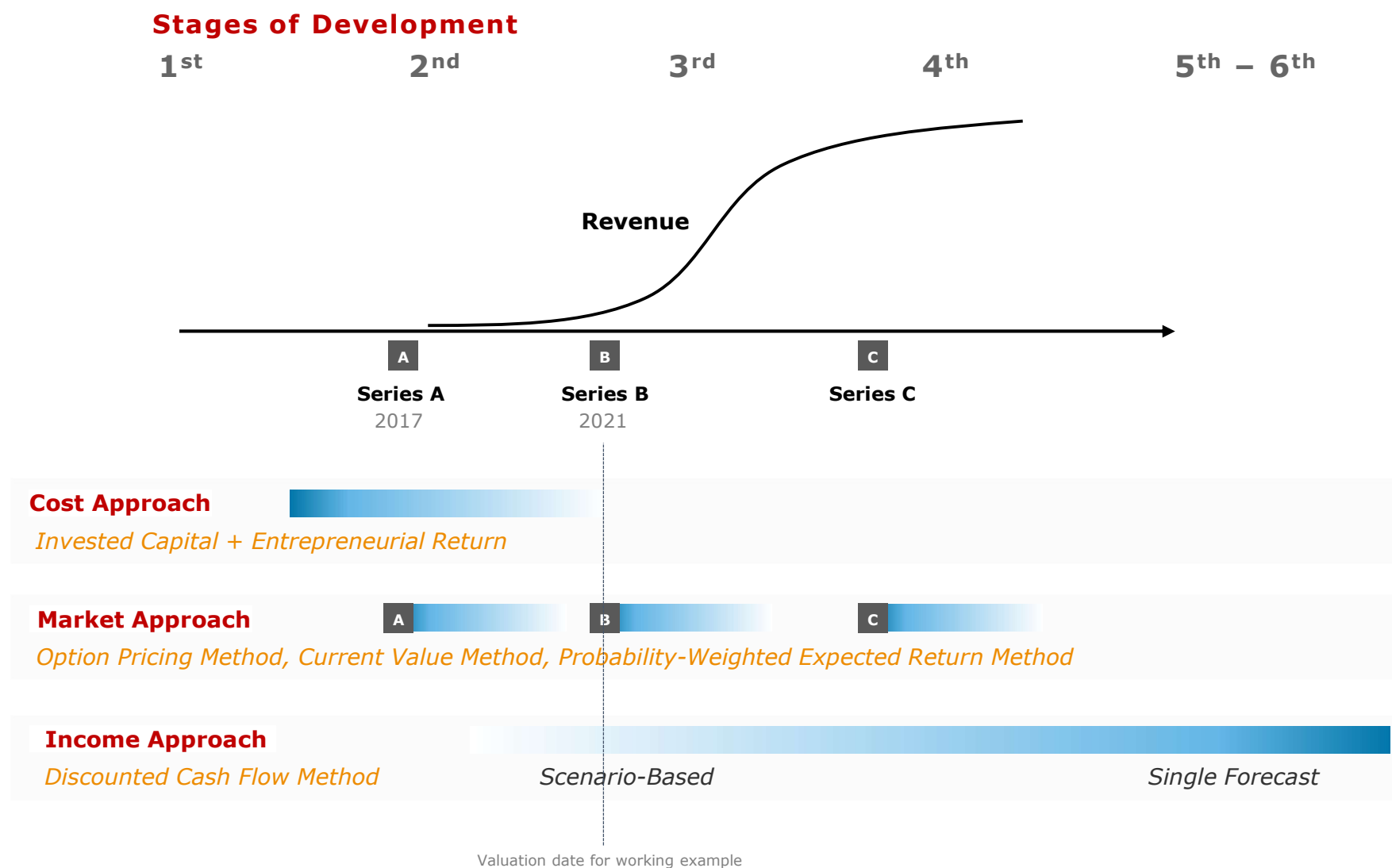


Source: adapted from a presentation given at **CFO VISION 2014: Navigate your World** by Deloitte & Touche LLP, OpenMatters and Deloitte Financial Advisory Services LLP (OpenMatters is now called AIMatters)

Valuation Approaches

Valuation Methods

Applicable methods depend on stage of development & financing



Valuation Methods: Cost Approach

Invested capital + entrepreneurial return

Approach and Considerations:

- Stage of development – this approach is typically applied pre-revenue or when forecasting is simply too speculative
- Investment to date – reflect the timing and amount of *relevant* investments to date (expenses & expenditures / in-kind contributions)
- Entrepreneurial return - apply an annual entrepreneurial return (consider VC rates of return) to prior year spend to derive a return-adjusted cost basis as a proxy for the value of the business

