

The background of the slide is a high-angle photograph of a city skyline at dusk or dawn. The sky is a mix of blue and orange, with soft clouds. In the foreground, several skyscrapers are visible, their windows reflecting the light. The Transamerica Pyramid is prominent in the center. To the right, a suspension bridge is visible in the distance. The overall mood is professional and modern.

svb



Silicon Valley Bank

Q4
2019

State of the Markets

Inside Views on the Health
and Productivity of the
Global Innovation Economy



State of the Markets: Fourth Quarter 2019



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Wheels of Venture Keep Turning Despite Uncertainty

As we enter the final stretch of 2019, the global economic outlook is cloudy. Multiple uncertainties, including the intensifying trade war and conflicting economic indicators, have put investors and policymakers on edge. Trying to get ahead of a broader slowdown, central banks are cutting interest rates.

Private markets remain buoyant. After a banner fundraising year in 2018, VC dry powder is close to historic highs and PE fundraising is now having its own record year. A diverse cast of investors, from VCs to large asset managers, is participating in massive late-stage rounds, contributing to net new Unicorn creation.

The United States has dominated exits this year, with total US Unicorn exit value this year now standing at around \$215 billion. Unicorns that have gone public have generally performed well, with a couple of high-profile exceptions. This year, public markets appear to reward unit economics more than growth-at-all-costs. In addition, disruptive new routes to liquidity have entered the conversation, such as direct listings and secondary programs.

Despite jitters created by the WeWork saga, fear of a global economic slowdown, and rising political uncertainty, the venture ecosystem remains robust — with ample private capital stockpiled for years to come.

State of the Markets: Fourth Quarter 2019

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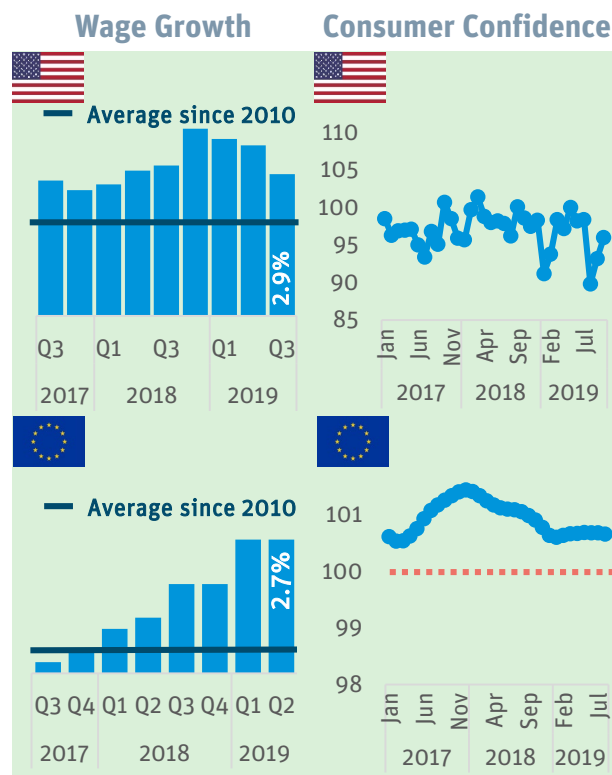
A Window of Uncertainty



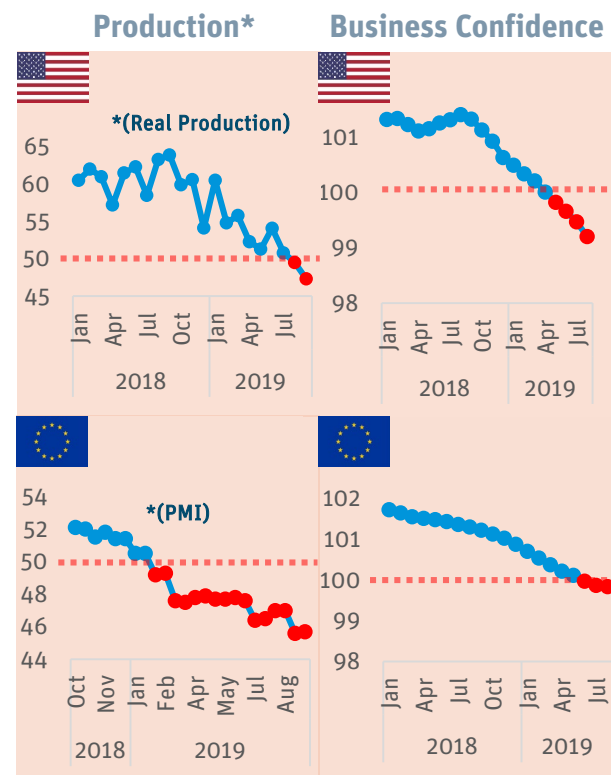
Consumers Still Happy; Producers Start to Hurt

Wage growth indicates the labor market remains strong, and consumer confidence is holding steady. In contrast, manufacturing activity and business confidence are on the decline, a product of the continuing trade war and late-cycle anxiety.

Labor Markets and Consumer Confidence



Production and Business Confidence



Notes: Wage growth figures include seasonal adjustment. Index readings below red line indicate a contraction.

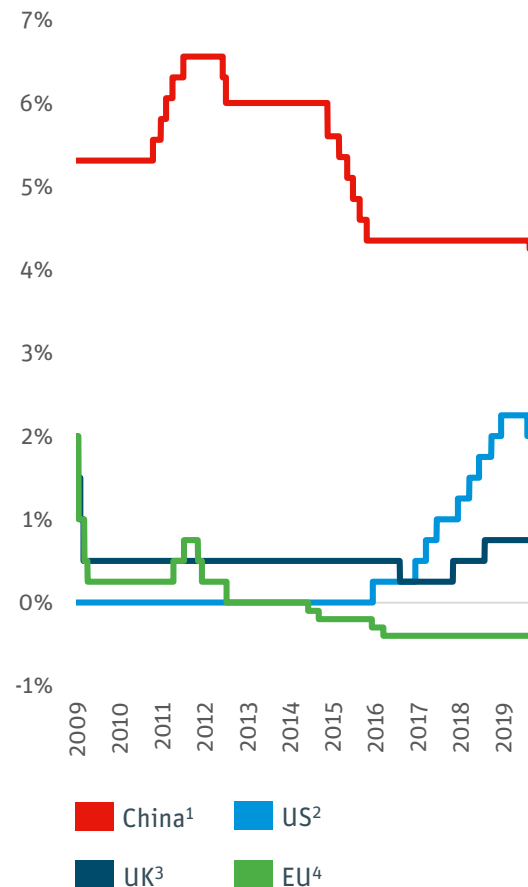
Europe PMI index is for European Union; other Europe indicators are for the Euro Zone.

Source: Bureau of Labor Statistics, OECD, Eurostat, Markit Economics, ISM, University of Michigan and SVB analysis.

A Declining Rate Environment

For the first time since 2008, the US Federal Reserve cut rates amid recession concerns, slowing economic indicators and political uncertainty. Other major economies have followed suit, with the Eurozone entering negative territory and China effectively making cuts through re-benchmarking.

Benchmark Rates for Major Economies: 2009–2019



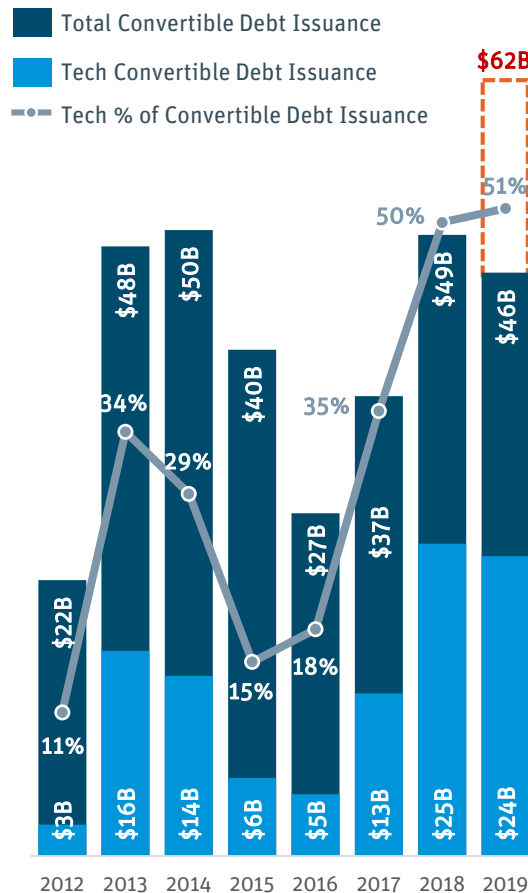
Yield Curve Inversion as an Indicator

10Y - 2Y Inversion Month	Months Before Recession
Aug 1978	16
Sep 1980	10
Dec 1988	19
Feb 2000	13
Dec 2005	23
Aug 2019	?
Median	16

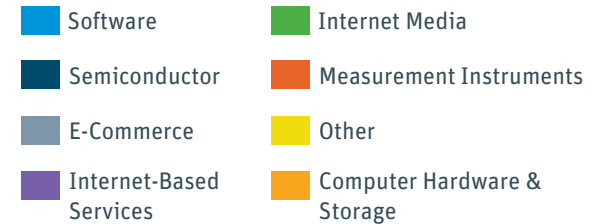
Tech Tapping Convertible Debt

With a drop in benchmark rates, stable credit spreads and strong performance of the convertible asset class, convertible debt issuance has been robust year-to-date. Tech has continued to take a larger share of total issuance and is on pace to surpass 2018's record year.

