KPMG Enterprise

Venture Pulse Q4 2018

Global analysis of venture funding

15 January 2019

Welcome message

Welcome to the Q4'18 edition of Venture Pulse — KPMG Enterprise's quarterly report highlighting the key issues, trends and opportunities facing the VC market globally and in major jurisdictions around the world. 2018 was a bumper year for VC investment with over $254 billion of VC funding raised globally, compared with $174 billion in 2017. Record levels of VC investment in the Americas, Asia, and Europe helped propel annual results globally.

The strong and diversified US market continued to attract the majority of investment, although Asia came in a close second, thanks to an ongoing wave of $1 billion+ mega-deals, including four in Q4'18. Despite ongoing uncertainty around Brexit, European VC also remained very strong in 2018, with a significant increase in VC investment year-over-year.

As the median deal size globally grew, VC deal volume continued to drop, with end of year results well below the peak of the more than 20,000 deals seen in 2015. This decline only highlights the continued importance of late-stage deals in the eyes of investors.

Globally, transportation was one of the VC market's hottest investment sectors during 2018, attracting funding across numerous verticals, including autonomous driving, ride hailing and alternative energy vehicles. At the technology level, artificial intelligence attracted the most significant interest, likely due to its widespread applicability across industries and functions.

Heading into 2019, the IPO market will be one to watch as a number of massive unicorns prepare to go public. However, the unexpected turbulence of the public markets at the end of 2018, may give pause for thought.

In this quarter's edition of the Venture Pulse Report, we examine both annual and quarterly VC market results, and explore a variety of global and regional trends, including:

— An increase in the number of unicorn births
— The ongoing breadth of transportation investments
— The increasing opportunities in emerging markets, including Latin America
— The growth of AI investment in all regions of the world.

We hope you find this edition of the Venture Pulse Report insightful. If you would like to discuss any of the results in more detail, please contact a KPMG adviser in your area.

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Venture's new normal meets shifting global trends

The venture industry has evolved markedly in the past decade. Funds increasingly focus upon particular stages as the capital stack has grown more segmented, while a significant increase in capital committed to private equity and venture capital in general has also transformed market conditions, with more players chasing more opportunities. Concurrently, successes on the part of early venture funds and startups launched in the wake of the global financial crisis also encouraged even more competition and a gradual trend toward slightly fewer deals overall, coupled with significant increases in median financing sizes and valuations. However, this evolution of the venture industry now is progressing against a backdrop of intensifying economic and market turmoil, from trade policies to increased volatility for companies that recently went public. It remains to be seen whether the venture environment will respond swiftly or slowly to the uptick in uncertainty, but even greater caution seems most probable.

2018 closes on high notes across the board

Worldwide, the tally of VC invested in the final quarter of 2018 hit a remarkable $64.4 billion, across over 3,000 transactions. The second-highest mark ever, it is worthwhile putting that quarterly sum in context of year-end figures. 2018 saw over $250 billion in VC invested across 15,000+ transactions on the whole; the next highest sum of the decade, 2017's $174.6 billion, pales in comparison. The Americas saw their highest tally yet invested in Q4 2018; Europe and Asia-Pacific regions remained robust on a historical basis.

Underpinned by the amount of dry powder available, deal metrics stay at all-time highs

As volume has slowly flatlined or at least diminished in its rate of increase, median financing sizes have only risen across all series for some years, culminating in highs for full-year 2018 tallies from angel and seed stages to Series D or later. A classic supply-and-demand phenomenon is in play — the proliferation of capital committed to venture funds has resulted in a massive hoard of dry powder available for firms to invest, while the number of viable opportunities has not soared in tandem, resulting in increased competition. What's intriguing is this has occurred across all stages; the level of competition has elevated for every segment of the capital stack.

Is the early-stage reversion complete?

Since the start of 2015, the earliest stage of venture financing has seen the most significant contraction in count of completed deals. The slide seemed irreversible at first but, on the global stage, has evened out until the most recent quarters. Due in part to deal size inflation shifting not only traditional round nomenclature, but also discouraging investors from backing startups at such a risky stage, the decline has been important to track, as it could impact the width of the deal funnel in the future. However, now it has appeared to even out — the most recent dip is likely due to data lags more than anything else. What this portends is that the venture ecosystem has nearly completed its reversion to longer-run historical means at the early-stage; only additional macroeconomic and political shocks could derail that trend.

All currency amounts are in USD, unless otherwise specified, data provided by PitchBook.

Q4'18 summary

The future of fundraising

Given its tenure, the fundraising cycle is hard to gauge on a purely quarterly basis, but looking at longer-term trends, it is clear that venture players have more than enough capital to dispense for years to come. Such an embarrassment of riches will continue to prop up capital invested and deal volume tallies, but not to record extents, should additional shocks to markets occur throughout 2019; rather, slight corrections will be likely. However, as stage-specific fundraising is likely to continue, each segment of the capital stack will also see more localized competition, maintaining robustness in metrics across every stage for at least some time, until sufficient shocks occur that funds have to wind down.

A strong year for sellers, but cause for uncertainty remains

Due primarily to some significant debuts on public exchanges resulting in massive market caps, 2018 saw a decade high of $300 billion+ in aggregate exit value. That is a mammoth sum, higher than any other year in some time, and should help refill the coffers of both financial backers and founders, prompting recycling of capital back into the global venture ecosystem. It should be noted, however, that exit volume has essentially plateaued in the past 3 years, even as valuations have continued to rise. Thus, mega-valuations persisting upon exit is likelier from the start; the question becomes whether such valuations can persist. Market conditions are growing shakier, although that is unlikely to dissuade companies from going public, it could impact market caps for some time. M&A is likely to continue but at less-heightened volumes if stock prices take hits. In short, things have been good, but there is cause for concern going forward, so venture backers and startups should be wary of pressures to liquidity avenues.

Software's reign persists; biotechnology boosted ever higher

It would appear software is still eating the world, as venture investors, as well as non-traditional funds, such as SoftBank's Vision Fund, continue feeding software businesses gargantuan sums of capital to keep doing so. No less than $100 billion was invested in software businesses throughout 2018, spanning all stages of investment. Key aspects of software have translated into horizontals rather than verticals, and continue to permeate every sector; as use cases and niches proliferate, investors are looking to fund the startups that can cater to a hopefully brand-new, addressable market. Hence, the significant rise of the other category in investment by sector, as traditional industry lines continue to be blurred. However, another sector has seen a meteoric rise in dollars invested, namely, pharmaceuticals and biotechnology. Over $23 billion was invested in 2018 in pharma & biotech startups, well over 2017's previous high of $16.85 billion. Long the purview of industry-savvy investors, biotech has benefited from not only the inflation of deal sizes, but also sector-specific trends, such as patents expiring, advancements in biosimilars, favorable legislation and more. Investors were bullish on the space as a result.

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Globally, in Q4'18 VC-backed companies raised

$63.9B

across

3,048 deals

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Global VC investment rises for the sixth straight year

It was a strong year for VC investment globally, with total annual VC investment soaring past $250 billion for the first time this decade. The year-over-year increase in VC funding was remarkably high despite a third-straight decline in annual deals volume. At a global level, key areas of VC investment in 2018 included AI, autonomous vehicles, ride hailing and other transportation options (e.g. scooters-sharing, bike sharing), healthtech, and biotech.

Fintech-focused VC investments also continued to grow. These investments were quite varied in more developed jurisdictions, while in emerging economies they continued to center around payments and lending.

No shortage of funding, yet investors cautious

There was no shortage of capital in the VC market globally during 2018. While nothing of the size of Softbank's Vision Fund[1] was established this year, many $1 billion+ funds were created in 2018, including Sequoia ($8 billion), Tiger Global ($3.75 billion), Bessemer Venture Partners ($1.85 billion), and GGV Capital ($1.36 billion) during Q4'18.

Many of the biggest VC funds globally have substantial capital at their fingertips and yet, investors are being cautious with how they are allocating their funding. The decline in the number of deals throughout 2018 reflects a broader trend toward investments in late-stage deals. However, the trend also suggests some clouds might be on the horizon, particularly given the turbulence in the public markets to end 2018. Q1'19 will provide an important milestone for the future, offering a clearer picture of how 2019 might unfold.

Mega-deals become the norm, particularly in Asia

Globally, there was an extraordinary number of mega-deals this year, led by the $14 billion raise by Ant Financial in Q2'18 and, more recently, a $12.8 billion raise by Juul, a US-based developer of e-cigarettes. While Asia came second to the US in terms of overall VC investment, the region leads the globe in $1 billion+ deals. In Q4'18 alone, Asia saw four billion-dollar deals, including $3 billion to China-based ByteDance, $2.8 billion to Singapore-based Grab, $1.1 billion to Tokopedia and $1 billion to Swiggy. The fact these mega-deals came from four separate countries is remarkable and speaks to the growing diversity of the innovation ecosystem in the region. While China remains the dominant regional leader, similar to the US in the Americas, other jurisdictions are by no means standing still in terms of supporting and helping to scale startups. While the US saw fewer $1 billion+ deals, it saw a strong increase in mega-deals above $100 million — one of the reasons the US continues to lead the world in VC investment overall.

Early-stage deals harder to come by as VCs act more like private equity

Over the past year, many VC firms acted more like PE with respect to their investments, focusing on fewer but bigger deals. This has created somewhat of a vacuum at early-stage deal levels, with many jurisdictions seeing a big decline in early-stage deals volume. The decline in early-stage funding has forced many companies seeking investment to raise the quality of their game; they have had to provide stronger business cases, proof-of-concepts, and paths to profitability. A number of programs have worked to bridge early-stage funding gaps, including TechCrunch in the US. However, the sharp decline in early-stage deals globally could cause pipeline issues later down the road.

[1] https://www.wsj.com/articles/when-it-comes-to-tech-venture-capital-grows-less-venturesome-1526635695

Global VC investment rises for the sixth straight year

Rebound in number of unicorn births

Globally, the number of new unicorns skyrocketed from 53 in 2017 to over 94 in 2018. The US accounted for 53 of these new unicorns — almost double the 26 new unicorns seen in Asia — and five times the 10 seen in Europe. This, combined with the number of $100 million+ mega-rounds, likely speaks to the strength of the US pipeline of innovative startups, including companies at the pre-unicorn stage (i.e. those with valuations under $1 billion but over $500 million). The US has been very successful at creating an environment where a variety of businesses can graduate to unicorn status[2].

While Europe's number of new unicorns paled in comparison to other jurisdictions, the number tripled from the three seen in 2017. The class of 2018 was also more diversified; in 2017, all new unicorns were born in the UK, while in 2018 the UK, Spain, Germany, Portugal, Israel, and Estonia all saw at least one unicorn birth. This mix highlights the maturation of European innovation ecosystems and startups outside of historical leaders — a trend that bodes well for the robustness of Europe's innovation economy as a whole on a long-term basis despite the uncertainty plaguing individual countries.