Formula Key	Variable	Unit	2017	2018	2019	2020	2021	Sum
X	# of years since investment	Years	4	3	2	1	0	
Y	Invested capital (expenses & expenditures)	USDm	2.8	4.5	3.3	5.5	3.9	20.0
$Z = (1+40\%)^X$	Entrepreneurial return factor as of 2021	40%	3.8x	2.7x	2.0x	1.4x	1.0x	
= Y * Z	Annual return-adjusted Investment as of 2021	USDm	10.8	12.3	6.5	7.7	3.9	
	Aggregate return-adjusted investment as of 2021	USDm	41.2					

Illustrative VC rate – business between development & initial expansion

Pre-money derived valuation

Capital raised in Series A

USDm	38.0	@ 35%
USDm	45.0	@ 45%

Sensitivity analysis

Valuation Methods: Market Approach

Implied valuation from recent financing round

Cap Stack:

Options							
Common	Capital Structure	Number of Shares	Liquidation Preference or Exercise Price	Seniority	Participating?	Conversion Ratio	Accrues Dividends?
Preferred A	Series B Preferred	10,000,000	\$5.00	1	No	1:1	No
	Series A Preferred	20,000,000	\$1.00	2	No	1:1	No
Preferred B	Common Stock	5,000,000	n/a	3	n/a	n/a	n/a
	Common Stock Options	500,000	\$2.00	3	n/a	n/a	n/a

Approach:

Use an **Option Pricing Method** backsolve to imply what aggregate equity value gives a Series B Preferred valuation of **\$5.00** per share

Inputs:

- Timing to a liquidation event
- Volatility based on peer group

Considerations:

- New money?
- Competing views (dilution vs return)
- Control and marketability basis
- Timing/volatility sensitivities

Results

Option Pricing Method – Scenario 1

- Timing: 3 yrs
- Volatility: 50%
- **Implied Valuation: \$115M (post money)**
- Series B: **\$5.00** per share
- Series A: \$2.55 per share
- Common: \$2.45 per share
- Options: \$1.45 per share

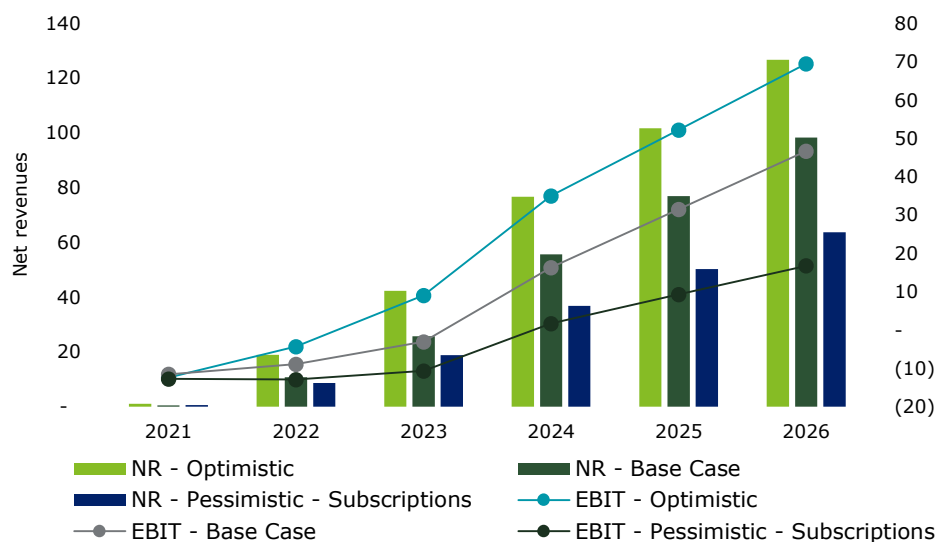
Option Pricing Method – Scenario 2

- Timing: 2 yrs
- Volatility: 50%
- **Implied Valuation: \$110M (post money)**
- Series B: **\$5.00** per share
- Series A: 2.40 per share
- Common: \$2.30 per share
- Options: \$1.20 per share

