PitchBook

PitchBook 2018 Venture Capital Outlook

Forecasting the primary themes that will shape VC in the year to come

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Contents

Themes	1
Unicorns get a haircut as they head to exits	2-3
Net cashflows to LPs to stay positive	4-5
ICOs will become more institutionalized	6-7
Fintech consolidation to accelerate	8-9
Continued bifurcation of VC valuations	10-12
Alternative exits to become less so	12-14
Median fund sizes will continue to grow	15-17
Venture activity will increase outside of CA	18-19

Themes

- **Unicorns will hit the exits, with haircuts coming to several**
- **Net cashflows to limited partners will stay positive as exit value gets a boost**
- **ICOs will become more institutionalized**
- **Fintech consolidation will accelerate as business models mature & tech giants move into financial services**
- **Continued bifurcation of VC valuations, with late-stage pricing remaining elevated while angel & seed sees a pullback**
- **Alternative exits become less of an alternative**
- **Median fund size will continue to grow**
- **Venture activity will increase in entrepreneurial hubs outside California**

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Analyst

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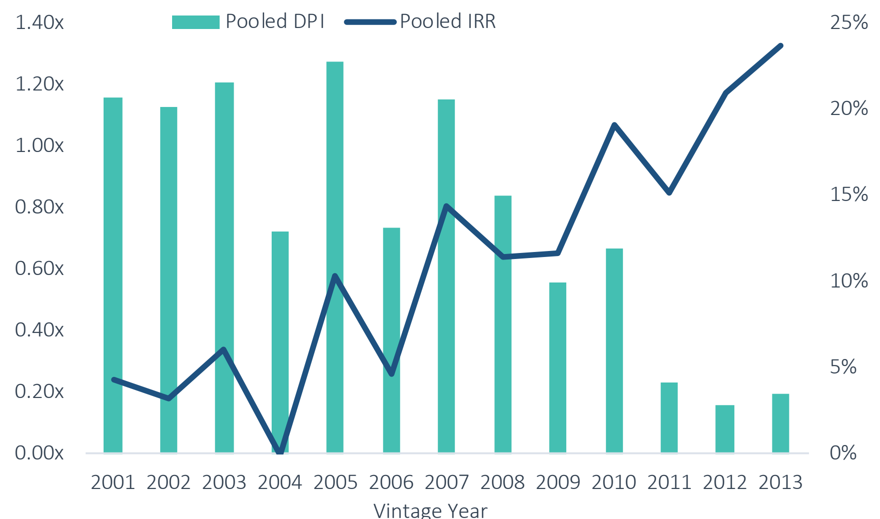
Theme: Unicorns will hit the exits, with haircuts coming to several

Rationale: As more companies achieve the highly coveted status of "unicorn," questions are beginning to arise as these companies stay private longer and the amount of capital locked up in them grows incessantly. With public equity valuations elevated after nearly a decade-long bull run and M&A multiples at all-time highs, 2018 may be the best chance for many to exit before the market and business cycle turn.

Caveat: The global build-up of dry powder, which shows no sign of reversing in 2018, has facilitated large late-stage financings that have afforded companies the opportunity to stay private and forgo an exit. Additionally, many companies achieved unicorn status during a period of rampant valuation growth, so it's also possible that some of these businesses encounter challenges and are forced to raise a new round below a billion-dollar valuation in lieu of an exit.

While the multi-year growth, age and sheer size of many unicorn companies today paints a picture of health, their prolonged private status poses issues for some investors and employees who continue to sit on the relatively illiquid shares of these private businesses. The unrealized gains from such valuation growth is evident in VC investment performance; for example, 2011 vintage VC funds currently have a pooled IRR of over 15% and a pooled TVPI of 1.86x, but the pooled DPI multiple is just 0.23x. In fact, in the US alone, roughly $600 billion in unrealized returns are locked in companies valued at $1 billion or more.

Global pooled venture fund metrics



Source: PitchBook
*As of 3/31/2017

The strong paper gains posted by many unicorns have largely placated LPs up to this point, but the pressure is mounting for GPs to begin tapping into their unicorn gains. To that end, unicorn exit activity has been accelerating, with 2017 seeing the highest number of US unicorns exit in a given year; however, that equated to just 14 exits from a pool of about 140 companies that currently meet "unicorn" criteria. Even with the uptick in exits, the backlog of continues to grow; the average age of recently exited unicorns was almost 9.5 years, and the average hold period for the initial venture backers was well over six years.

We think that 2018 will serve as an inflection point, with many of the highest profile unicorns finally taking the next step with an exit. The age and high valuations of many unicorns make IPOs the most likely route. Some may be deterred by the lack of success for some recent high-profile unicorn offerings (e.g., Snap, Blue Apron), but newly listed companies in general have been delivering strong relative performance in public markets and several unicorns have hinted that an offering may be in the works.

But while the IPO market appears to be gaining strength, going public is still a relatively expensive and arduous process. As such, many investors have been keen to open alternative exit routes, such as secondary transactions, direct listings and special purpose acquisition vehicles, which should help to facilitate unicorn exits in 2018 (even if only on the margin).