Convertible Debt Issuance



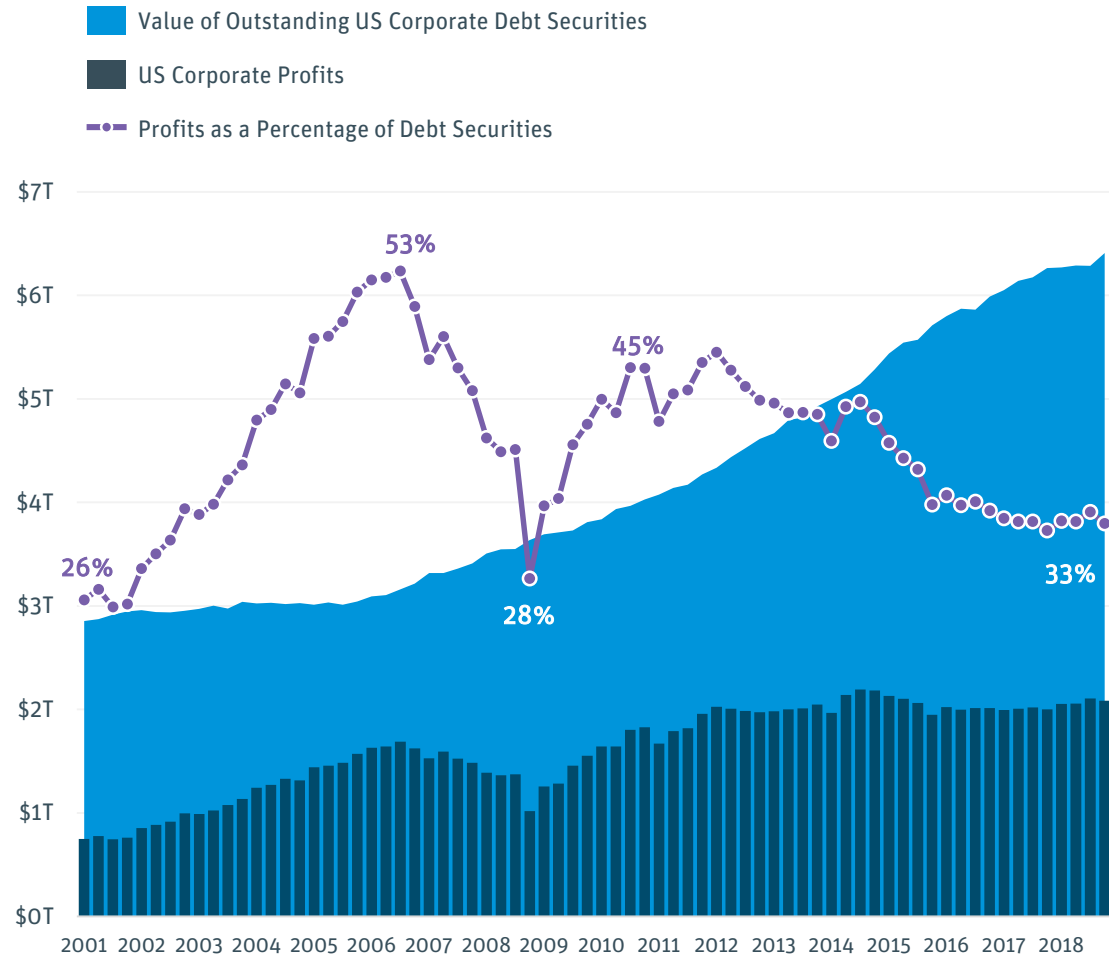
Tech Convertible Debt Issuance by Sub-Sector



More Corporate Debt in the System

Fomented by a low interest rate environment and economic expansion, corporate debt levels have risen to new heights after remaining relatively steady throughout the last cycle. Since 2011, debt to profitability has reached a post-GFC¹ high.

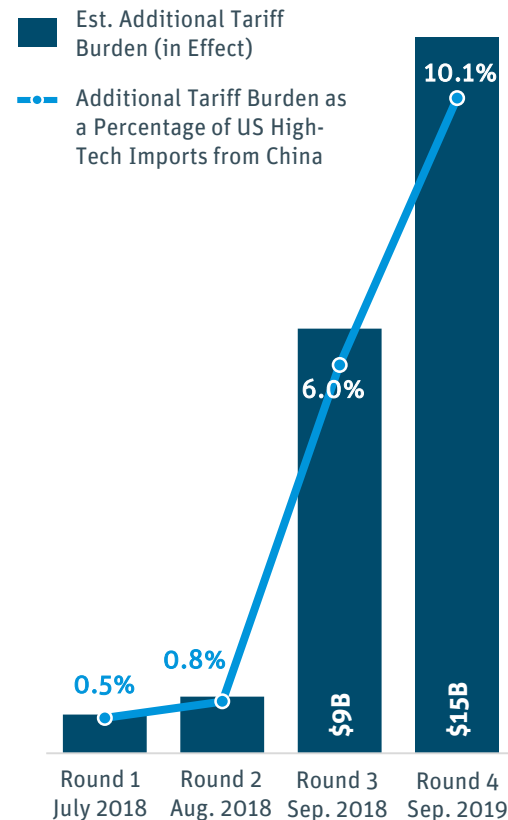
Corporate Debt and Profit, 2001–2018



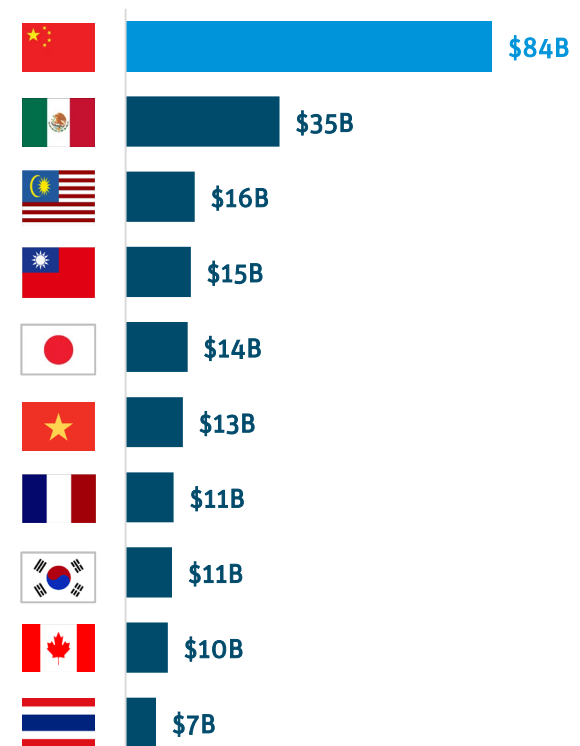
Trade With China Matters to Tech

The trade war with China continues to linger as Trump and Xi struggle to find common ground. Since our last update, Trump has levied new tariffs and threatened more increases. Despite this, the US remains heavily reliant on China — and broader Asia — for advanced tech imports.

Effect of US Tariff Rounds on High-Tech Sector¹

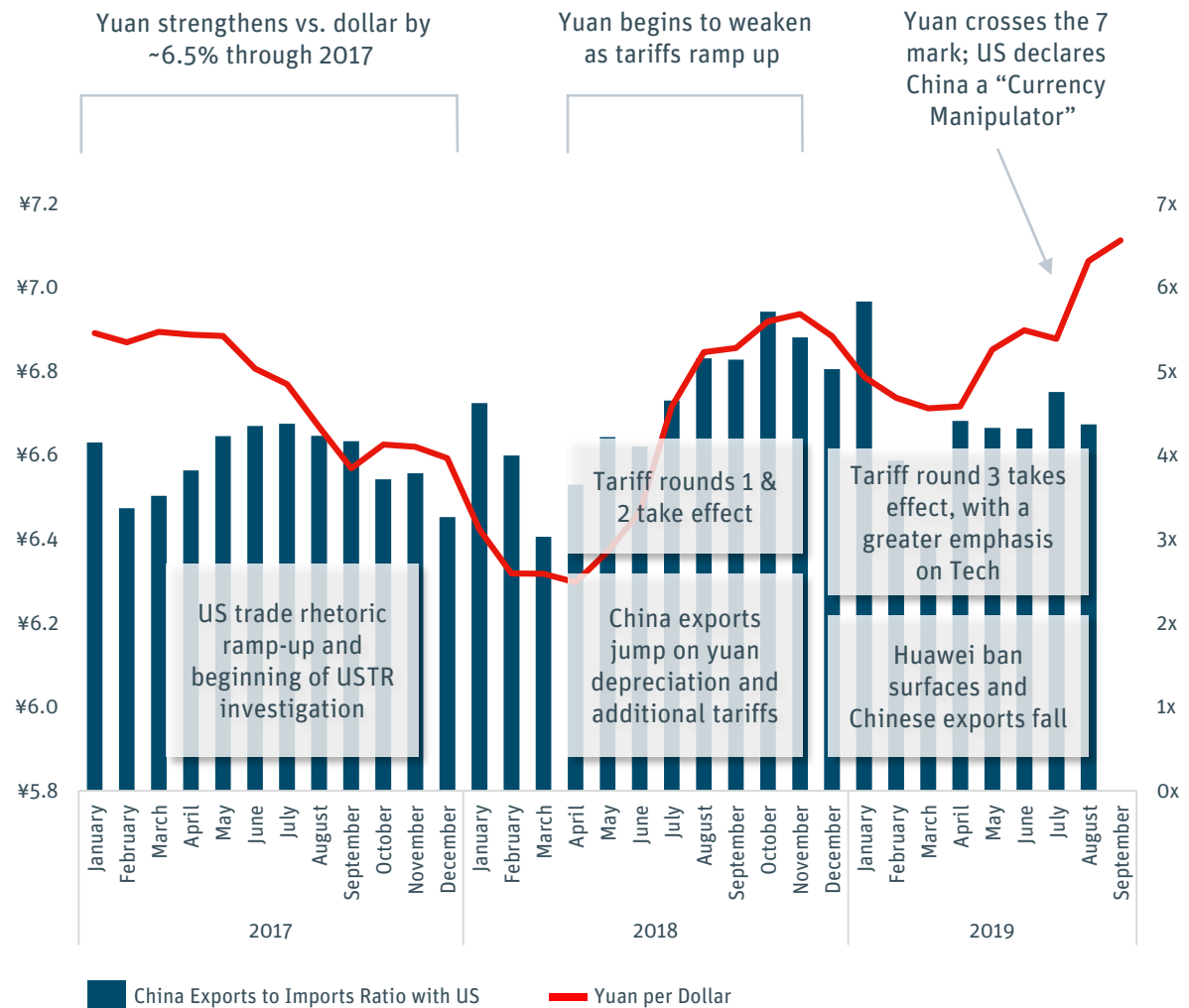


Advanced Tech Imports² YTD³



Trade War Begets Tech War Begets FX War

The trade war has grown in size, intensity, and scope. Tech has joined agriculture and manufacturing in the crosshairs of tariffs and other sanctions. The yuan's recent weakening has brought currency to the fore, which may cushion the effects of the tariff increases.