Valuation Methods: Income Approach

Capturing uncertainty through forecast scenarios at a risky rate

Illustrative



'Rosy' picture

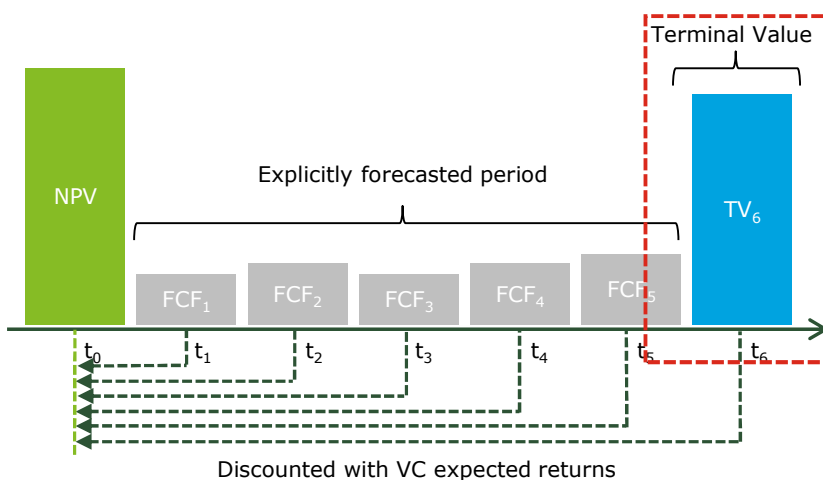
- Scenarios typically consider a going-concern with varying degrees of growth and profitability
- As no explicit failure scenario is assumed, the high probability of failure is not captured explicitly

Risk remains

- The scenarios therefore still need to be risk-adjusted with a risky discount rate, and the appropriate rate is a matter of judgment
- Typically a rate approaching a VC rate of return is applied

Probability weighting

- Discreet probabilities can be assigned to scenarios in order to derive a narrow valuation range
- However, well structured scenarios and value indications serve as a management and communication tool

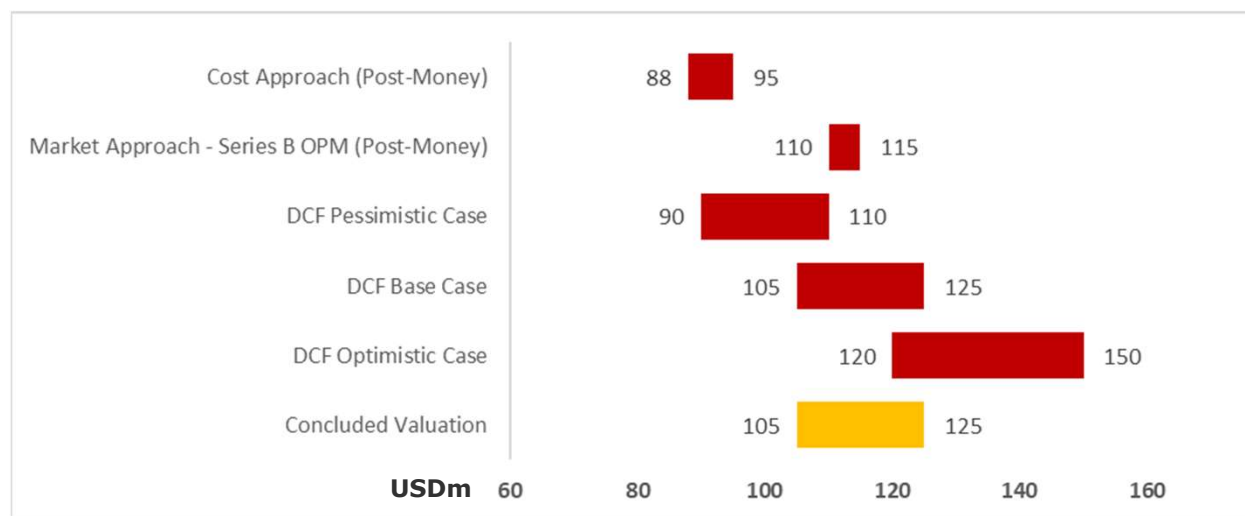


- Terminal value often represents **close to 100%** of the total value of the start-up
- A traditional **GGM unsuitable** as likely to understate the value and not reflect an exit valuation
- An **exit multiple** better reflects the potential value at a liquidity event (e.g. 12x to 15x EBITDA)
- Exit multiple should reflect growth & margin at exit relative to multiples for comparable peers
- Suggest sensitizing discount rate range using VC rates of return (e.g. 30% to 25%)

Valuation Methods: Triangulation

Bringing it all together and recognizing limitations of the analysis

Value Indications (post Series B financing)



Considerations

- Commercial and technical/IP due diligence can further shape DCF scenarios
- Triangulation across multiple approaches helps form a more supportable position
- Valuation ranges better represent the inherent uncertainty; however, sometimes point estimates are required
- Fund raising data on sector peers may help expand the market approach analysis w/ additional value indications (e.g. Pitchbook, Crunchbase)
- Ultimately, investors will require a certain rate of return and price & value may diverge

Further Topics

Further Topics

Additional considerations and useful references

Additional Considerations

Control / Liquidity Discounts

409a Valuation / Cheap Stock

Privately-Held Equity Exchanges

Resources

AICPA Practice Aid “Valuation of Privately-Held-Company Equity Securities Issued as Compensation”

International Private Equity and Venture Capital Valuation (IPEV) Guidelines

Thank YOU