Although signs point to an uptick in exits, it is possible that many unicorns will continue to prefer the familiarity of private markets and VC backing. One persistent hurdle to unicorn exits is their sheer size. Corporate acquisitions are the most frequent exit route for VC-backed companies, but the high price tags of many unicorns preclude many would-be acquirers, which remains a major headwind to overall exit activity.

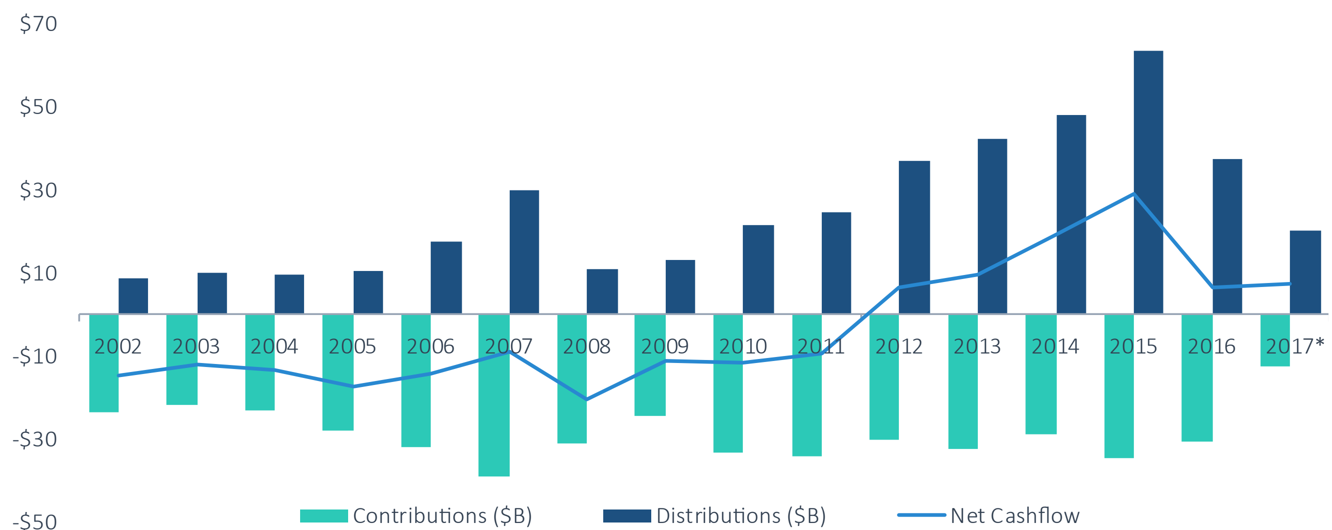
Theme: Net cashflows to LPs will stay positive as exit value gets a boost

Rationale: While a lackluster exit environment in 2017 will weigh on distributions, we expect a rebound in overall exit value in 2018 fueled by several large $500 million+ exits. This should help to keep net cashflows to LPs in positive territory.

Caveat: Any hiccup in the exit environment will make it difficult for distributions to keep pace with contributions, as deal sizes continue to grow.

When assessing aggregate VC cashflows, mega-funds obviously play an outsized role in shaping the broad trendlines. In the wake of the financial crisis, these large VC funds were afforded the opportunity to invest in the early stages of many of the current unicorn herd. This, in turn, has given these vintages relatively attractive returns on paper, but much of this value remains unrealized. As a result, while VC fund performance for newer vintages continues to trend positively, net cashflows to LPs dipped in 2016 and the downturn in exit activity in 2017 suggests that this development is likely to persist

Global VC funds' annualized cashflows by year



Source: PitchBook
*As of 3/31/2017

To be sure, VC distributions remain relatively strong on a historical basis; the downtick in 2016 came on the heels of seven consecutive years of distribution increases. And, as mentioned in our unicorn theme, the macro backdrop remains conducive to exits as we enter 2018. This should allow many VCs to exit larger holdings over the next year-plus, as they look to capitalize on exit opportunities while public markets hover at all-time highs. VCs are also warming to partial exits, including secondary sales, that allow them to return capital to LPs while maintaining some upside potential. While this activity is not accounted for in traditional exit metrics, it is evident in distribution data.

On the other side of the LP cashflow equation, capital calls (i.e., contributions) have been elevated in recent years, which should continue to put downward pressure on net cashflows, particularly as fund and deal sizes only continue to expand. That being said, we think that net cashflows will remain positive as VCs redouble their exit efforts.