Emerging economies draw substantial interest from VC investors

In 2018, emerging economies moved onto the radar of VC investors at a rapid rate. Countries such as Brazil, Colombia, Mexico, India, Malaysia, Indonesia, and others together attracted well over $8 billion in investment. Indonesia-based e-commerce company Tokopedia even landed among Q4'18's top global deals with its $1 billion raise.

The increasing number of deals in emerging economies likely reflects investor sentiment that these markets hold a wealth of potential for companies able to provide services that cater to the needs of underbanked and unbanked populations — such as microloans or remittances, or to the unique challenges of small businesses in emerging economies — such as efficient distribution.

Corporate participation in VC deals reaches an all-time high

Globally, corporate VC investment continued to grow for the fourth-straight year, with corporates participating in over 20 percent of VC deals. Corporate investors were most active in Asia, where the participation rate was well above 30 percent. Many corporate investors were focused on VC investment for strategic purposes, whether for internal use or to extend their service offerings — for example: purchasing a SaaS solution to improve operations which could also be sold as a service to others.

Technologies and industries continue to evolve

2018 was a banner year for a number of industries and technologies. At a global level, AI was one of the hottest areas of technology development, while transportation and healthcare were among the hottest industries. Yet, the shape of both technologies and industries also evolved significantly over the course of the year. On the AI side, companies like SenseTime rose rapidly, using AI to support facial recognition and more advanced natural language processing. At an industry level, transportation investments evolved beyond ride hailing and autonomous driving, stretching into multimodal transportation planning platforms, new energy vehicles, and smart-trip technologies. Over time, the definition of technologies and industries will continue to broaden, no doubt increasing VC opportunities.

[2] https://pitchbook.com/news/articles/unicorn-class-of-2018

Global VC investment rises for the sixth straight year

IPO market opens wide during 2018, M&A also strong

During 2018, the IPO market door swung open, with IPO exits across all key jurisdictions. For example, the US had more than 80 VC-backed technology companies go public over the year. In Q4'18 alone, US IPOs included companies suh as Allogene Therapeutics, Anaplan, Elasticsearch, Guardant Health, and Upwork. Asia also saw a solid increase in IPO activity during the year, in part because of new guidelines issued by the Hong Kong Stock Exchange aimed at making it easier for tech and biotech companies to IPO. While Europe was less active, it still saw several high profile IPOs, including Funding Circle, Ayden, and Farfetch.

Despite the turbulence in the public markets seen at the end of 2018, there are positive signs that IPO exit activity could continue, particularly from unicorns. These IPOs will be critical to watch as they may set the stage for the remainder of 2019.[3]

M&A activity also remained strong in 2018. In Q4'18 alone, Microsoft acquired GitHub for $7.5 billion in the largest SaaS company acquisition ever. The deal was eclipsed shortly thereafter however, by the announcement of SAP's acquisition of survey company Qualtrics for $8 billion in November.

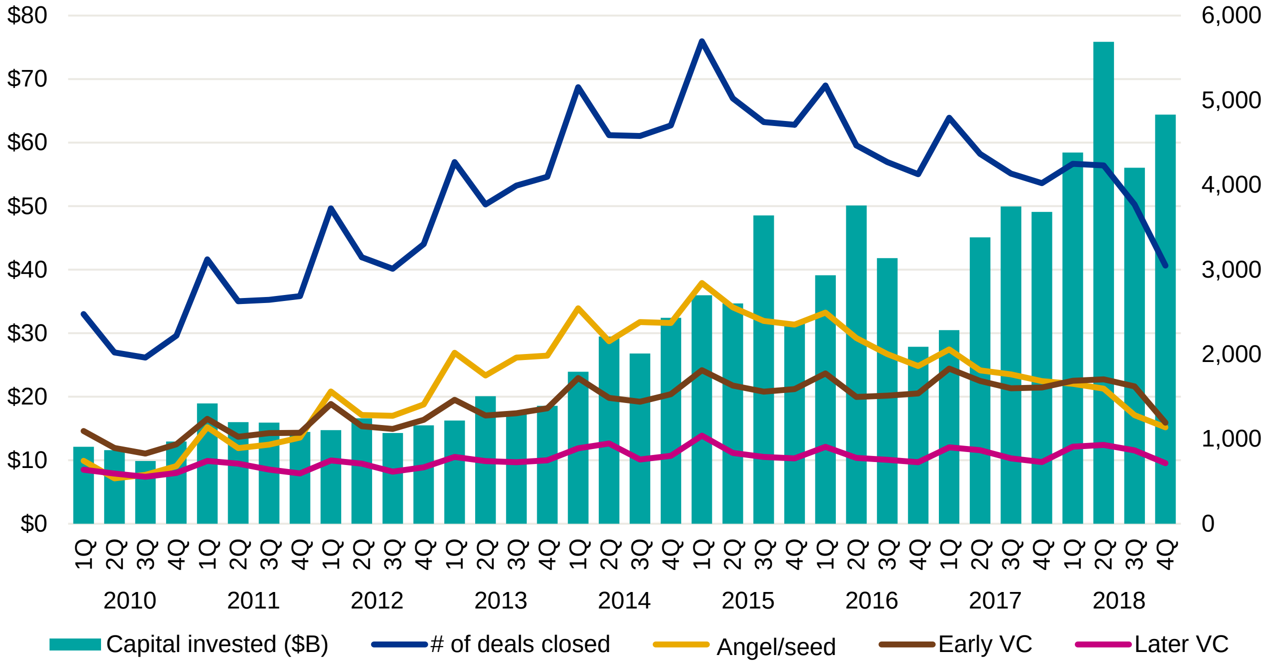
Trends to watch for in 2019

Looking ahead to 2019, it may be difficult to improve upon the results achieved in 2018. However, there will continue to be a substantial amount of VC capital invested globally, particularly in safe bets and later stage companies. This will likely result in the average deal size continuing to increase while deal volume either remains steady or drops further. In most jurisdictions, AI is expected to continue to attract significant investment, in addition to healthtech, biotech and transportation solutions.

[3] https://pitchbook.com/news/articles/all-the-companies-making-2018-a-historic-year-for-ipos

Will the new normal persist?

Global venture financing by stage
2010–Q4'18



Source: Venture Pulse, Q4'18. Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019. Note: Refer to the Methodology section on page 101 to understand any possible data discrepancies between this edition and previous editions of Venture Pulse.

The new normal of a richer venture ecosystem has persisted for some time, with median financing metrics staying stubbornly high, fundraising still going strong and sufficiently robust exits (in terms of size) still fueling the cycle. However, as 2018 wound down, more volatility within public markets and national economies, not to mention political realms, was observed than in years. Different asset classes are isolated to some degree, yet any sustained choppiness in public markets will inevitably affect those in VC. Beyond the mechanics of pricing, the prospects for interrupted liquidity or disappointing debuts at first for unicorns will also give investors pause. All that remains to be seen, contingent upon just how volatile things become.

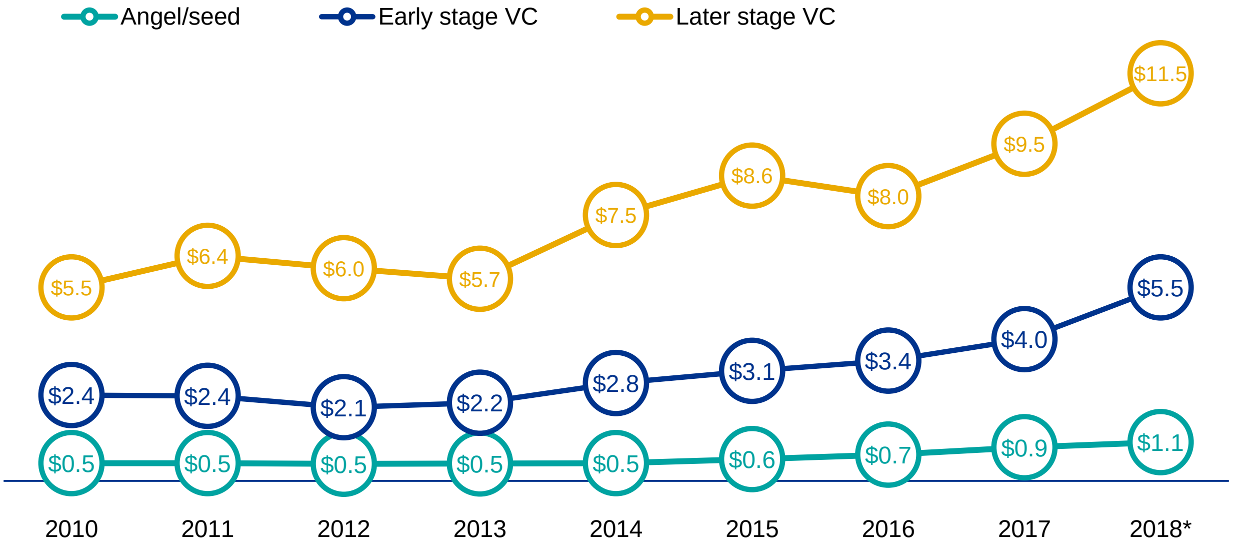
"It will be hard for 2019 to beat the levels of investment we've seen this year. That said, we will likely continue to see substantial VC dollars being invested globally. Average deal sizes will likely keep going up, meaning that later stage deals should continue to attract funding, leaving earlier stage deals to take the hit."