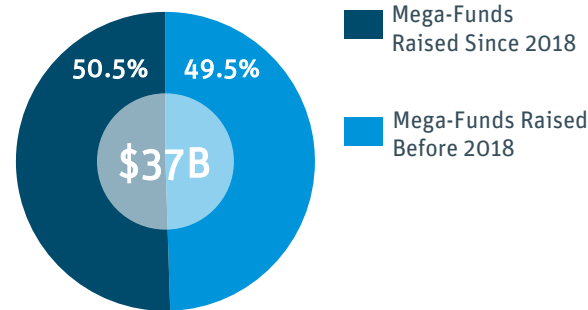
Private Markets Onward and Upward



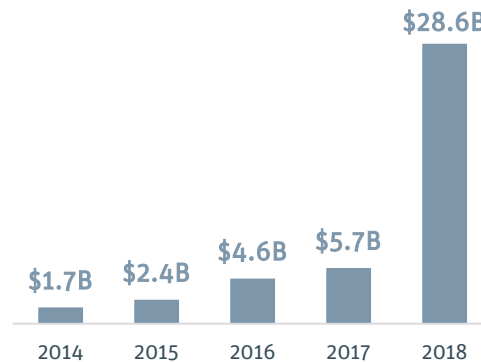
An Update on the Mega-Funds

Billion-dollar-plus Venture Capital funds (“Mega-Funds”) continue to grow in size and number. More than half of the known dry powder in these funds was raised in the last two years. In theory, these huge pools of capital will continue to drive later-stage investment through a possible downturn.

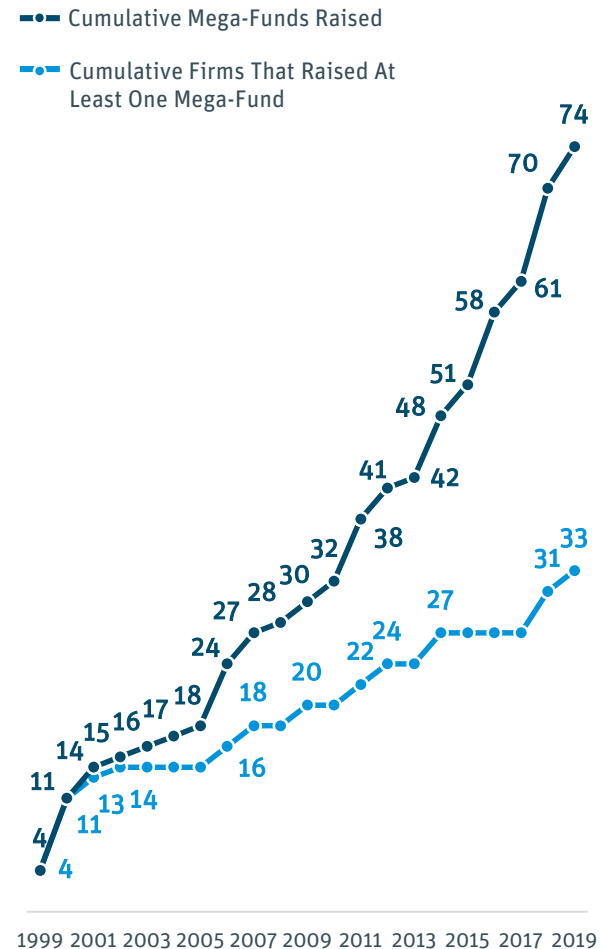
Mega-Fund Dry Powder by Fund Close Date



Mega-Fund Dry Powder by Vintage



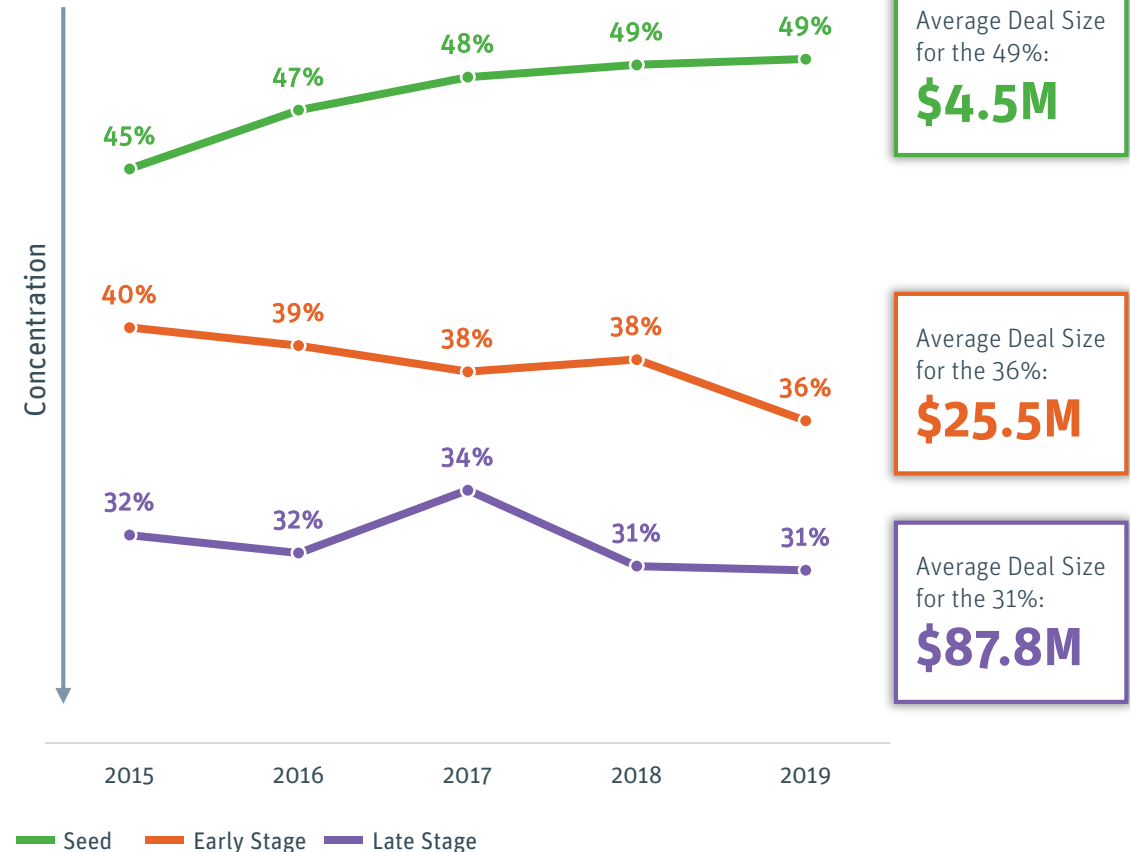
Size of the Mega-Fund Club & Total Mega-Funds¹



The Reckoning Is Happening at the Early Stage

Since 2015, the concentration of investment has become more pronounced at the early stage, while the seed stage has shown the opposite trend. This suggests investors are spreading capital around before doubling down on their most promising investments.

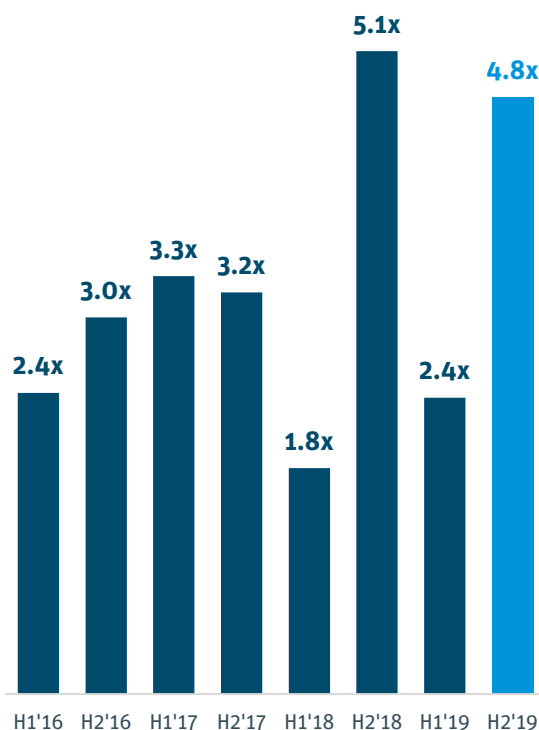
Proportion of Companies that Represent 80% of Total Investment by Stage¹



Unicorns Are Being Minted at a Historic Rate

While this year has been defined by monumental exits, the massive Unicorn creation this year is not to be ignored. More than 50 Unicorns have been minted in 2019, bolstering the backlog of companies that will be looking for an exit in the years to come.

Net Unicorn Creation: Entrants vs. Exits



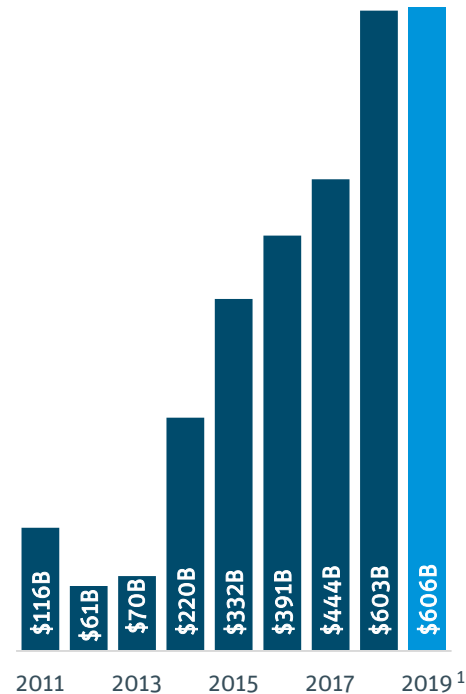
New Unicorns Created: 2019¹

Company	Raised to Date	Valuation
 databricks	\$897.4M	\$6.2B
flexport.	\$1.4B	\$3.2B
 nuro	\$1.0B	\$2.7B
aurora	\$696.1M	\$2.6B
 confluent	\$205.9M	\$2.5B
 grammarly	\$202.0M	\$2.3B
Checkr	\$309.1M	\$2.2B
<i>Lemonade</i>	\$479.8M	\$2.1B
IMPOSSIBLE	\$777.0M	\$2.0B
 ThoughtSpot	\$557.5M	\$1.9B

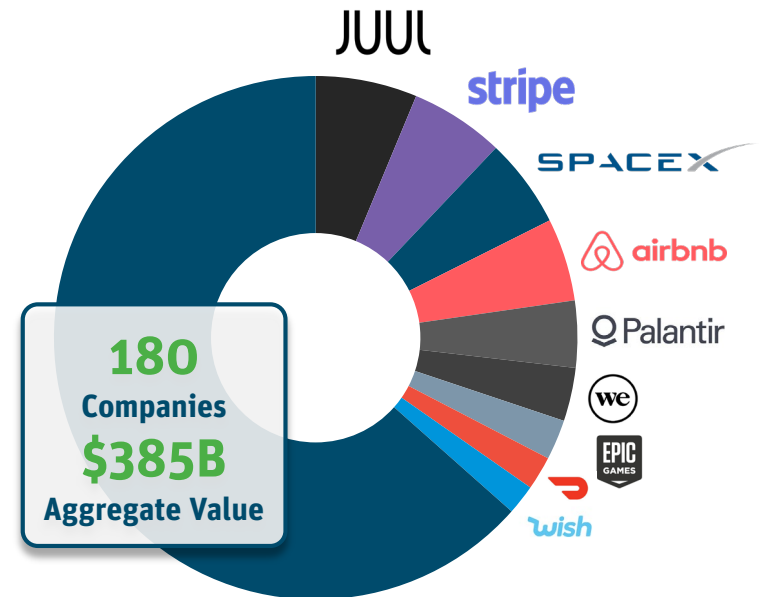
Unicorn Backlog Reaches New Heights

Unicorn value is being harvested massively this year, with the backlog being replenished through new Unicorn creation. The total valuation of Unicorns as of Q3 has returned to 2018's record level, despite the likes of Uber and Lyft going public.