Analyst

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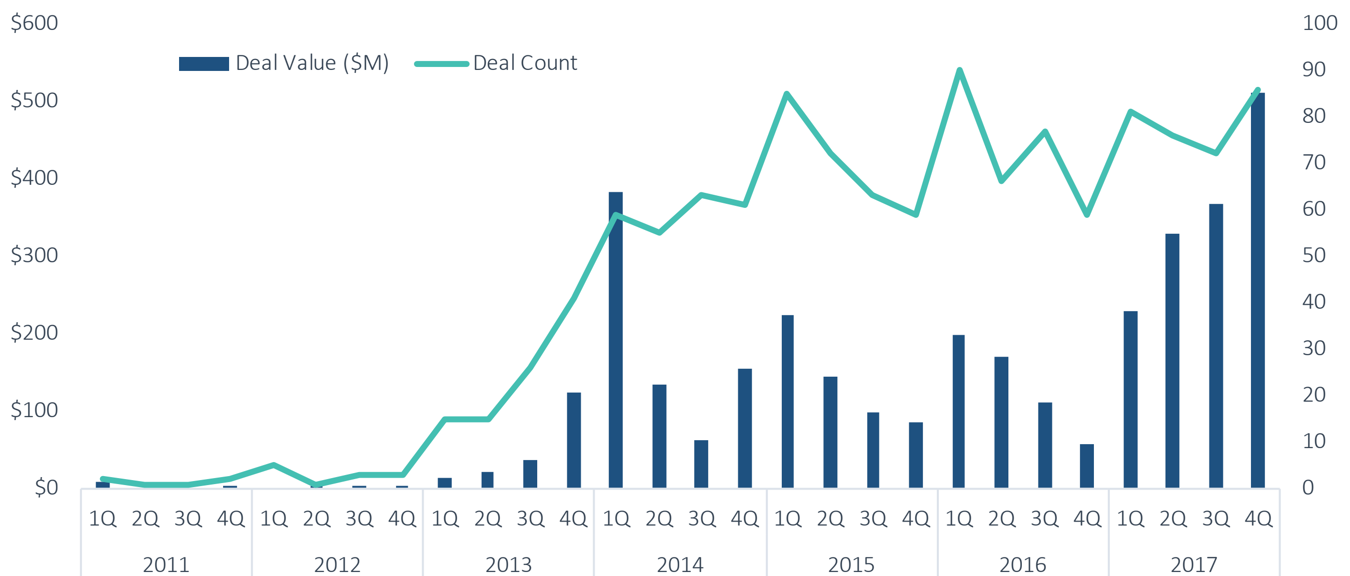
Theme: ICOs will become more institutionalized as more sophisticated investors are enticed by the relative bargains available via ICOs relative to the stretched valuations of listed crypto assets.

Rationale: Investors seek out "the next big thing," as exchange-listed crypto assets continue to exhibit strong tailwinds from retail capital flows. Furthermore, we expect to see a strong pipeline of projects in 2018 as many of the ICOs we've seen to date were rushed to market pre-product.

Caveat: Increased ICO regulatory enforcement could create additional administrative and compliance costs, which could encourage credible projects to instead seek out pre-ICO early stage capital from accredited investors.

Global venture activity in crypto startups



Source: PitchBook
*Data as of 2010 to 12/31/2017

Biggest ICOs of 2017

COMPANY	DATE	CAPITAL RAISED ($M)
Filecoin	August	$257
Tezos	July	$232
EOS	Ongoing	$200
Sirin	December	$158
Bancor	June	$153
Polkadot	October	$144
QASH	November	$108
Status	June	$108
Kin	September	$98

Source: Autonomous Next

Biggest ICOs pre-2017

COMPANY	DATE	CAPITAL RAISED ($M)
The DAO	May 2016	$150
ETHeum	July 2014	$18.9
Waves	April 2016	$16.0
ICONOMI	August 2016	$10.5
Golem	November 2016	$8.6
SingularDTV	October 2016	$7.5
Maid SafeCoin	April 2014	$7.0
Lisk	February 2016	$6.2

Source: Autonomous Next

It has been impossible to avoid the crescendo of media coverage and attention lavished upon Bitcoin, crypto assets and ICOs in 2017. Total aggregate market cap of all crypto assets exploded over the course of the last year, growing from $18 billion in January 2017 to nearly $800 billion today. While a small number of hedge funds have provided institutional access to cryptos, until now these inflows have been driven by retail money; however, the asset class is becoming increasingly accessible thanks to innovations like Bitcoin futures on the CME and CBOE. Institutionalization will continue to funnel downstream. We've seen a persistent pattern of gains from the more mainstream crypto assets, like Bitcoin and Ethereum, recycled down into alt coins and ICOs. The recent bull market thus bodes well for those bringing new token projects to market in 2018.

It's easy to take for granted how recently blockchain technology and crypto assets were outside the mainstream, relegated to obscure online message boards. The burgeoning interest in the space has already attracted more pedigreed and higher quality teams to work on forthcoming ICO projects. The Orbs Network has already received favorable comment from the CEO of popular chat application Kik, while messaging software Telegram and film company Kodak have released ICO plans of their own. Looking back, the most successful token projects of 2017 (based on capital raised) had detailed product roadmaps and came from teams with multi-year track records of developing technology. One example is Tezos, which raised the equivalent of over $200 million in July 2017 and has employed a full-time development team since 2014.

So far, institutional crypto funds have been able to enjoy a discount on private pre-sales and pre-product equity deals. However, considering the pre-product status of many projects, token sales come at significantly more founder-friendly terms than traditional venture capital. This influx of pre-sale capital will extend the product development window, as opposed to the largely nascent ideas that received over $4 billion in aggregate funding in 2017. As valuations for more mature blockchain projects have exploded, investors will increasingly look to the ICO market to find the "next big thing."