Jonathan Lavender
Global Chairman, **KPMG Enterprise, KPMG International**

Medians close the year on high notes across the board

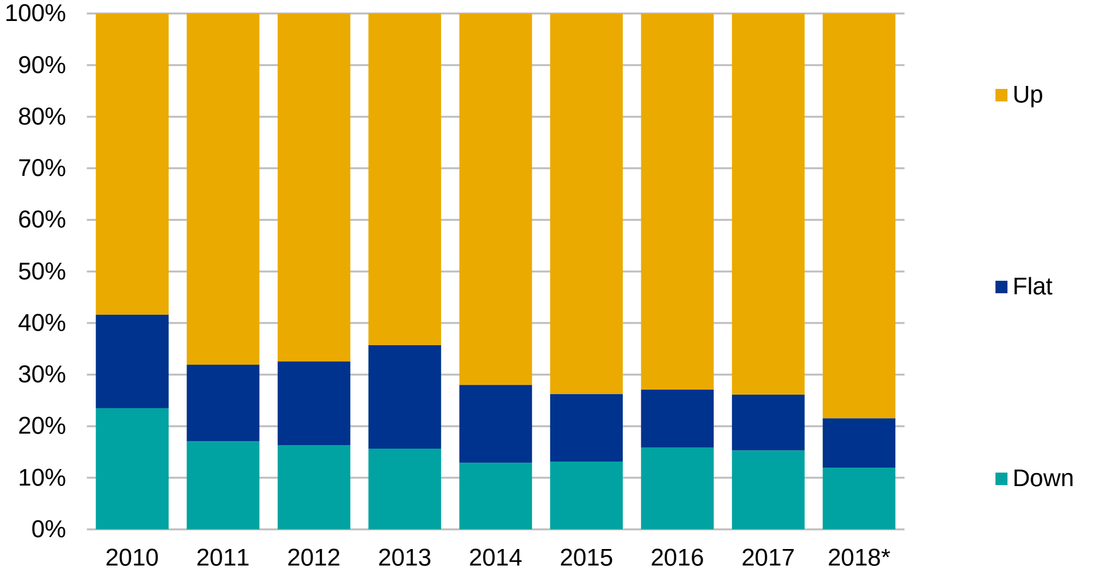
Global median deal size ($M) by stage

2010–2018*



Global up, flat or down rounds

2010 — 2018*

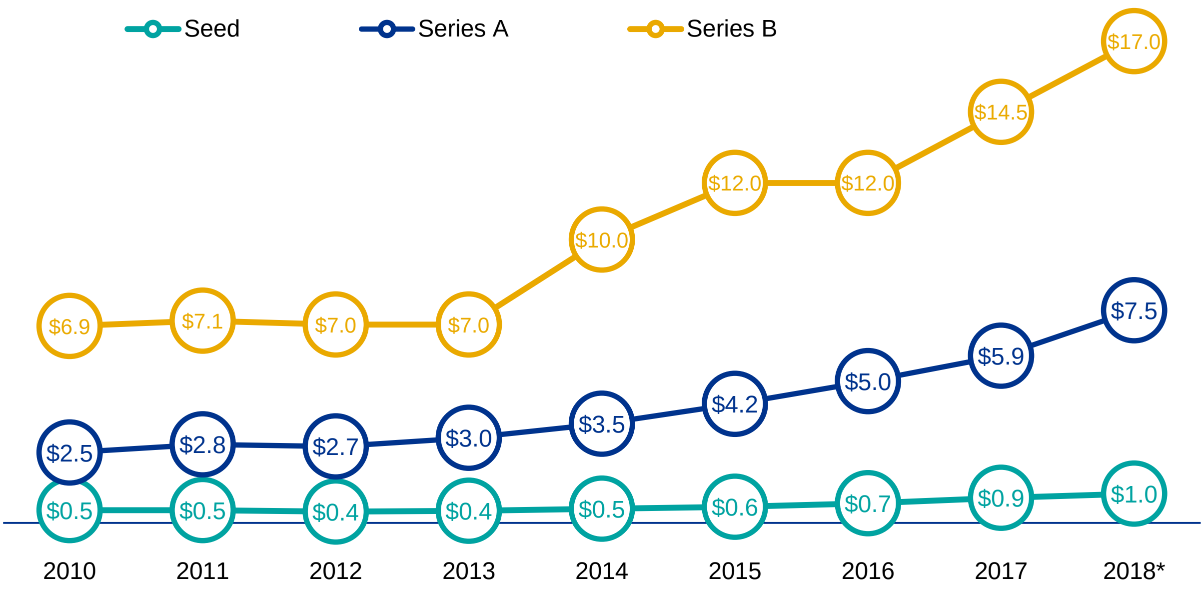


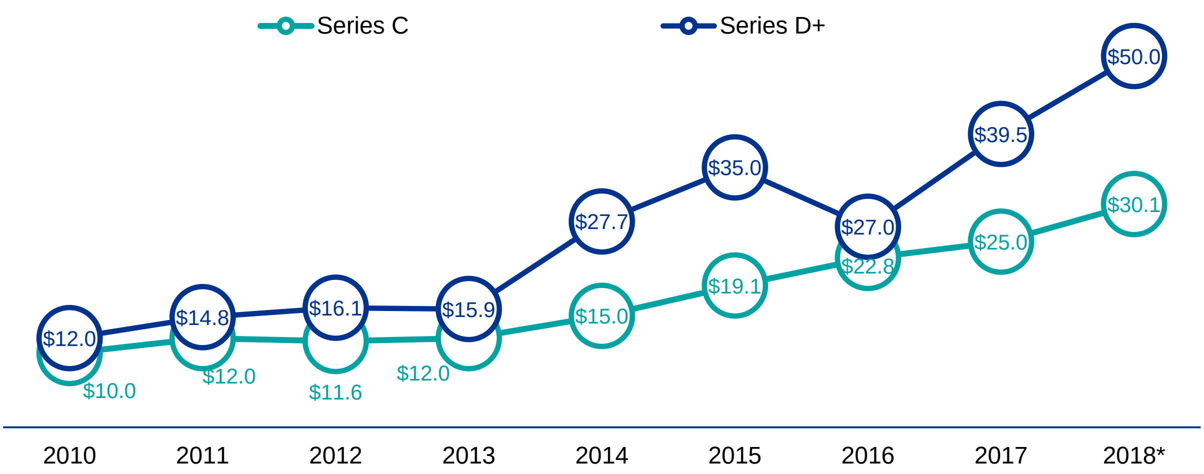
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Capping 2018 off with record tallies

Global median deal size ($M) by series

2010–2018*





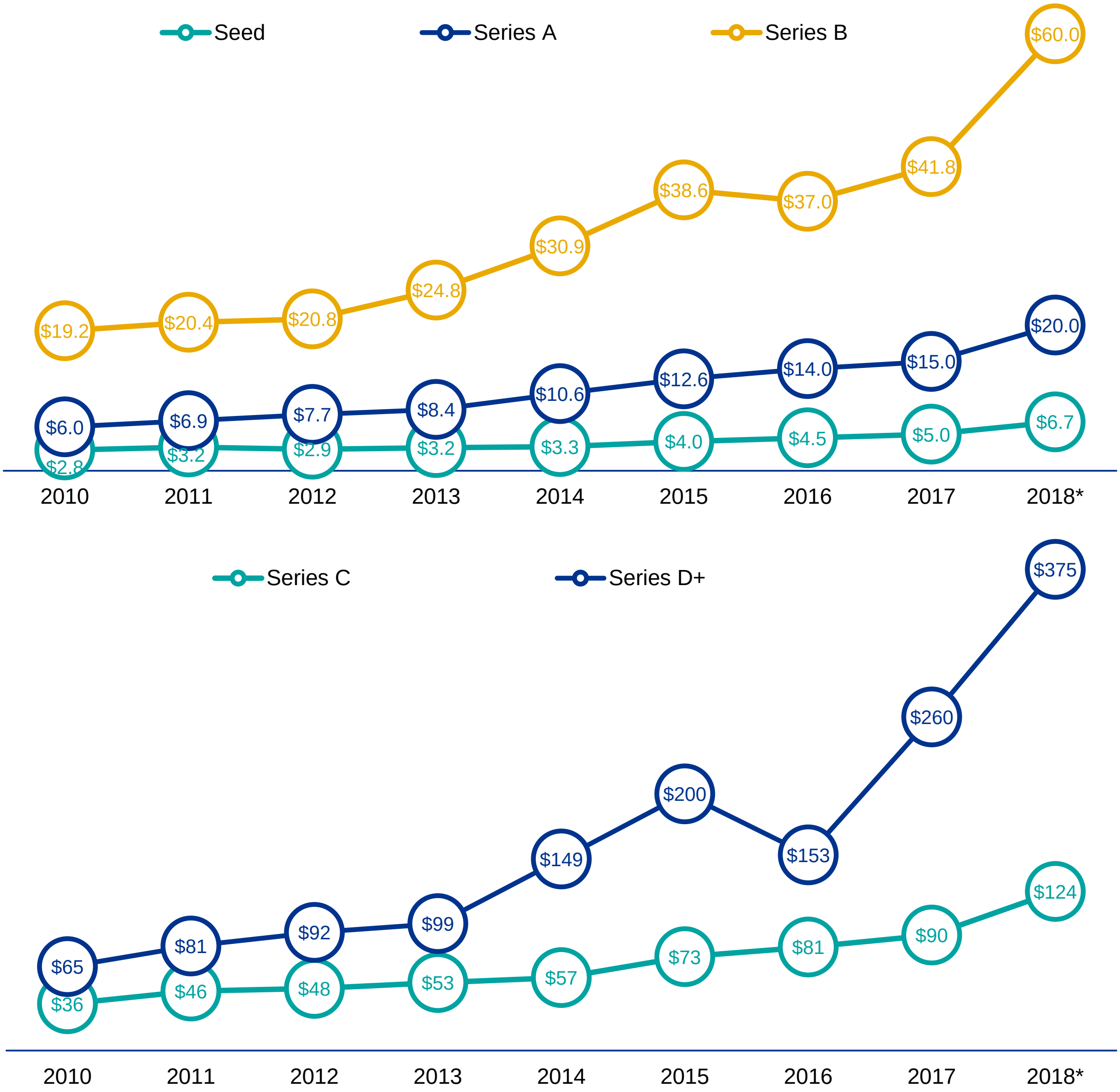
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

A year characterized by even more unceasing growth ended on high notes across the board, resulting in record tallies for median deal sizes of the decade. It is still reasonable to ask if this type of growth or, indeed, figures, are reasonable at all. To some degree, they are, as some companies do, indeed, merit such valuations. That being said, not every startup receiving these ranges of capital does, as such growth is driven more by the level of competition than true market opportunity.