Aggregate Unicorn Post-Money Valuation



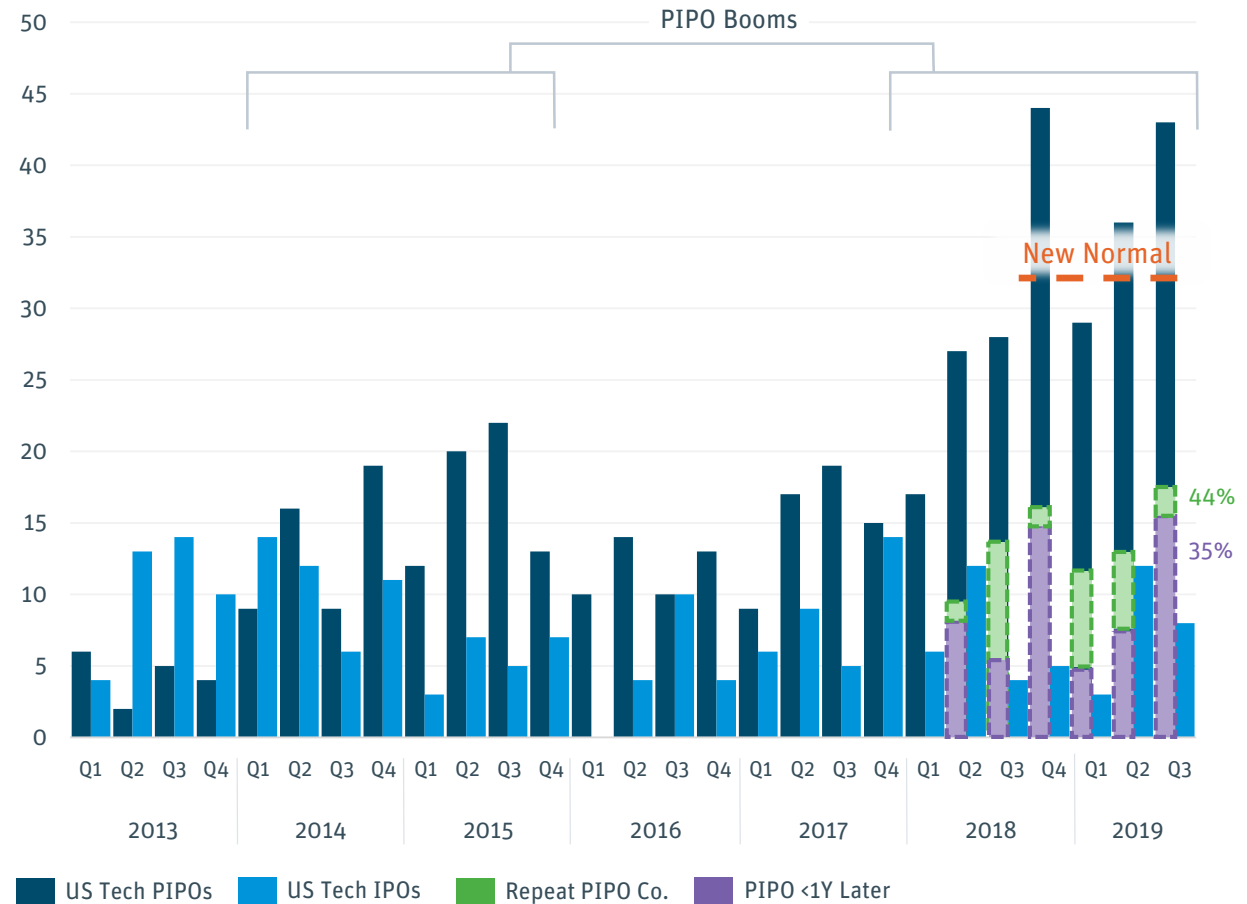
Unicorn Backlog¹



Significant Capital Fuels PIPOs

Traditionally, companies seeking sizable capital infusions would have to accept the heightened scrutiny and transparency of the public markets. Starting in 2014, the rate and level of funding for PIPOs¹ exploded. Since Q2 2018, a new normal has been reached for the rate of PIPOs.

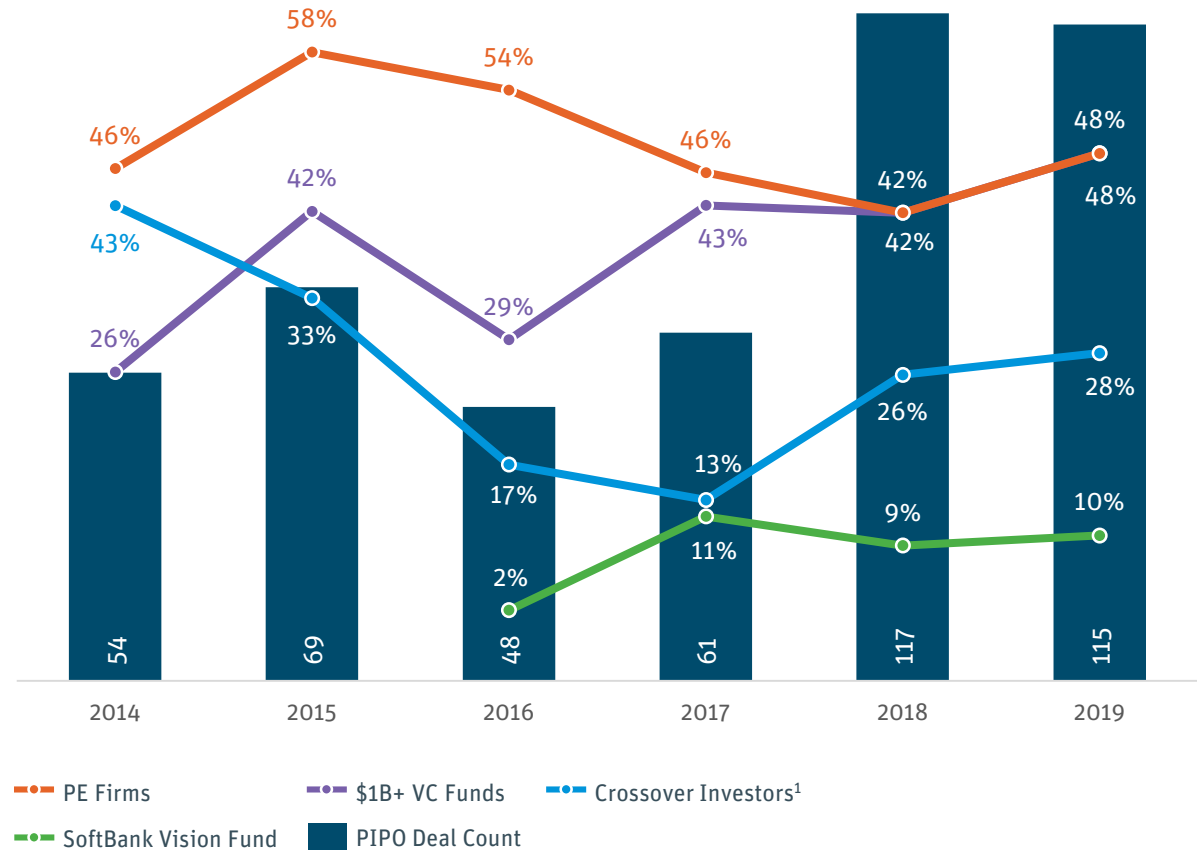
Deal Count of US Venture-Backed Tech IPOs vs. PIPOs: 2013–Q3'19



Non-Traditionals Help Drive PIPO Investment

If not directly, then indirectly SoftBank has been the catalyst for rising PIPOs. Recently, PIPOs have been largely supported by non-traditional venture investors such as private equity (PE) firms and large asset managers (crossover investors). Crossover participation has rebounded after a pullback in 2016.

Participants in US Tech PIPOs: 2014–YTD 2019²



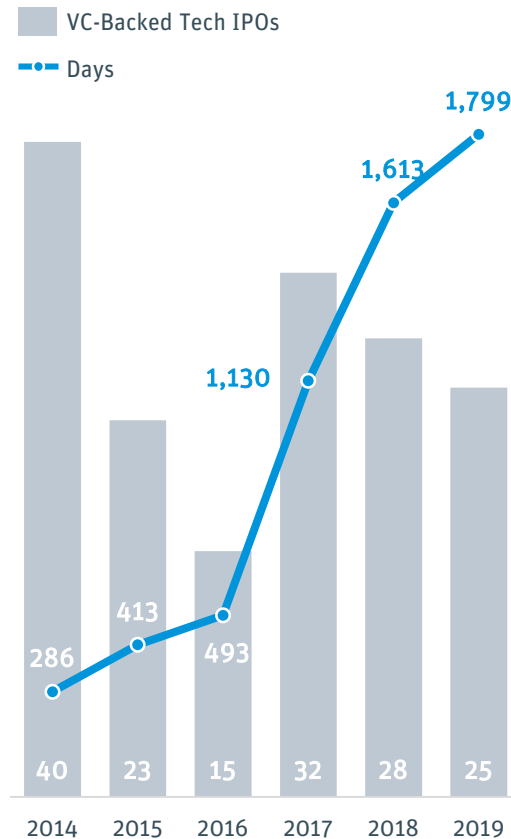
Notes: 1) Crossovers include BlackRock, Coatue Management, Fidelity Investments, Franklin Templeton Investments, T. Rowe Price, The Hartford Financial Services Group, Tiger Global Management and Wellington Management. 2) 2019 actual number as of 9/30/2019.