Theme: Fintech consolidation will accelerate as business models mature and publicly traded tech giants move into financial services.

Rationale: Technology giants have a huge opportunity to leverage and add to datasets by offering financial services.

Caveat: Any entrance into financial services will be bring new regulatory considerations, which technology companies tend to avoid. The track record has been mixed when traditional corporations branch into lending; most recently, GE—perhaps the most high-profile marriage of commerce and finance—divested itself from many of these businesses.

Many of the fintech business models that garnered consumer attention and investor dollars in recent years seemed to lose momentum in 2017. Marketplace lenders like Lending Club had relatively flat years in terms of valuation; only SoFi made significant headlines, albeit negative ones related to personnel issues. What went under the radar, however, was how the largest marketplace lenders leveraged their scale to access capital markets and securitize their loans, increasing their clout with institutional investors. As a result, we expect many of the smaller online lenders to be gobbled up in 2018 by larger financial services institutions as they look to capture inorganic growth through digital channels.

The most compelling value proposition for online lenders is that they can leverage data in novel ways to lend more profitably. Companies like Square and PayPal have successfully utilized their own payments and transaction data to boost their lending margins and, consequently, their share prices. Technology behemoths like Amazon and Google, which have spread into virtually every business line imaginable, have already made their initial forays into banking. Amazon has quietly lent a total of $3 billion to sellers on Amazon Marketplace over the course of a six-year trial, while Google's previously announced a partnership with Lending Club in 2015 that was overshadowed by the fintech company's major underwriting scandal just weeks later.

Some suspect that technology companies may shy away from financial services because it would lead to more public and regulatory scrutiny, but we think an established technology company will make a concerted move into fintech in 2018 by acquiring a major VC-backed online lender. Amazon's Prime model would be highly compatible with how some online lenders refer to their customers as "members" who receive special perks like career counseling. For their part, companies like Facebook and Google could leverage online lending to further monetize their troves of data and diversify away from increasingly controversial online advertising.

While native technology companies may have a leg up when it comes to leveraging data in lending, incumbents in the financial space have their advantages too, namely the requisite infrastructure and knowhow to navigate complex financial laws and regulations. And while many tech giants have yet to enter fintech in a meaningful way, the theme of consolidation in the financial sector has been present for several years and can even be applied to bank-sponsored fintech platforms like Goldman's consumer-facing businesses. In 2016, Goldman acquired Honest Dollar, an online lending platform that offers retirement benefits. Since then, the bank has quietly built out ancillary consumer businesses, most recently combining their GS Bank savings products and their Marcus online lending platform.

Analyst

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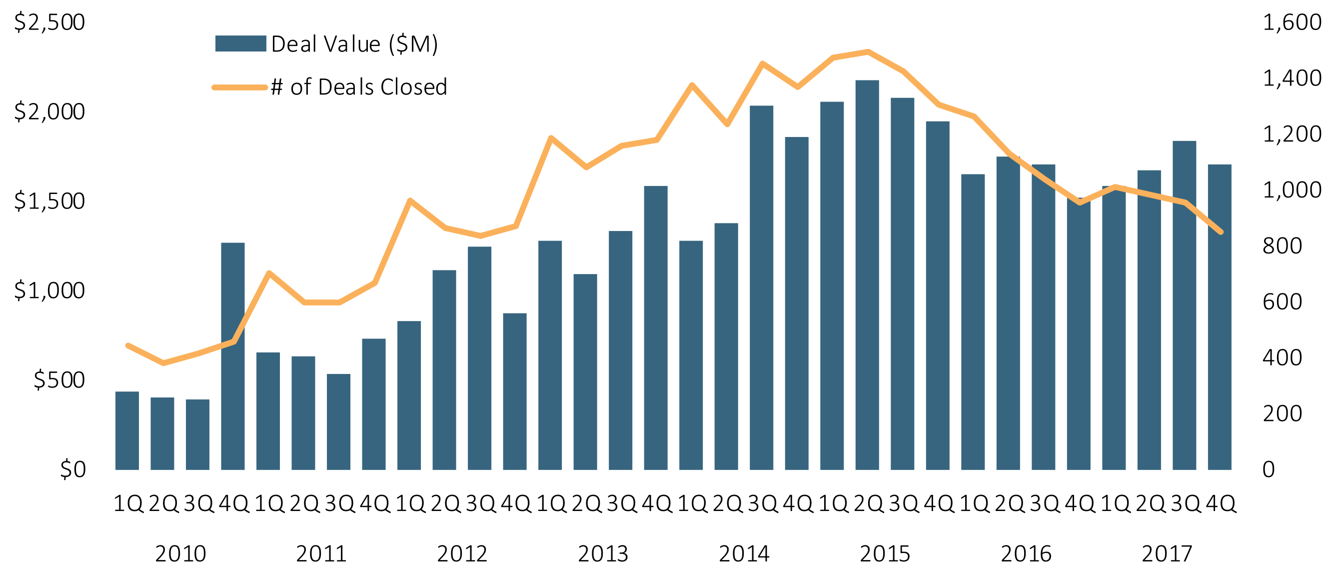
Theme: Continued bifurcation of VC valuations, with late-stage pricing remaining elevated while angel & seed sees a pullback

Rationale: Following a period of exponential expansion, deal activity in the angel & seed market has pulled back from its peak, which should start to alleviate the upward pressure on valuations. Concurrently, the large pool of capital available and recently raised for late-stage deals should translate to continued strong competition for deals.