Valuations march upward without pause

Global median pre-money valuation ($M) by series

2010–2018*

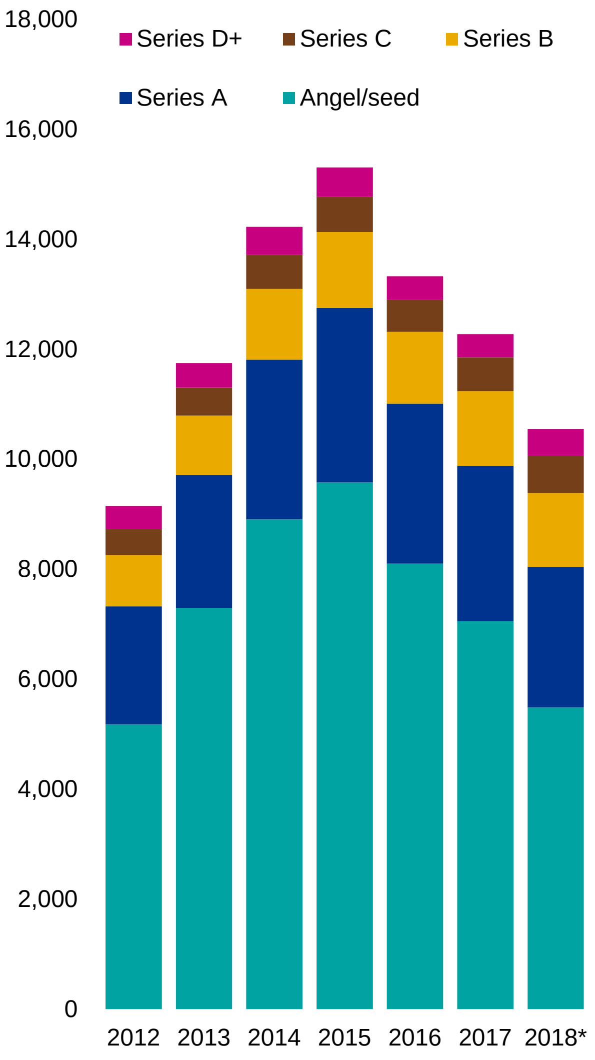


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

An unstoppable late-stage tide of capital

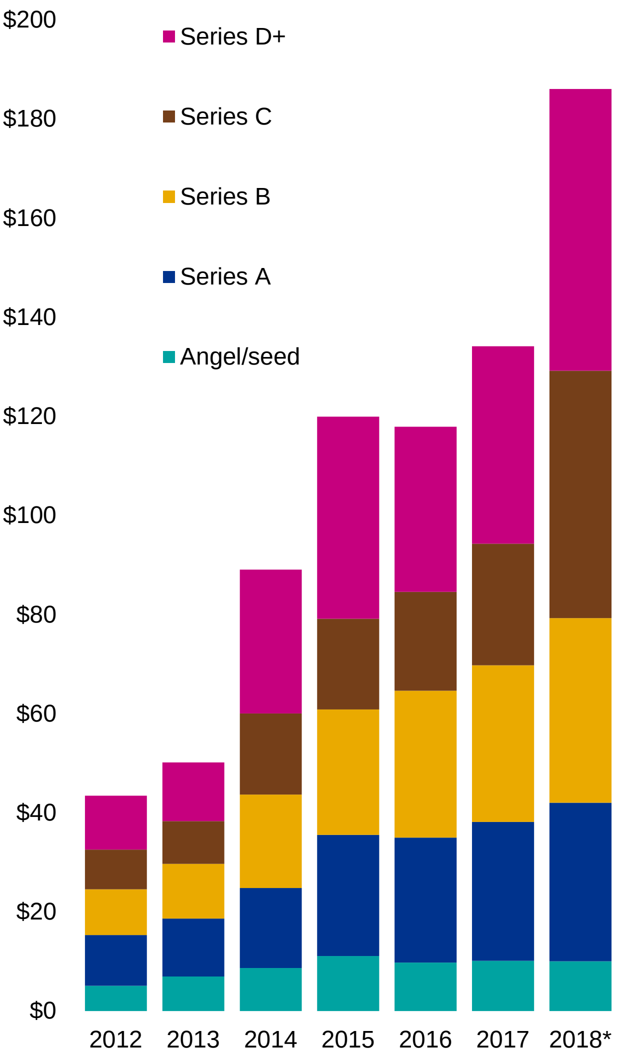
Global deal share by series

2012–2018*, number of closed deals



Global deal share by series

2012–2018*, VC invested ($B)



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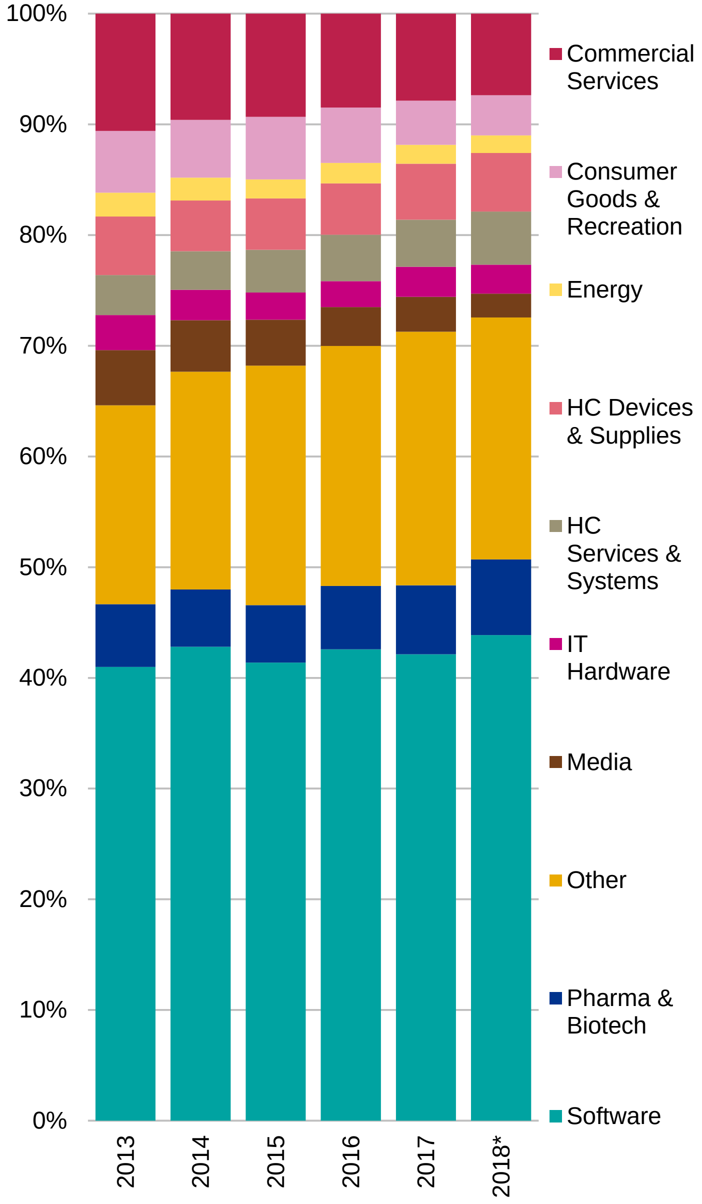
No matter what superlatives were applied to the gargantuan growth in dollar flow to the late-stage in past years, 2018 dwarfs all priors and merits the most grandiose, as is evident from looking at the above charts. Series D or later rounds accounted for the largest plurality of VC invested ever last year.

Globally, software still predominates

Global financing trends to VC-backed companies by sector

2013–2018*, number of closed deals



Global financing trends to VC-backed companies by sector

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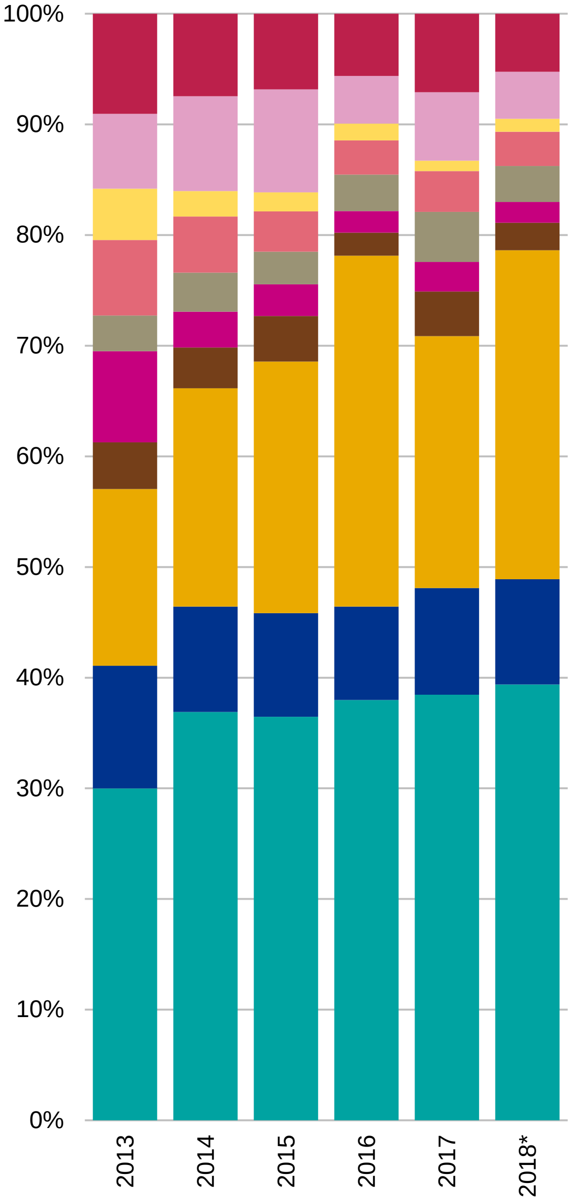
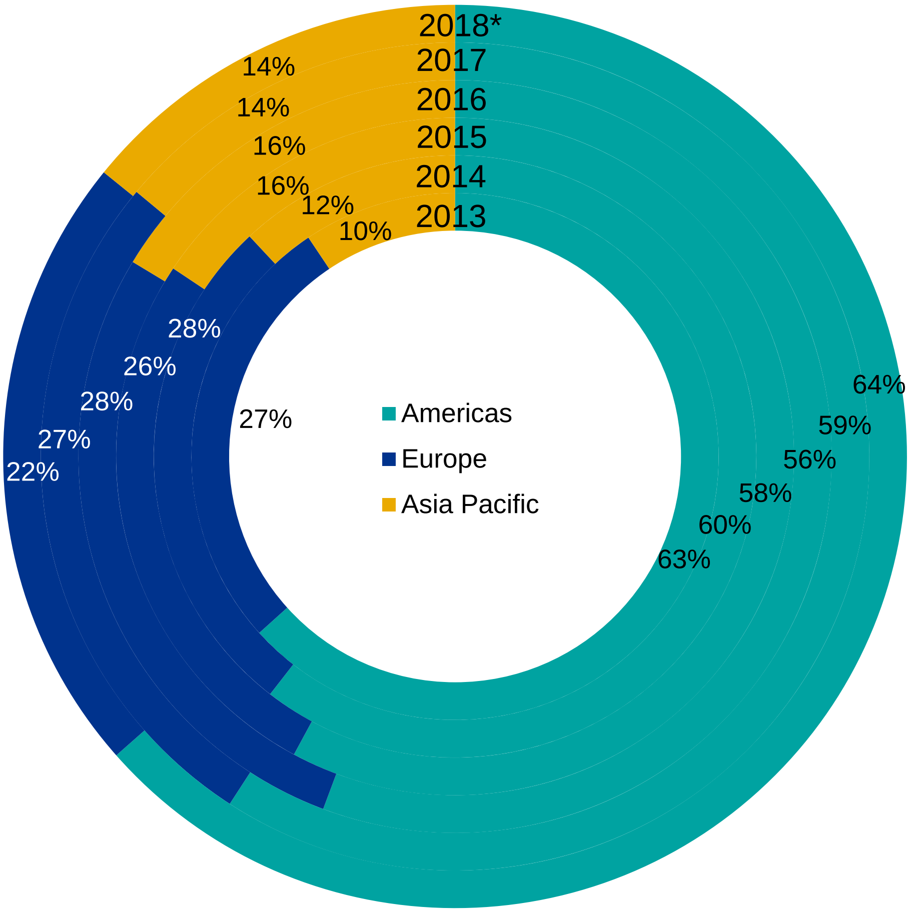