Source: PitchBook and SVB analysis.

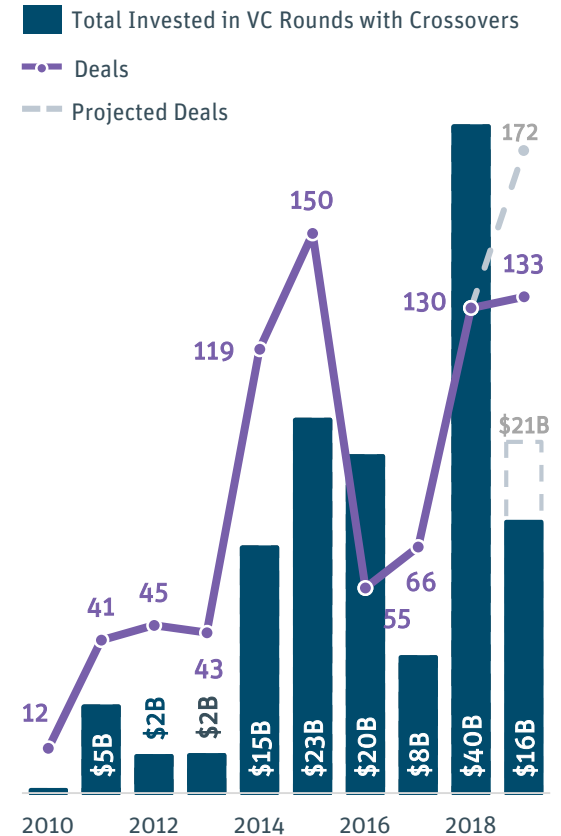
Traditional Asset Managers Venture Back

Crossover investors like BlackRock and Fidelity have been investing more in venture-backed companies. Due to the abundance of private capital, companies are taking longer to go public — extending the holding period of these investments.

Median Days Between First VC Investment by Crossover¹ and IPO



VC Rounds with Crossovers Participating

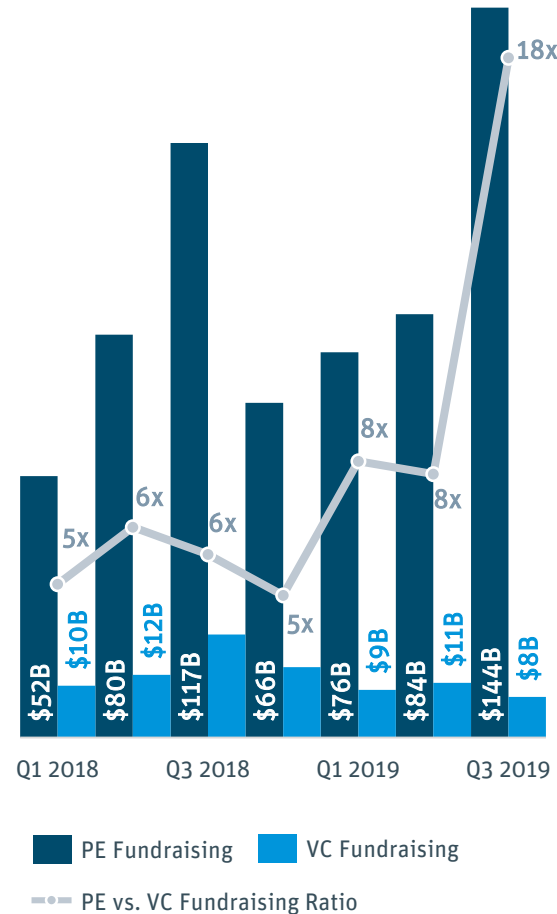


Notes: 1) Crossovers include BlackRock, Coatue Management, Fidelity Investments, Franklin Templeton Investments, T. Rowe Price, The Hartford Financial Services Group, Tiger Global Management and Wellington Management.
Source: PitchBook and SVB analysis.

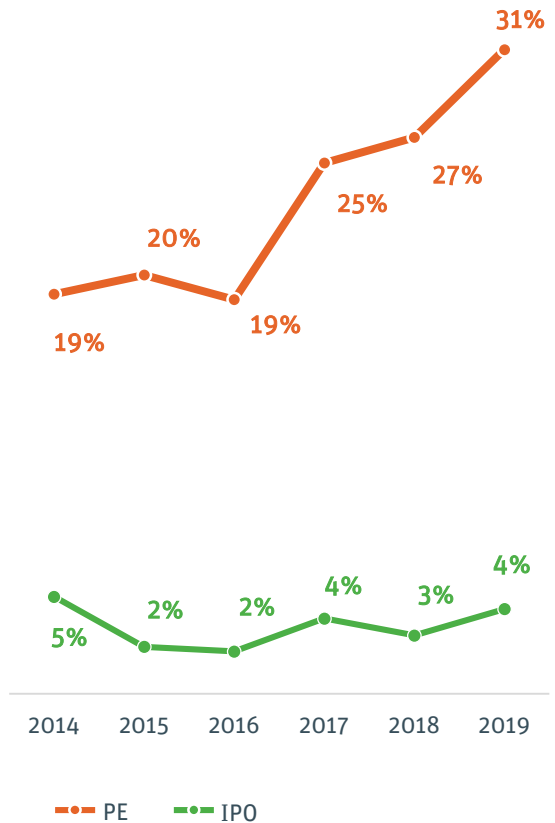
Private Equity Rises to the Occasion

Private Equity (PE) continues to raise record levels of funds, with 2019 turning into a banner year. Additionally, PE buyouts of US VC-backed Tech companies have increased significantly, relative to initial public offerings over the past five years.

PE vs. VC Fundraising: Q1'18–Q3'19



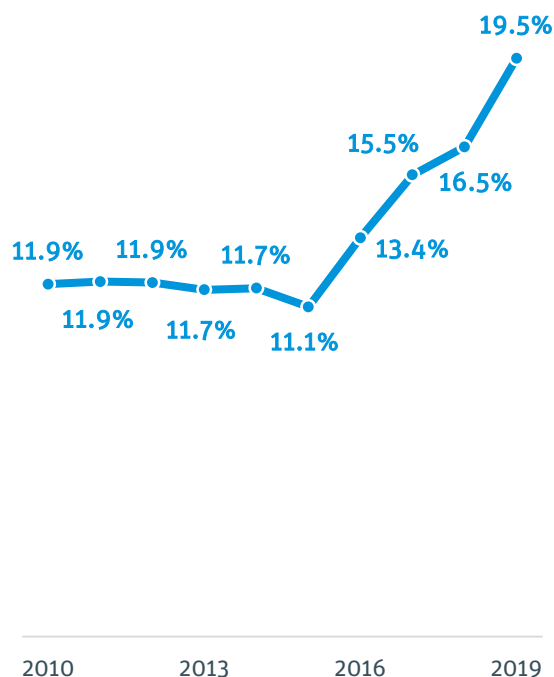
PE vs. IPO as a % of Total Exits¹



Private Equity's Appetite for Tech Increases

Tech represents an increasing percentage of overall PE deals. This illustrates PE's newfound understanding of opportunities and risk in growth tech companies. Specifically for PIPOs, PE is participating in some of the biggest deals this quarter.

PE Tech Investment (% of all PE Buyout Deals)



PIPOs with PE & Crossover Investors: Q3'19

Company	Deal Size ¹	Investor(s)
Mission Lane	\$500M	OAKTREE
KNOTEL	\$400M	WAFRA MERCURIA INVESTMENT
COMPASS	\$370M	CPP INVESTMENT BOARD
ROOT	\$350M	TIGERGLOBAL COATUE
FUNDBOX	\$326M	Allianz HarbourVest Hamilton Lane
robinhood	\$323M	DRAGONEER INVESTMENT GROUP Industrial Investors
Lime	\$310M	Fidelity GIC
CLEARBANC	\$300M	upper90
samsara	\$300M	TIGERGLOBAL
GitLab	\$268M	BLACKROCK FRANKLIN TEMPLETON TIGERGLOBAL

Public Markets

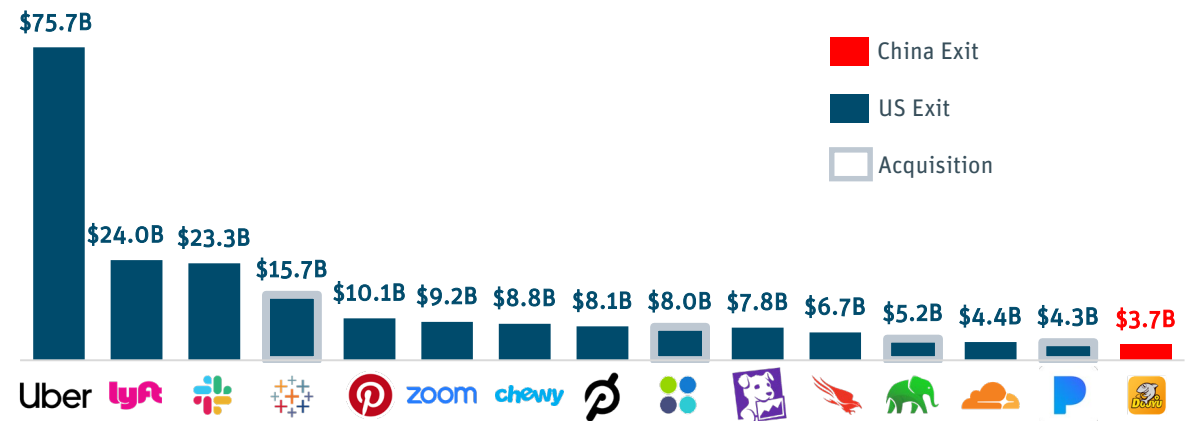
An Update on IPOs



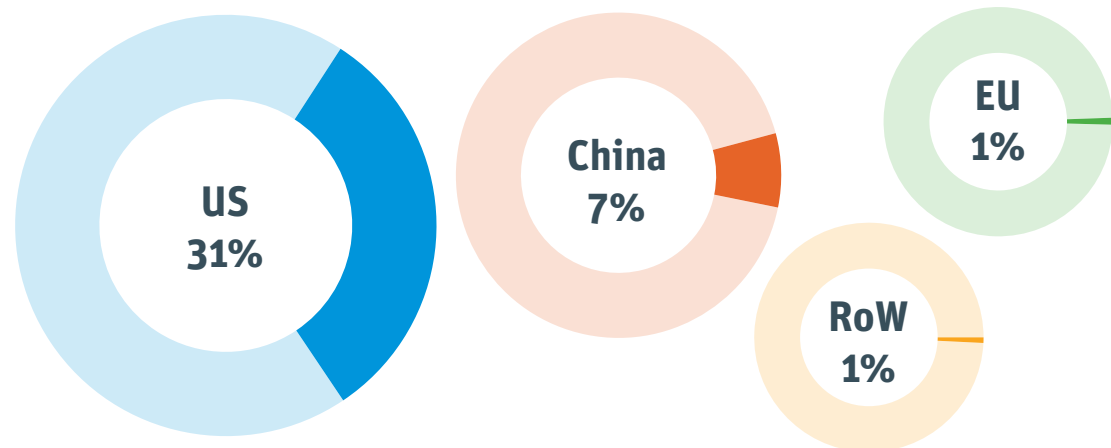
Role Reversal: Domestic IPOs Dominate 2019

In 2019, listings of US startups outpaced Europe and China, contrary to last year when international exits dominated. In the US, Unicorn exits this year and last represented ~\$280B of realized value. The exited Unicorn value this year is 31% of the value that remains.