Caveat: Companies receiving angel & seed funding may continue to raise their initial institutional capital later in their lifecycle and, as a result, command higher valuations. Late-stage companies are more susceptible to broad market or economic shocks, which would reverse the trend in late-stage valuations. At the current stage of the business cycle, we think the risk of these types of shocks have increased.

US angel & seed activity

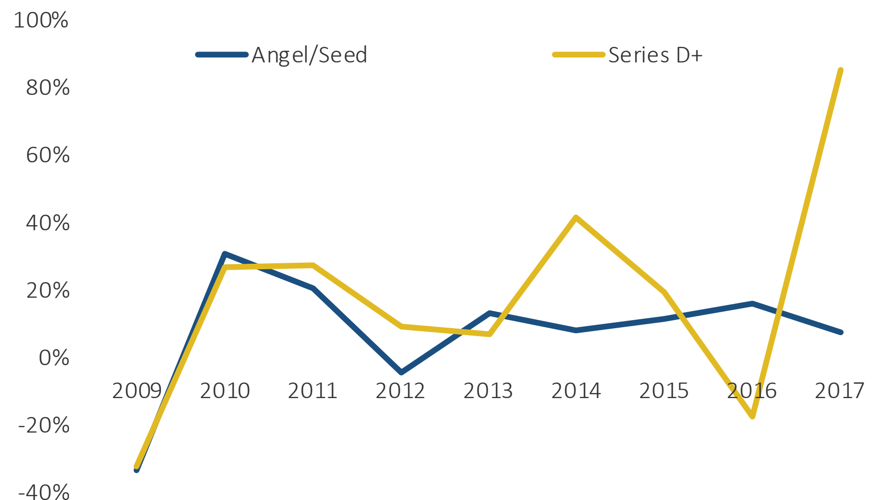


Source: PitchBook

The sheer amount of available capital across all VC stages since 2010 has fueled the extended rise in valuations. And while we believe competitive pressures persist across most of the industry, we see the angel & seed market as a space that is evolving in response to market changes. There was a massive influx of investors to the space from 2011 to 2015, as evidenced by a doubling of the count of micro-VC funds raised from 2011 to 2014 while angel & seed deal flow increased some 108%. However, a reversal of this exuberance has manifested itself in a 36% decline in angel & seed deal count from 2015 peaks.

That being said, total capital invested at the angel & seed stage has remained steady due to larger transaction sizes and the robust valuations attached to deals. As many angel & seed investors leave due to failure or to raise larger funds to invest at a different stage, we predict competitive pressures will start to wane. If this were to occur, it would lead to increased bargaining power for investors, which would ultimately result in median angel & seed pre-money valuations beginning to move back toward the $3 million to $4 million range of 2010 to 2012.

YoY change (%) in median pre-money VC valuation ($M) by stage in US



Source: PitchBook

We believe opposite forces are at work in the late stage, which will lead to further extensions of valuations, although at a slower pace than the 85% YoY increase we saw in 2017. Specifically, in 2018, we expect YoY valuation growth to revert toward the average of 22% seen from 2010-2015. As VC firms raise larger funds and outside interest grows from non-traditional VCs, such as the SoftBank Vision Fund and sovereign wealth funds, the outsized amount of capital available to late-stage companies should continue to propel funding at the top end of the market.

We see this as a bifurcation between what was historically been considered "traditional VC"—providing funding for young and small startup businesses—and the new late-stage/growth equity hybrid model that facilitates massive unicorn rounds; WeWork's $3 billion-dollar Series G round in August, for example, functions much differently from a $500,000 seed investment.

Several developments could affect this outlook. A smaller number of angel & seed investors also means that they can be more selective when choosing investments; therefore, the companies that do receive funding may be mature and, as a result, more highly valued. Another consideration is that while investment activity has been waning, sub-$100-million funds still have roughly $5 billion of dry powder to deploy, so a pickup in activity—and therefore competition—could be coming. Lastly, as mentioned previously, a broader market shock during the year could also put pressure on the uptrend in late-stage valuations.