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Asia-Pacific holds steady as Americas grow

Financing of VC-backed companies by region

2013–2018*, number of closed deals

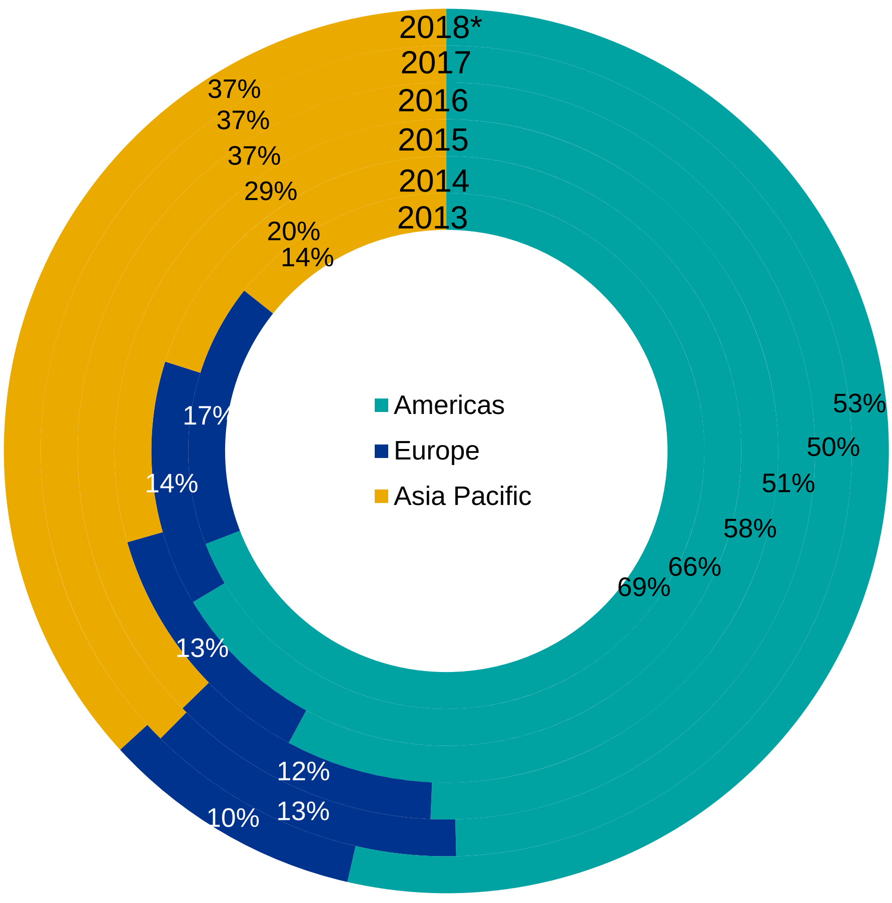


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Asia-Pacific persists in prominence

Financing of VC-backed companies by region

2013–2018*, VC invested ($B)

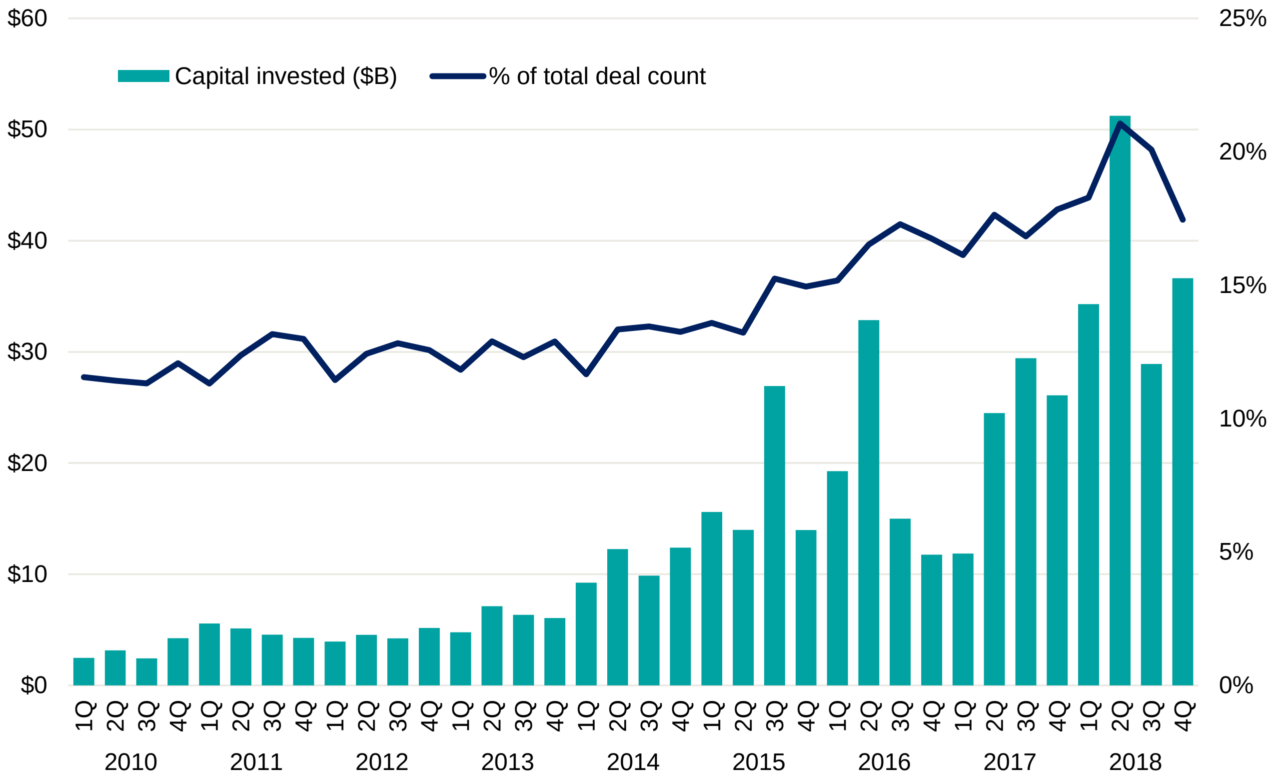


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

A sudden decline still leaves participation rates at historical highs

Corporate VC participation in global venture deals

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

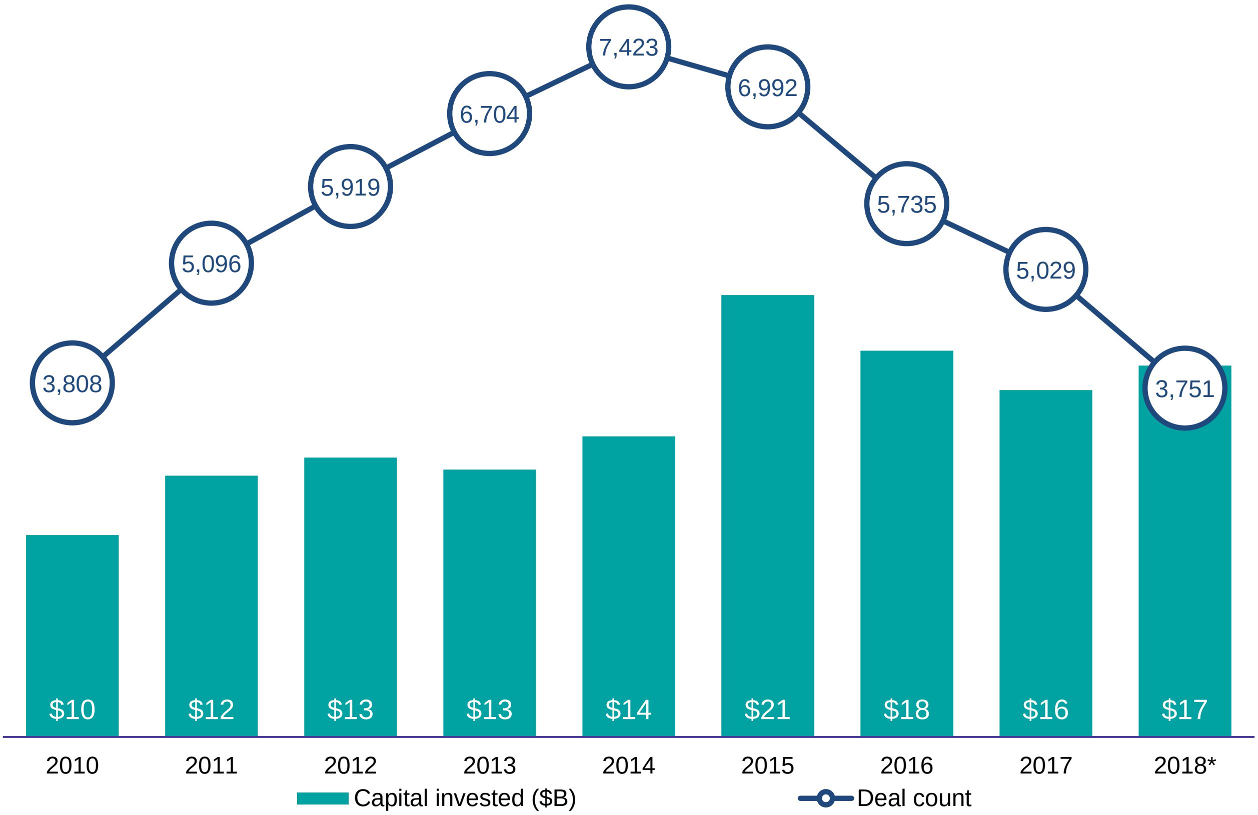
A surprising decline in the rate of corporate venture participation in the final quarter of 2018 still left the overall trend at historic highs, especially with regard to the aggregate of deal value in participatory rounds. All of the drivers for corporations and their venture arms to remain involved still hold true, so the sudden drop is more of a temporal aberration than anything else.

Note: The capital invested is the sum of all the round values in which corporate venture capital investors participated, not the amount that corporate venture capital arms invested themselves. Likewise, the percentage of deals is calculated by taking the number of rounds in which corporate venture firms participated over total deals.

2018 set to roughly match 2010 levels by count, third-highest tally of VC invested

Global first-time venture financings of companies

2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Once again, it is important to note that first-time financing data will likely be lagged somewhat and, thus, 2018 may end up roughly approximating the count of deals in 2010. However, total VC invested even in first-time rounds remains on the historically higher end. This is likely due more to the business and investment cycles coinciding in a relatively high-priced, high-valued environment, which has led to plenty of available capital being pledged to somewhat less risky, even if still early-stage, investments, while semi-nimble incumbents detract from startup rates by inculcating innovation internally.