Largest Venture-Backed Technology Exits¹ by Region: 2019



Unicorn Value Realized YTD (Percentage) Relative to Total Remaining Value



A Look Back: Long-Term Performance Matters

While short term performance catches headlines, a public company's true test comes over the long run. Looking back at the IPO cohorts from 2014 and 2016, the majority of companies are still above their LPV¹.

Market Cap Relative to LPV: Top 5 US Tech IPOs by Post-Valuation from 2014 Cohort

	2014 IPO Cohort	2016 IPO Cohort	2019 IPO Cohort
% > LPV	79%	92%	75%
Med. Mkt. Cap vs. LPV (>)	3.7x	3.2x	2.1x
Med. Mkt. Cap vs. LPV (<)	0.5x	0.1x	0.6x
% M&A	29%	-	-
Med. Acq. Value vs. LPV	2.1x	-	-



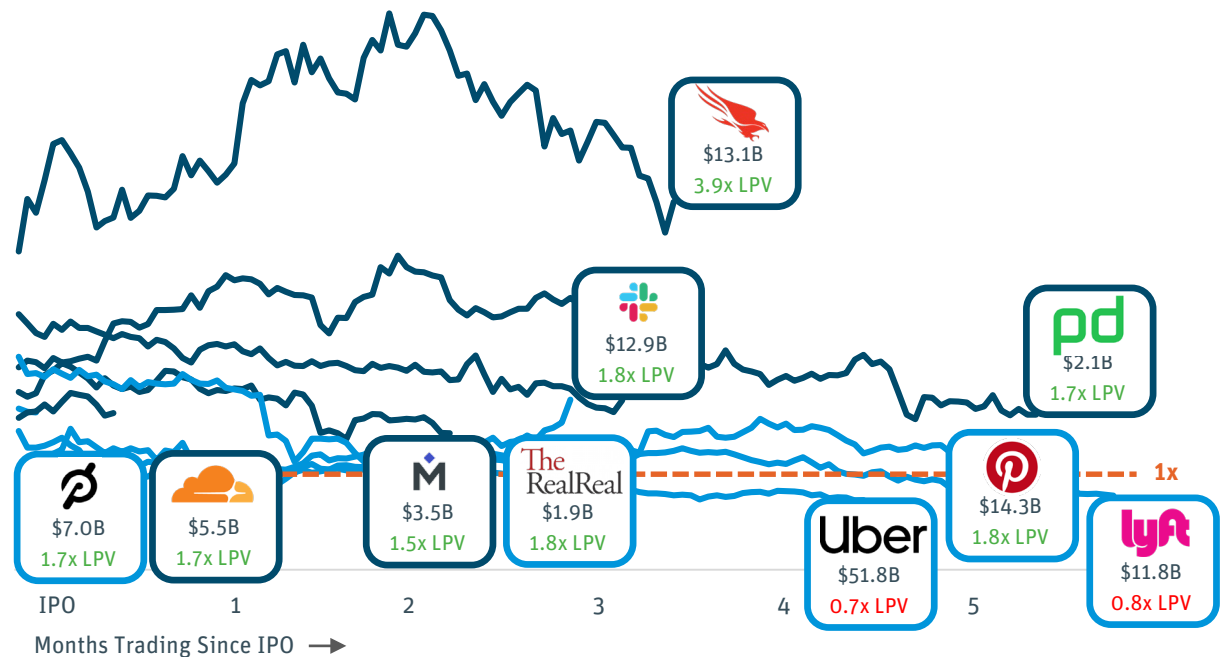
The Street Validates the Valley

Struggling to prove their unit economics, Uber and Lyft have sunk below their LPV¹. Meanwhile, other consumer and enterprise stocks have trended sideways, but mostly above their LPVs. Zoom has led the pack due to its superior fundamentals, product offering, and sizeable market opportunity.

Market Cap Relative to LPV: \$1B+ US Tech IPOs YTD²

	Consumer	Enterprise
Median Multiple at IPO	9x	21x
Median Revenue Growth	+58%	+55%
Median Operating Margin	-104%	-32%
Median Margin Change	-66%	+3%

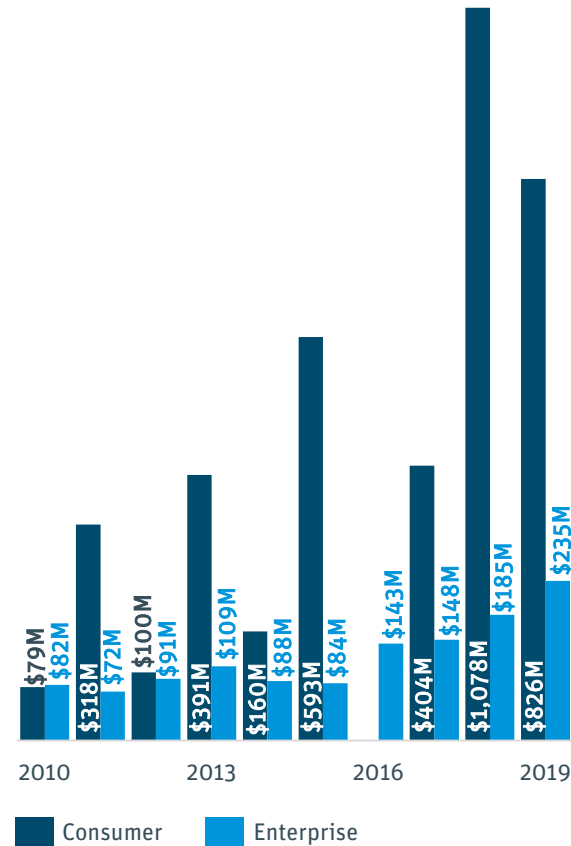
zoom
\$20.8B¹
20.8x LPV²



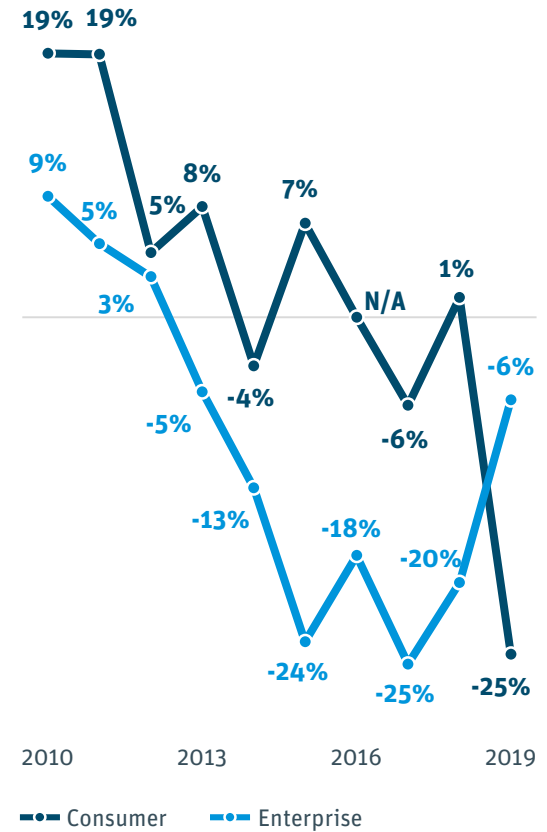
Consumer IPOs Are Bigger, but Are They Better?

Newly public consumer companies have grown to a scale not seen this cycle. Margins, however, have fallen below zero, leading to mixed performance in the public markets. In contrast, enterprise companies continue their path to break even.