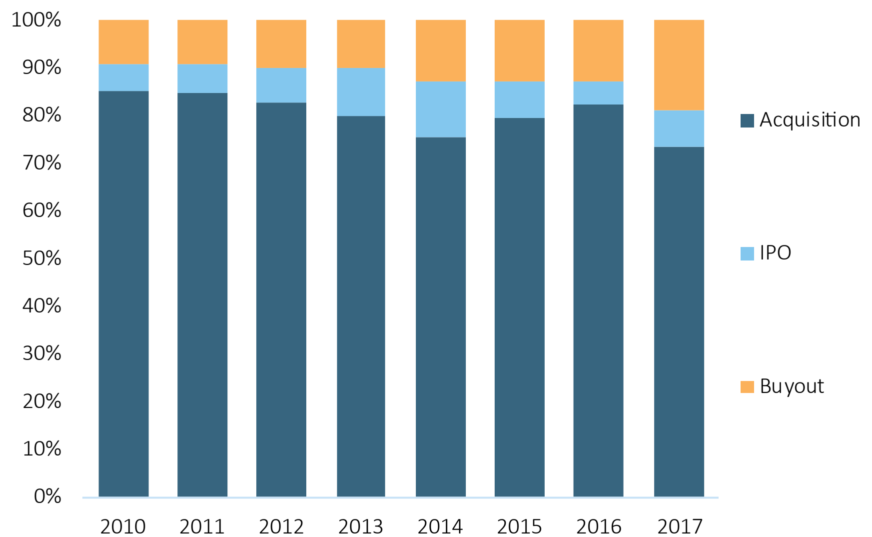
Theme: Alternative exits become less alternative

Rationale: Lengthening exit timelines have driven investors to seek out more creative ways to find liquidity besides strategic acquisitions—traditionally the most prevalent exit route. To that end, alternative ways of accessing the public markets, such as SPACs and direct listings, should continue to gain popularity. Furthermore, the access ramps (e.g., exchanges and brokerages) to the direct secondary markets have increased as of late, which will help both investors and employees achieve liquidity even without a full exit.

Caveat: Strategic acquirers could resume a more acquisitive attitude toward VC-backed companies, resulting in a return toward the heightened acquisition volumes that we saw from 2012-2016. Additionally, the new and relatively uncertain alternative IPO options currently being tested could prove unsuccessful and discourage others to follow suit. Finally, stock market performance could weaken, putting pressure on the IPO window and further delaying companies poised to go public.

Record levels of dry powder currently underpin the VC ecosystem, which allows large, mature VC-backed companies to postpone exits and instead choose the familiarity of VC fundraising. Furthermore, while still strong from a historical perspective, strategic acquisitions slowed in 2017, with dealmakers either deterred by high valuations or simply backing off after spending sprees in 2014 and 2015. As a result, other common exit alternatives—namely IPOs and private equity buyouts—have commanded a greater share of the VC exit market since 2014.

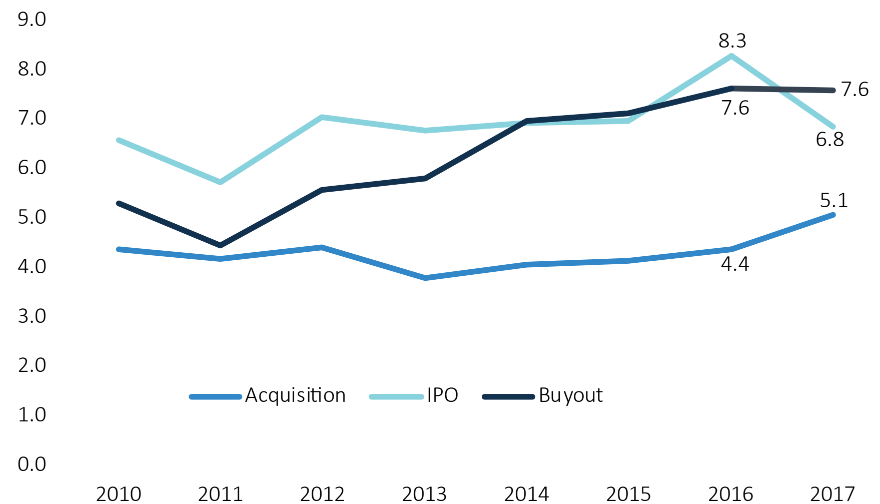
US venture-backed exits (#) by type



Source: PitchBook

PE buyers have picked up some of the slack from strategic buyers as they become more comfortable with technology companies. With PE firms also sitting on record amounts of dry powder, they have sought out new deal sourcing strategies to deploy capital quickly and efficiently. One solution has been software companies, including VC-backed businesses, which have historically been overlooked by PE firms. Another positive development for exits is that the IPO market rebounded in 2018 after a tepid 2016, with the positive performance of the stock market persisting and encouraging new VC-backed listings.

Despite positive signs in some areas of the exit market, many of the largest VC-backed companies continue to delay exits. Delaying an exit is not necessarily a problem for business operations, as illustrated by the several successful unicorns staying private for a decade or longer; however, the extension of exit timelines leaves many early investors and employees of these companies sitting on significant illiquid equity. This has led to a number of innovative alternative exit routes.



We are looking toward the execution of Social Capital Hedosophia's (SCHH) SPAC acquisition and Spotify's direct listing on the NYSE as barometers of feasibility for alternatives to the traditional IPO. We expect the creation of at least one more VC-sponsored SPAC in 2018, regardless of the outcome of SCHH, as SPACS have a relatively long history and have been widely accepted as a viable strategy.

Conversely, due to the unprecedented size of Spotify's direct listing, the success of the process and initial trading will be important factors in whether other companies follow suit. From the company's perspective, a direct listing adds an extra level of failure risk without the safety net of underwriters, whereas the SPAC process contains about as much risk for the target company as a normal M&A transaction.