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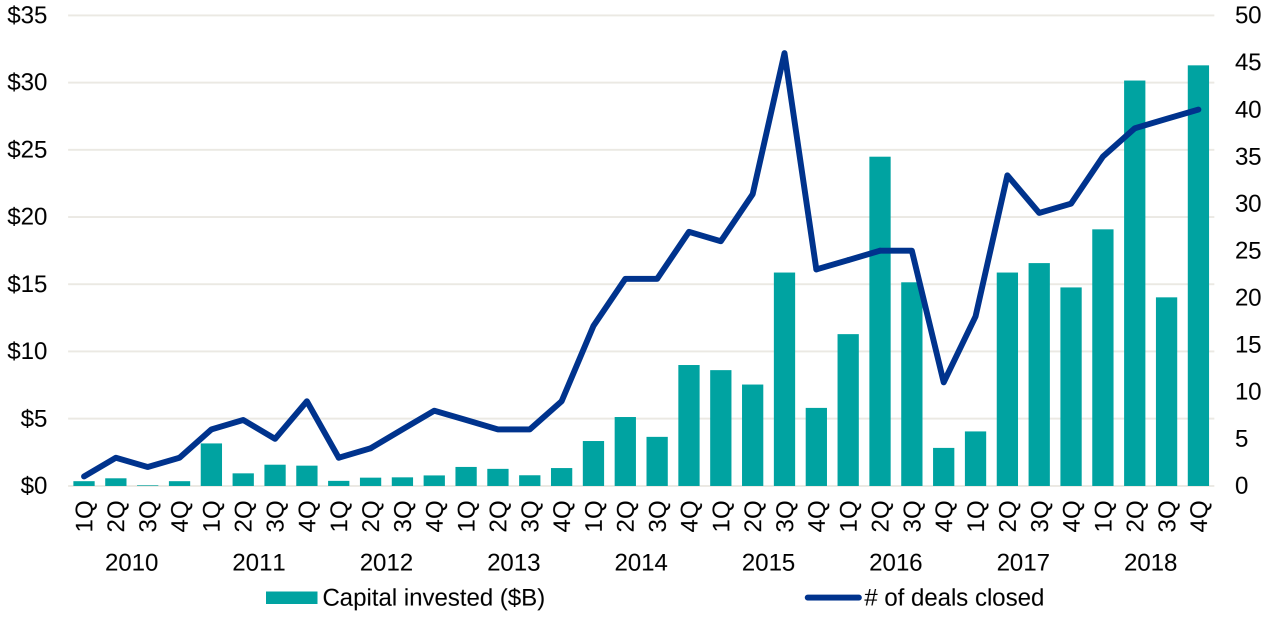
The volume of unicorn financings is resurging

Global unicorn rounds

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Note: PitchBook defines a unicorn venture financing as a VC round that generates a post-money valuation of $1 billion or more. These are not necessarily first-time unicorn financing rounds, but also include further rounds raised by existing unicorns that maintain at least that valuation of $1 billion or more.

It hardly seems right to call companies that receive a billion-dollar valuation “unicorns”, as they are far from rare, especially on the global stage. Moreover, their ongoing success in attracting additional billions of dollars in private investment rounds speaks to the gradual bridging between private and public spheres of company growth, all in all.

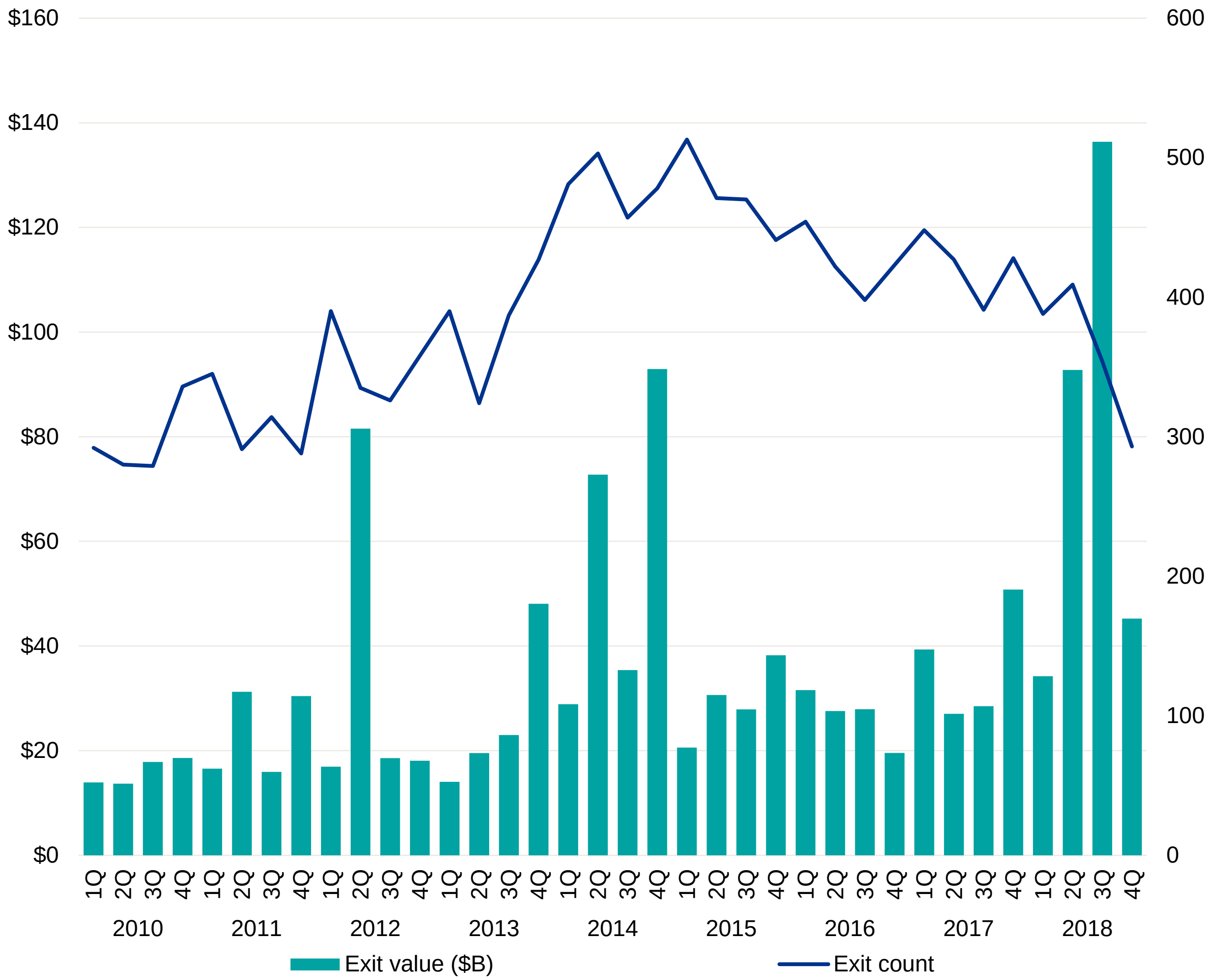
“Globally, a new era of transportation is being shaped — such as alternative energy vehicles, autonomous cars, and ride hailing — has been booming, and I believe this will continue because those companies are really providing value and relevant solutions for the users and the cities. There’s probably going to be some consolidation in the market over the next year but money will definitely keep pouring into the space.”

Arik Speier
Co-Leader, KPMG Enterprise Innovative Startups Network, KPMG International and Partner, Head of Technology, **KPMG in Israel**

After blockbuster IPOs, a return to normalcy

Global venture-backed exit activity

2010–Q4'18



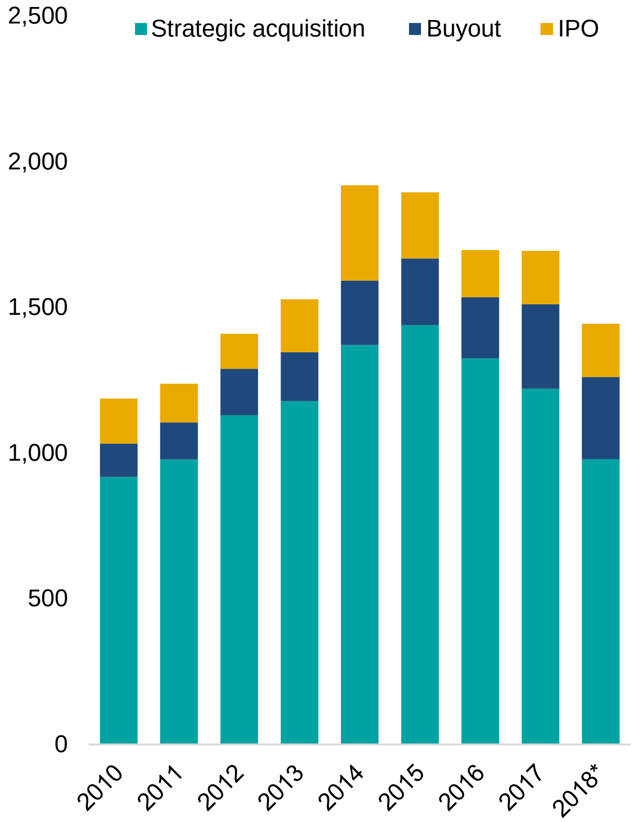
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

An important change in Venture Pulse methodology must be noted once again, given the significant trend differences. Although exit volume remains largely the same, the shift in exit values is due to the fact that PitchBook now utilizes IPO pre-valuations in the stead of IPO offering sizes. This is more accurate in depicting potentially realized value and, moreover, paints a rosier picture of liquidity prospects overall.