Median Revenue by IPO Year¹ Cohort



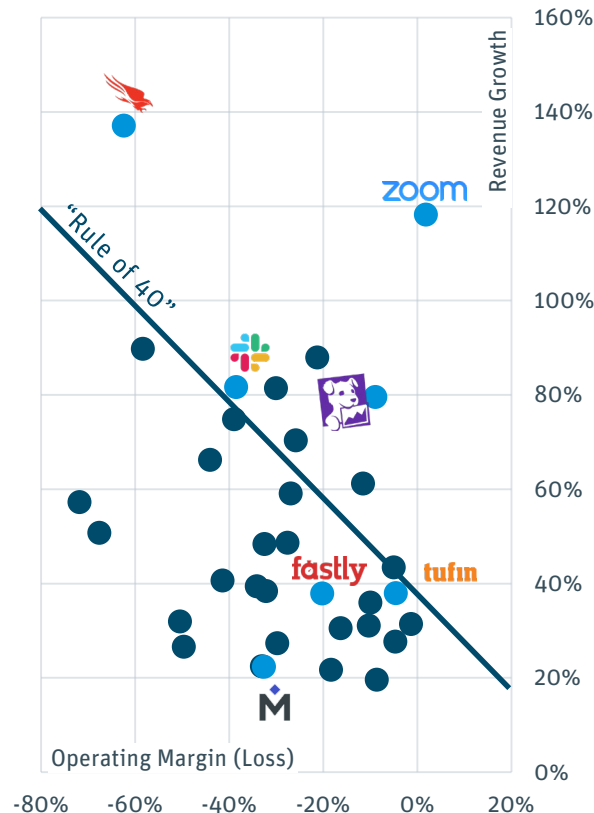
Median EBIT Margin by IPO Year¹ Cohort



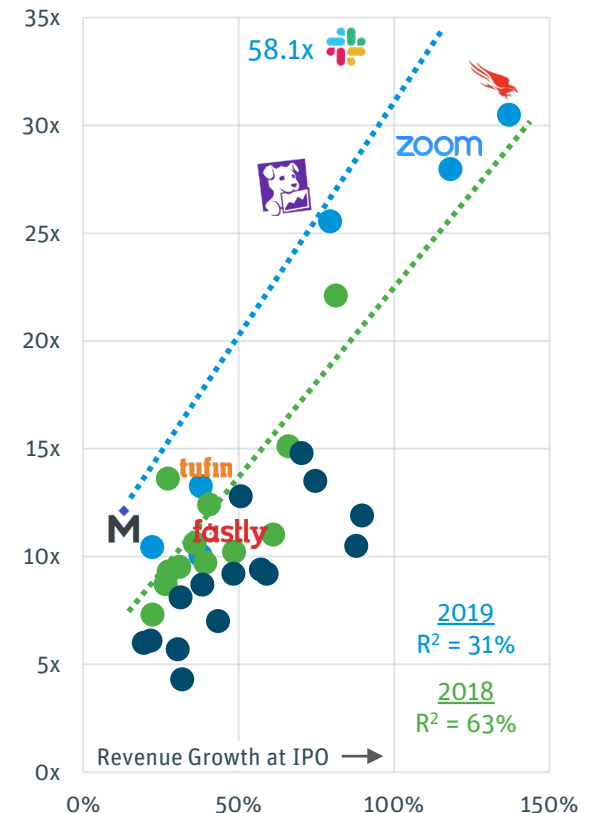
“Rule of 40” Holds, but Is No Longer Just About Growth

YTD, the 2019 enterprise cohort has had the highest proportion of companies above the “Rule of 40” line of the last three years. The difference has been a margin improvement with sustained growth. This year, revenue growth has been less significant in determining the IPO revenue multiples.

“Rule of 40”¹ Metrics 2016–2019 SaaS IPOs



IPO Revenue Run Rate Multiple² vs. Revenue Growth

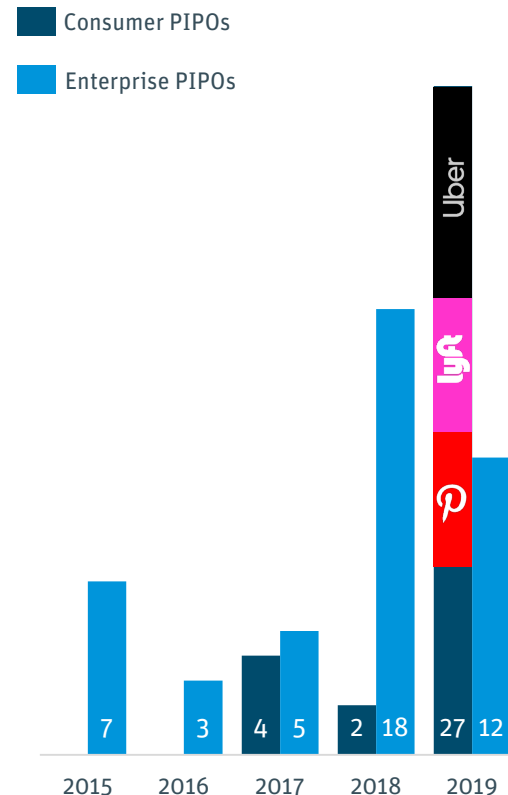


Notes: 1) The “Rule of 40” is a guideline developed in 2015 for SaaS companies to manage growth (approximated by revenue) in sacrifice of profitability (approximated by operating margin). Growth rate + profitability should exceed 40%. 2) Revenue run rate = S-1 12 month or 6 month revenue and annualized (if required). 3) Most recent quarter relative to year prior.
Source: Company SEC filings, S&P Capital IQ and SVB analysis.

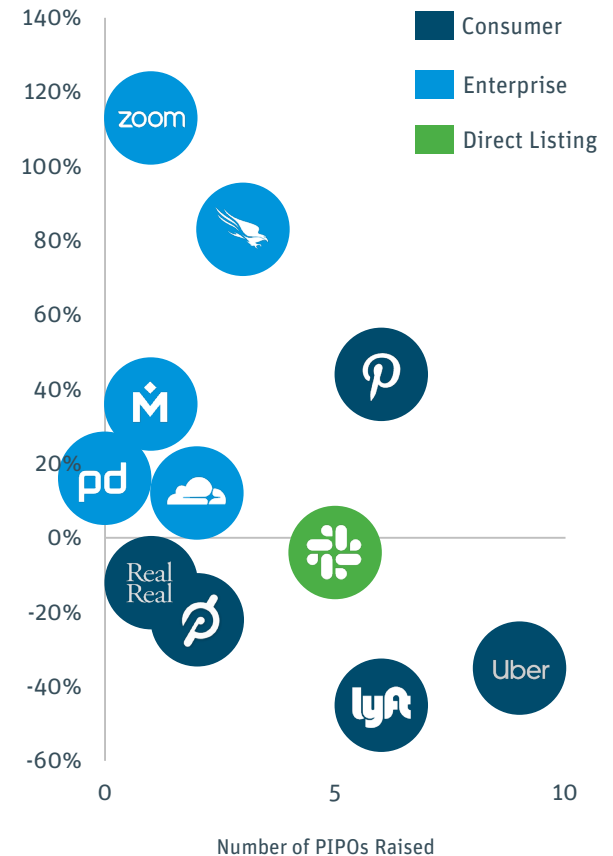
Private Markets Soak Up Unicorn Value

In 2019, consumer companies that went public raised a large number of PIPOs. Enterprise companies typically raised fewer PIPOs relative to their consumer counterparts and performed better once public. PIPOs may signal to public markets that value creation has already occurred.

Consumer vs. Enterprise: PIPOs by IPO Cohort Year



PIPOs vs. Post-IPO Performance: 2019



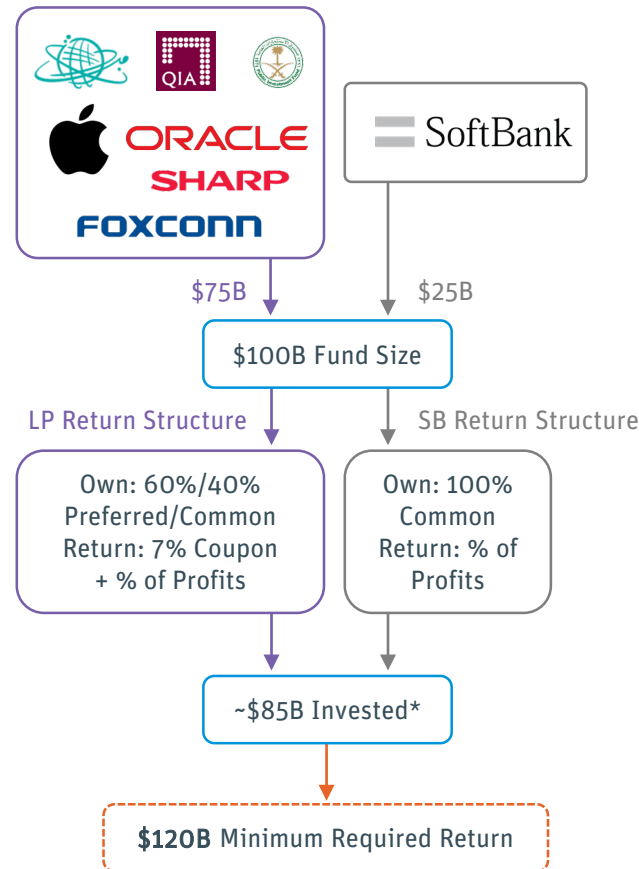
Liquidity Options Alternative Routes



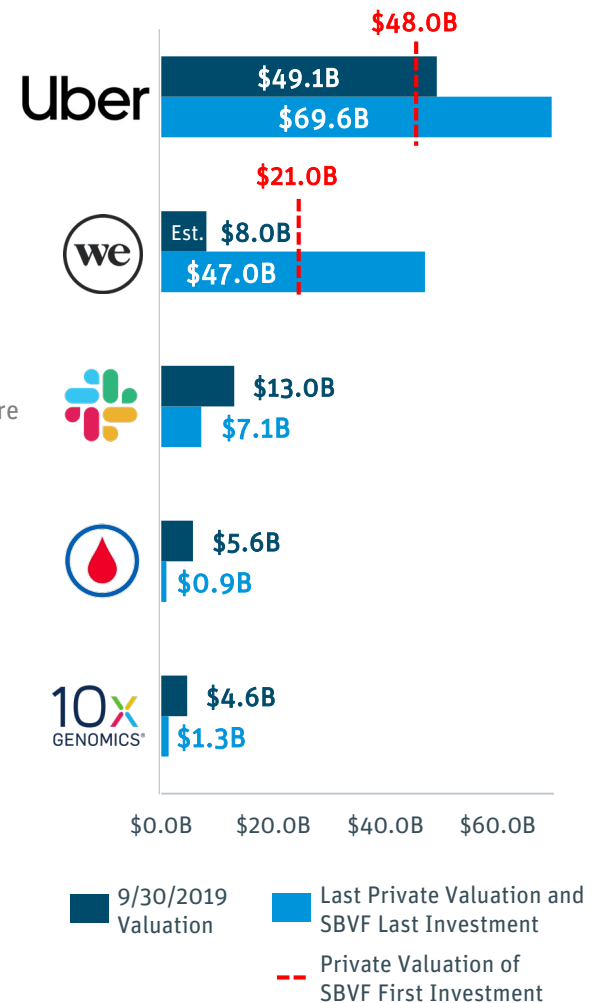
SoftBank Vision Fund I: Under Pressure

While SoftBank has seen positive performance from its investments in Slack and two healthcare companies, its larger holdings in Uber and WeWork have not fared as well. This is likely to hamper fundraising for the Vision Fund II and potentially affect the later stage funding environment.

SoftBank Vision Fund: Structure and Required Return



Performance So Far: Notable Investments



*\$15B reserved for follow-on investments and coupon payments.