For companies that are not ready for a full exit, the direct secondary market represents an exciting liquidity option outside of the traditional exit methods. Volume in this market has seen significant growth over the past couple years, in tandem with the lengthening of exit timelines. The flexibility and utility these transactions provide clearly have value in the current market environment, which will fuel further expansion. We also see improvements in access to these transactions (e.g., exchanges, brokerages) and a maturation of the secondaries space as adding more momentum.

Analyst

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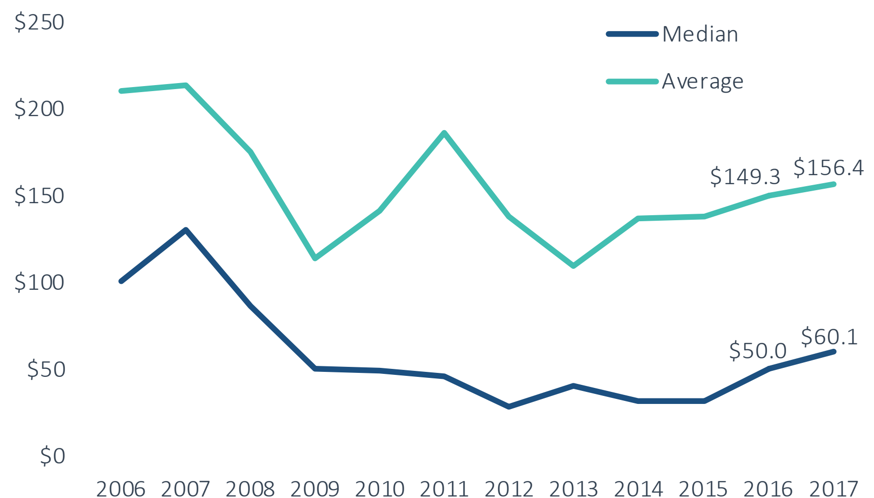
Theme: Median fund size will continue to grow

Rationale: VC fund sizes continued to climb in 2017, but the number of closed funds fell to the lowest level since 2013. The 20% increase in median fund size, coupled with a 26% decrease in fund count suggests that LPs are making larger commitments to fewer managers, consolidating their allocations with proven managers. Committing to fewer general partners helps to streamline the investment process and minimize administrative costs for LPs, many of whom have limited resources dedicated to alternative investments. In parallel, GPs have been targeting larger funds to keep up with growing round sizes and to maintain sufficient follow-on funding reserves. We expect these trends to persist in 2018 and exert further upward pressure on median fund size.

Caveat: Instead of consolidating, LPs could choose to further diversify with more allocations to first-time or emerging managers that often offer more flexible fund terms as well as innovative and differentiated strategies that provide portfolio diversification benefits.

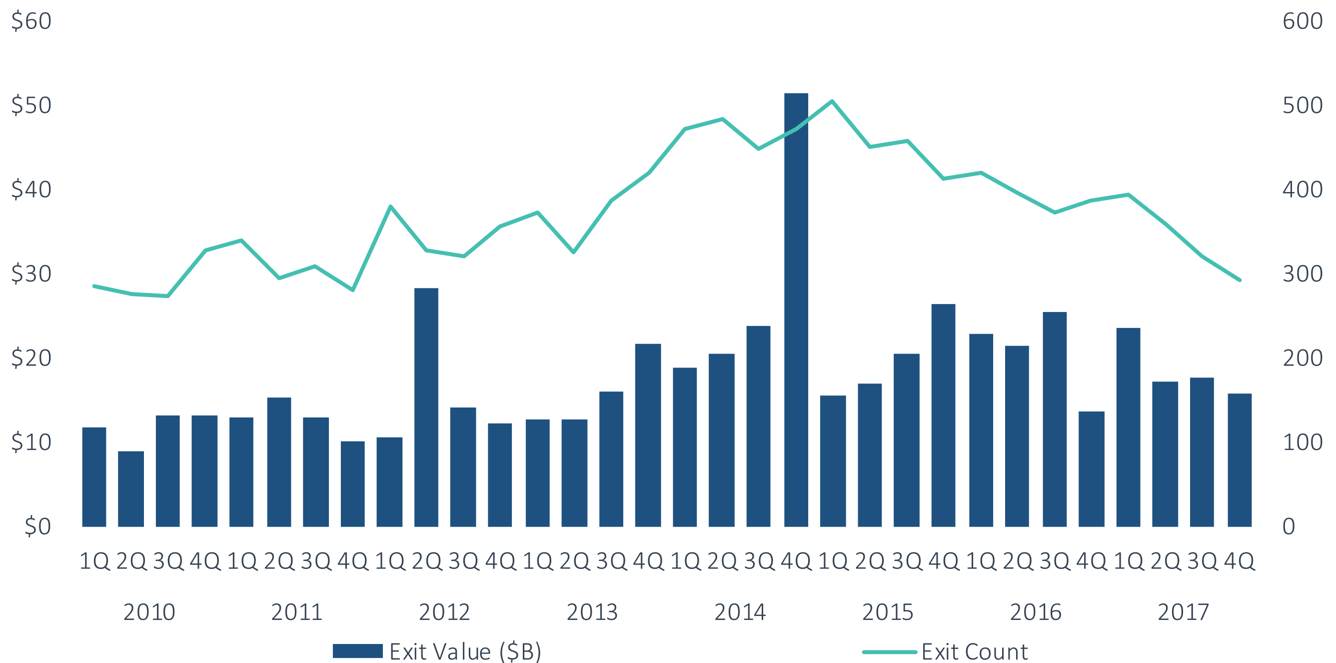
From 2014 to 2017, the median VC fund size doubled while venture markets have seen a resurgence of mega funds, with 54 vehicles $500 million or greater raised since 2016. The growth in median fund size that began in 2014 was fueled in part by record positive net cashflows (i.e., distributions outstripping contributions) to LPs in the preceding years, which encouraged LP reinvestment into venture funds. While distributions showed strong traction in the first quarter of 2017, global capital exited has trended downward in the following quarters and exit count decreased approximately 27% YoY through mid-December 2017.