Mega-IPOs in Asia-Pacific end year on high note

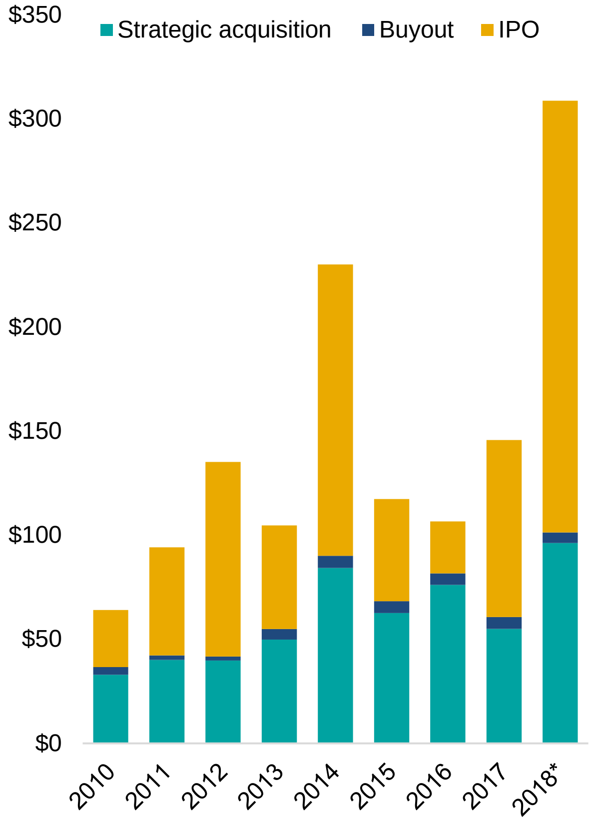
Global venture-backed exit activity (#) by type

2010–2018*



Global venture-backed exit activity ($B) by type

2010–2018*



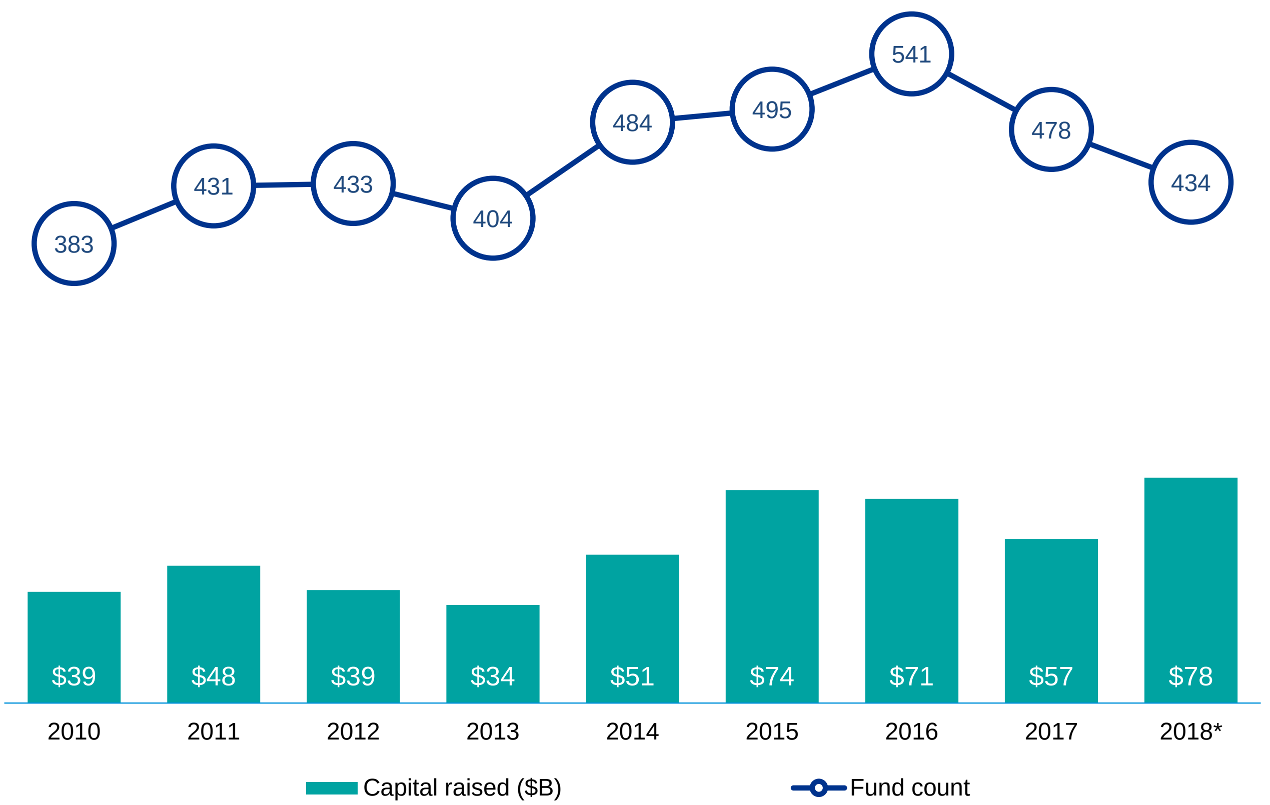
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

On a global basis, the tech IPO market has resurged primarily thanks to somewhat of a thawing in the US and a true surge in Hong Kong listings. The primary surge in Hong Kong was in the third quarter, but it was still massive enough to boost IPO volume for the year on the whole, particularly when it came to aggregate market cap achieved.

The fundraising cycle remains robust

Global venture fundraising

2010–2018*



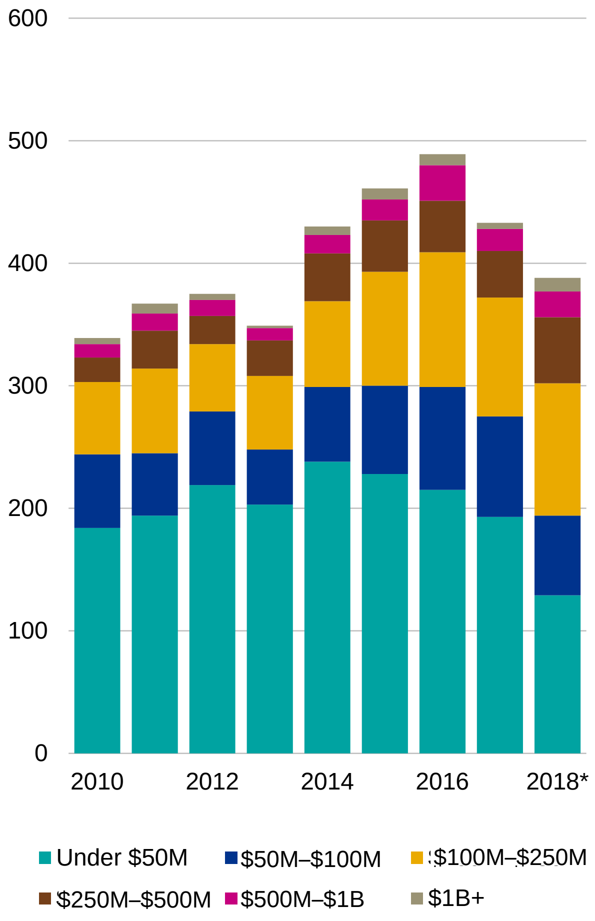
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

When analyzing year-end figures, it was worth depicting yearly figures rather than quarterly, if only to highlight even more the extraordinary aggregate sum raised in 2018 by venture funds. At $78 billion worldwide, the largesse on the part of limited partners has been remarkable, albeit concentrated in larger and larger funds over the past several years. The venture industry is maturing and evolving. Some firms are now able to raise multibillion-dollar vehicles, which bodes well for continued late-stage cycles to come.

First-time funds continue their rebound through 2018

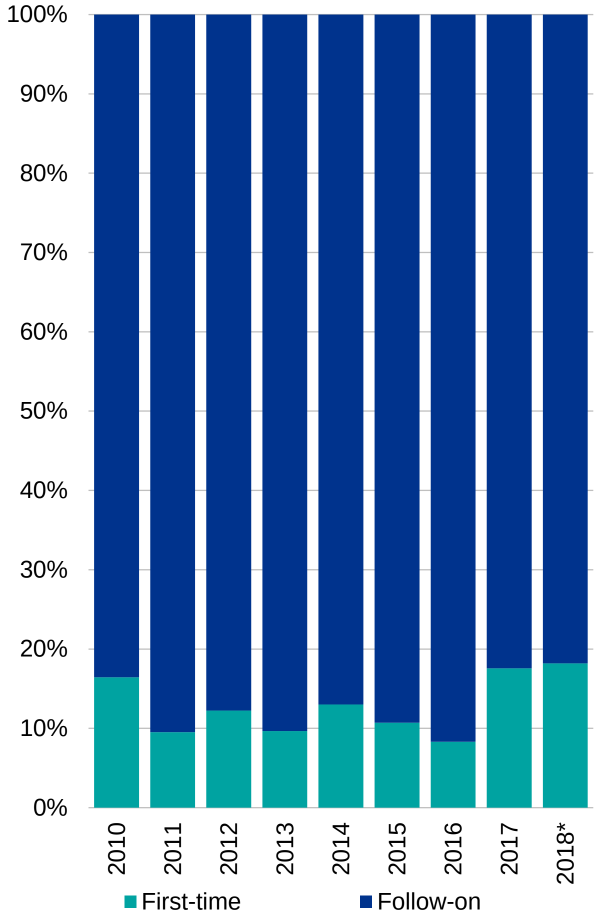
Global venture fundraising (#) by size

2010–2018*



Global first-time vs. follow-on venture funds (#)

2010–2018*



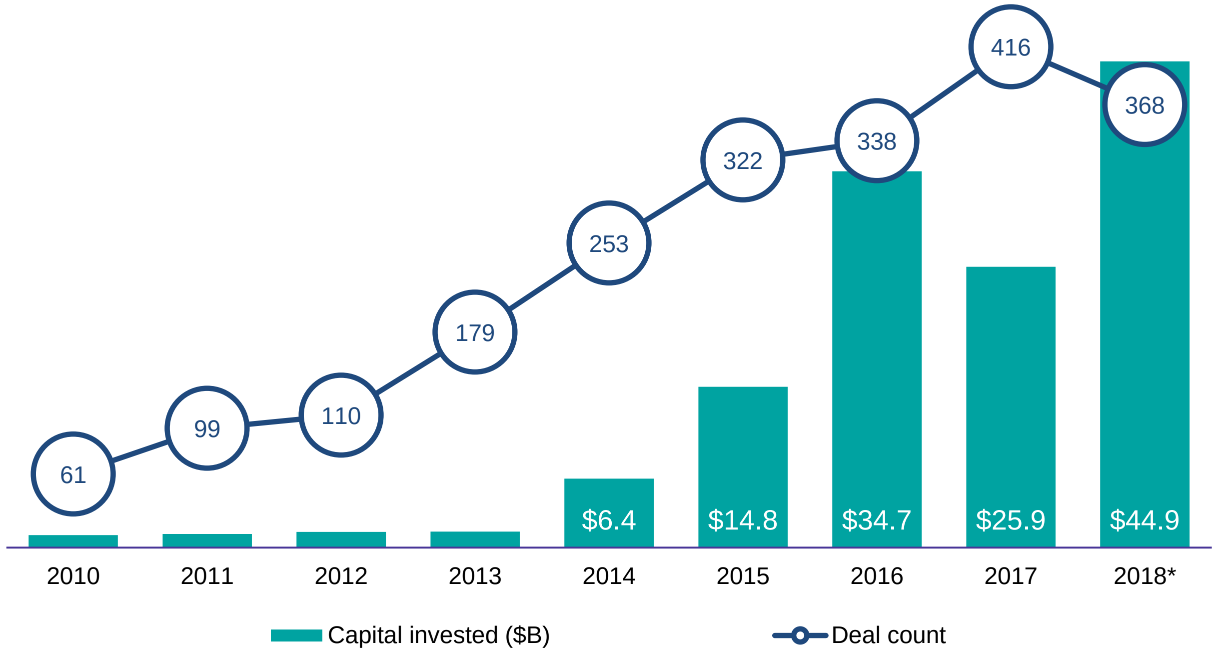
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

The comeback in first-time fundraising volume kicked off in 2017 has continued through the entirety of 2018, aligning with anecdotal evidence of ever-more stage-specific fundraising, driven, in part, by successful venture firms seeing their more experienced general partners spin off into their own endeavors, or micro-VC funds increase in volume as additional niches in emerging markets and technologies opened.