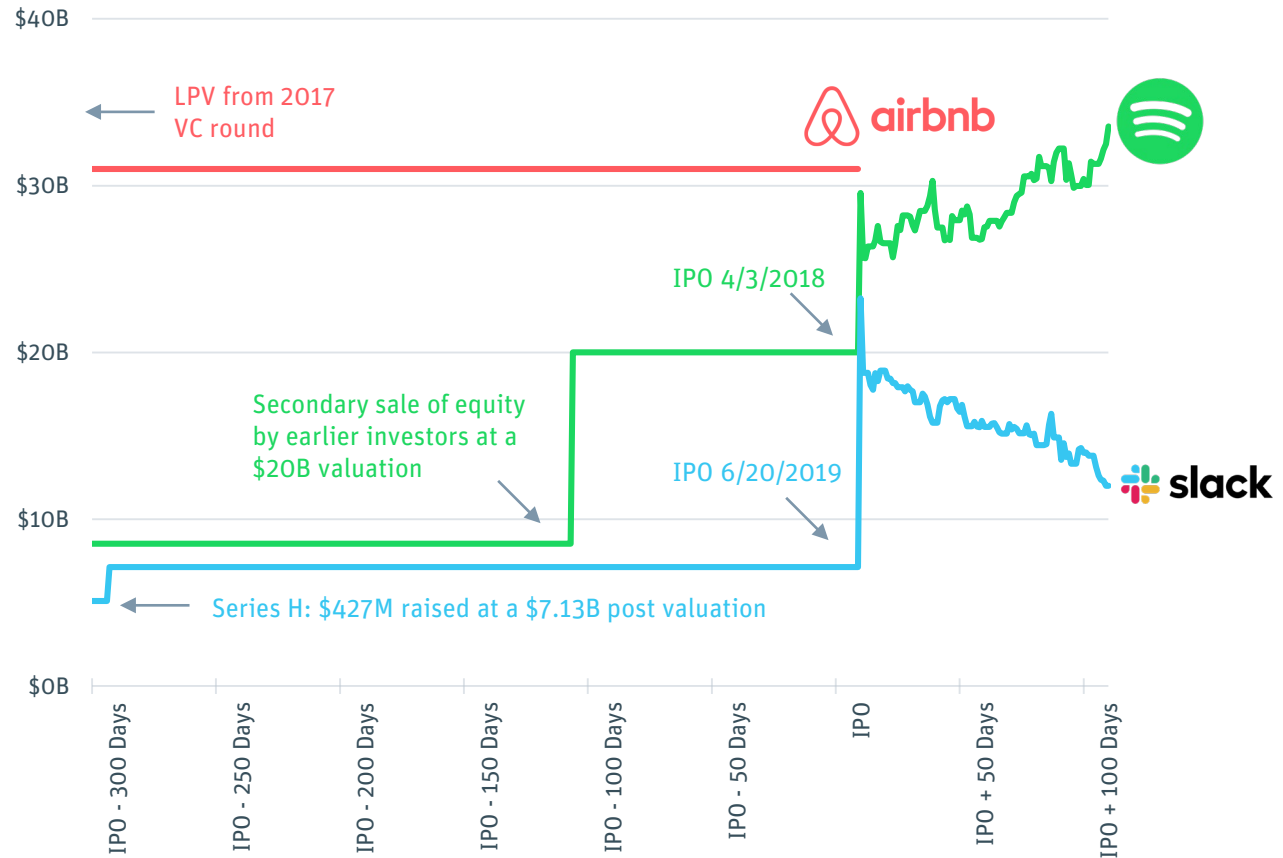
Notes: Low-water mark calculation: \$100B committed capital + \$11B coupon payments + \$8.5B management fees.

Source: PitchBook and SVB analysis.

The Direct Listers: Airbnb May Test the Model

Direct listings provide the liquidity of a traditional IPO without the cost of hiring an investment bank or the additional dilution from creating new shares. Airbnb may be the next direct listing and the biggest yet, but it is unclear whether it will go the way of Slack or Spotify.

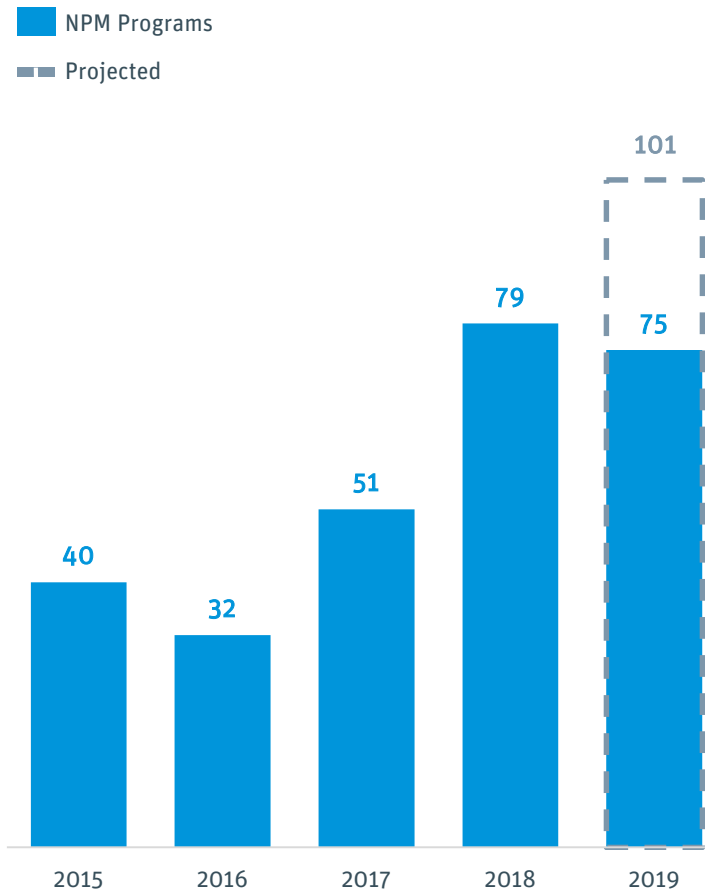
Valuation Trajectory Before and After IPO



Secondary Markets Are Becoming Established

For investors and employees to liquidate their holdings, they would typically have to wait until their company was either acquired or went public. Perhaps this is becoming a thing of the past, as secondary exchanges gain traction, solving the liquidity dilemma.

Private Company Secondary NPM¹ Programs by Year²



Raised a PIPO in last round of funding

50 percent

Average company age

9 years

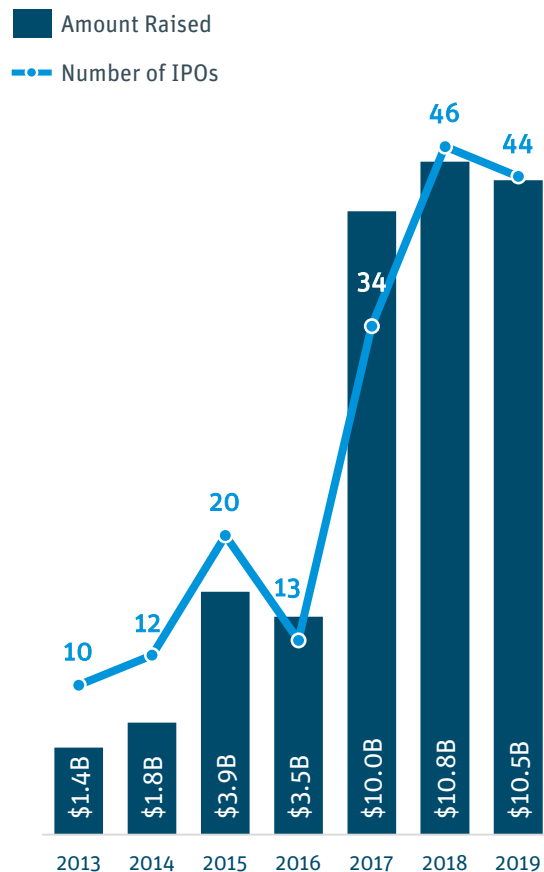
Median transaction value in 2018

\$17 million

SPACs Provide Alternative Path to Public Markets

SPACs¹ have reentered the fray as an interesting exit for tech companies. These vehicles go public with the intention to combine with a private company. Along with direct listings, SPACs represent an alternative route to the public markets instead of the traditional IPO.

SPAC IPOs by Year²



Tech Acquisitions Involving a SPAC



GALACTIC

Social Capital Hedosophia (NYSE: IPOA)
IPO 9/14/2017
Merger with **Virgin Galactic**
7/9/2019

**CHURCHILL
CAPITAL CORP**



Churchill Capital Corp (NYSE: CCC)
IPO 9/6/2018
Merger with **Clarivate Analytics**
5/13/2019

Appendix



About the Authors



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Bob Blee heads Silicon Valley Bank's Corporate Finance Group, which leads SVB's relationships with public and late-stage private companies in the Innovation sector throughout North America, providing a full suite of lending and banking products, and guidance as a trusted partner, helping our clients succeed and quickly scale.

Previously, Bob held a variety of roles in SVB's California and Midwest regions, including heading seed, early and mid-stage Infrastructure, Hardware and Consumer Internet and Fintech banking in the Bay Area and Southern California, and was responsible for SVB's Mezzanine Lending and Loan Syndications practices.

Bob sits on the nonprofit board of the Network for Teaching Entrepreneurship (NFTE) and the Silicon Valley Advisory Council of the Commonwealth Club. He is also active with his alma mater, the University of Illinois.



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Nick Candy, a Vice President of Research based in San Francisco, is responsible for the capital market research and data-driven analysis of the innovation economies that SVB serves globally. In this role, he has led global research efforts exploring investment, fundraising and exit dynamics in the venture ecosystem.

Prior to his research role, Nick managed strategic advisory and valuation engagements for venture-backed technology companies as part of SVB Analytics.

Nick earned a master of business administration from Chapman University and a bachelor of science in design from Bournemouth University. In addition, he holds the Chartered Financial Analyst (CFA) designation.



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Andrew Pardo is a Senior Research Associate based in San Francisco who is responsible for the capital market research and data-driven analysis of the innovation economies that SVB serves globally. In this role, he supports research efforts exploring investment, fundraising and exit dynamics in the global venture ecosystem.

Prior to this role, Andrew was a buy-side equity research analyst for a \$100B+ asset manager based in the Bay Area. His area of coverage spanned the domestic and international Financials sector. Andrew earned a bachelor of science in accounting from Loyola Marymount University.

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For more than 35 years, Silicon Valley Bank has helped innovative companies and their investors move bold ideas forward, fast. SVB provides targeted financial services and expertise through its offices in innovation centers around the world. With commercial, international and private banking services, SVB helps address the unique needs of innovators.

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