Median & average US venture fund size ($M)



Source: PitchBook

Global venture-backed exit activity



Source: PitchBook

While we expect net cashflows to remain positive, they fell sharply in 2016 and the factors listed above puts 2017 on a similar trajectory[1], which could put a damper on fundraising as LPs theoretically will have less capital to recycle into VC funds. As such, we expect LPs to become increasingly selective in their allocation decisions, making fewer commitments but writing larger checks to proven managers who can provide liquidity and solid returns. Larger allocations to fewer funds can also help to reduce the high administrative burden associated with manager selection and portfolio monitoring.

From the fund perspective, we expect GPs to continue targeting larger funds to keep pace with ever-growing deal sizes and to maintain sufficient reserves for follow-on funding. Over the last two years, the median overall fund size doubled in tandem with the escalation in deal sizes. Given these market dynamics, raising larger funds is a logical strategy for GPs looking to maintain a competitive edge both against growing peers and deep-pocked non-traditional VCs, such as SoftBank. Larger funds also provide important follow-on capital to avoid dilution and maintain investment value. These factors, taken together with greater LP allocations, lead us to believe that 2018 will be yet another year of growth for VC fund size.

1: Cashflow data is reported on a lag; the most recently available data is as of March 31, 2017.

Theme: Venture activity will increase in entrepreneurial hubs outside California

Rationale: The median VC deal size and pre-money valuation for California-based startups have grown substantially in the last few years. With it becoming more expensive than ever to finance startups in the region, 2017 saw a growing proportion of deals and capital flow to developing VC hubs in mid-America. Geographically diverse investments tend to be less expensive for VCs while still offering competitive performance. We expect to see greater investment in entrepreneurial hubs outside California in 2018.

Caveat: Time is money, and many VCs may see sourcing investments from external hubs as not worth the cost. It takes time for ecosystems to develop, and some may be too under-capitalized or under-resourced to offer a substantial enough pipeline for investors to commit. Also, startups outside Silicon Valley may find it challenging to attract the same level of talent in competition with salaries, lifestyle and venture ecosystem found in Silicon Valley.

California is home to seven of the 10 highest-valued VC-backed companies in the US, and has the highest median pre-money valuation of any US state. The median deal size in California has grown relentlessly since 2012, prompting some investors, such as Elsewhere Partners, to look for fresh opportunities in less saturated markets in other parts of the country. As the deal count in California has shrunk 16% over the last two years, we've seen a growing proportion of deals completed in hubs on the east coast and in non-coastal states including Illinois, Colorado, and Utah.

In these hubs, VCs can source less expensive but still competitive investments, thanks to these startups' low-cost operations and capital efficiency. Many of these relatively untapped secondary and developing VC hubs are near high-quality universities but offer more affordable housing and living costs that facilitate lower operating costs, enabling companies to channel more capital to revenue-generating activities. Additionally, startups in these regions favor lean operating models, as limited access to venture funding makes a low burn rate essential to sustainable growth.

An example of one such company is Denver-based company, SendGrid, which raised $131.2 million in its November 2017 IPO, making it one of the top exits of the fourth quarter. The SaaS company produced positive operating cash flows in the two years leading up to its IPO, thanks in part to its operations in low-cost Denver and lean SaaS business model. The timely exit provided a solid return to SendGrid's early-stage investors, with Series A investors achieving a cash-on-cash multiple just above 7x. This is illustrative of the template that VCs strive to follow outside Silicon Valley; commit less capital while receiving similar returns.

These secondary and developing entrepreneurial hubs stand to benefit considerably from more VC activity, as successful exits and increased venture investment create a positive cycle of resource development and ecosystem maturation. Because they are already well developed, we expect to see greater capital and deal flow this year in the secondary VC hubs of New York and Massachusetts, as well as developing hubs in D.C., Texas, and Illinois. We anticipate that emerging ecosystems like Colorado, Pennsylvania, and Florida—all of which have the educational infrastructure, sector-specific expertise, and a growing track record of successful startups—will gain traction in 2018, which will set the stage for growth in future years.

Venture activity (#) by select US states