Urban mobility has a record year

Global venture financing of urban mobility companies

2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

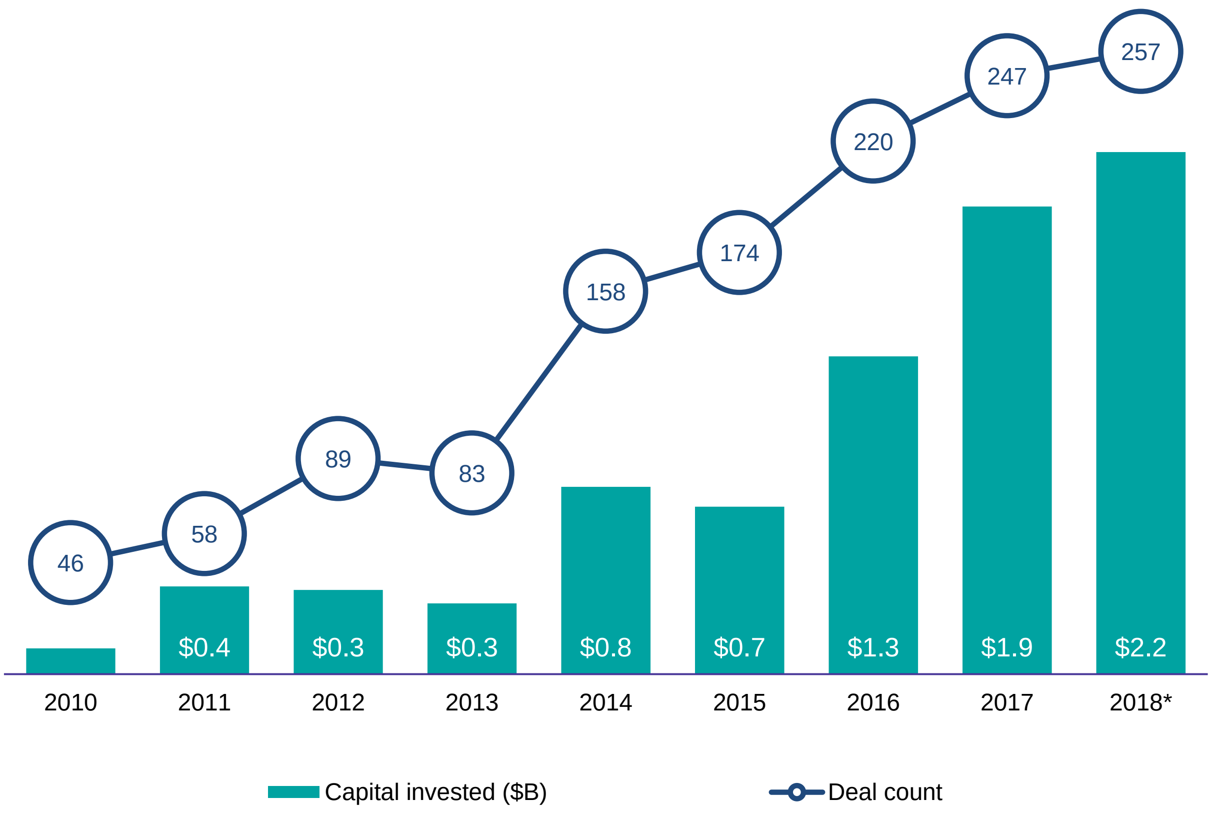
The urban mobility dataset expanded significantly as additional companies were founded and/or expanded operations into the space, resulting in a record year for VC invested within the burgeoning field. As urbanization proceeds apace, increasing densification and the need to circumvent aging infrastructure as it is replaced or simply neglected is a day-to-day challenge, leading to plenty of opportunities to rethink how people get around. Consequently, the number of companies and avid investors fueling their growth looks set only to grow further.

"The cyber space is extending into the physical space. It's changing how we organize everything. Just look at transportation. Many companies are becoming much smarter, multi-modality companies; they are finding ways to route movement in the best way for the best price based on situation. It's inherently changing how people and goods move."

David Pessah
Senior Director, KPMG Innovation Labs
KPMG in the US

The agtech revolution continues

Global venture financing in agtech
2010–2018*



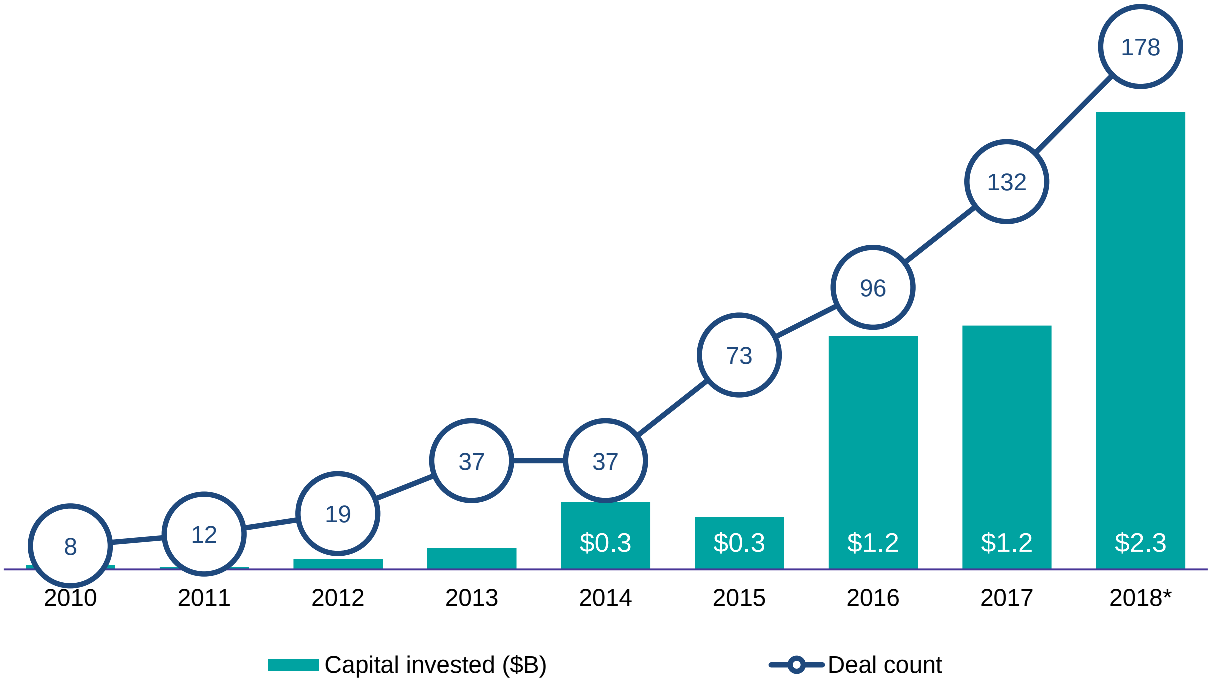
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019

Highlighted in a previous edition of the Venture Pulse, agtech has enjoyed a record surge in interest over the past 3 years in particular, hitting new highs in volume and VC invested per year. The macroeconomic backdrop is compelling; as populations grow and tastes evolve, there are strains on current agricultural production cycles. With plenty of efficiencies to be achieved by proliferating software and hardware solutions throughout the agtech value chain, investors are eager to gain exposure.

Exploring automation of healthcare

Global venture financing of artificial intelligence companies in healthcare

2010–2018*

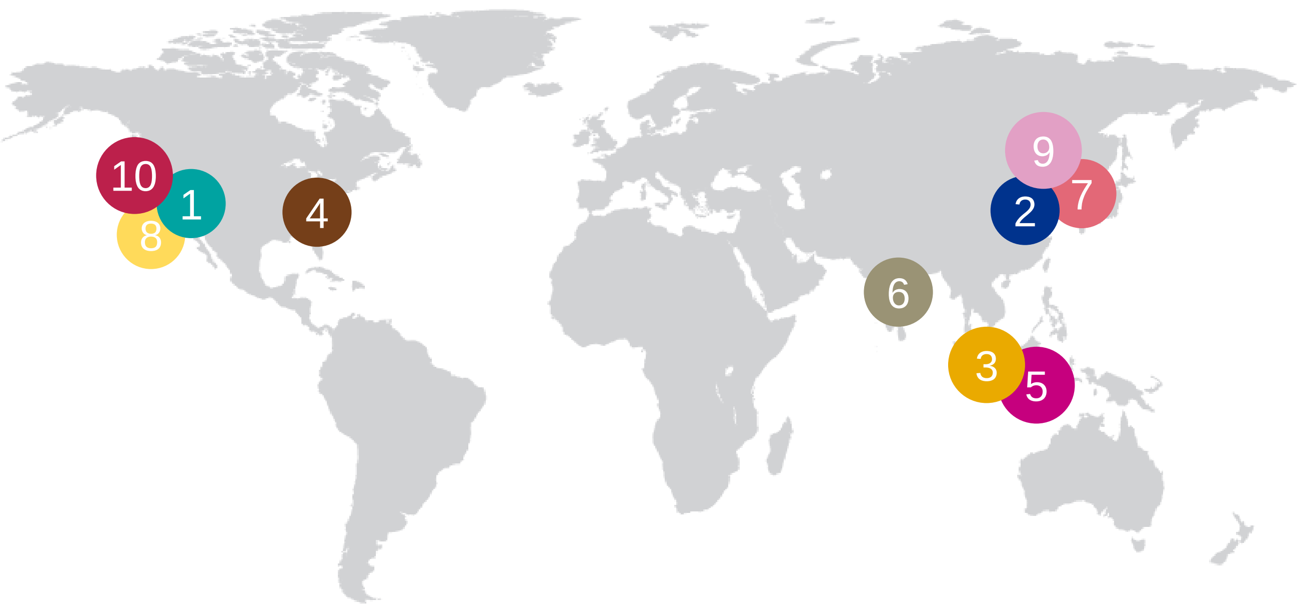


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019

The pace of growth in funding artificial intelligence companies involved in the healthcare space in some manner has accelerated perhaps the sharpest of the three spotlighted areas in this edition of Venture Pulse. The macroeconomic backdrop, plus industry standards, are maybe even the most compelling, as vast sums are spent by healthcare entities each year in an attempt to save and streamline processes. Enabling the intelligent automation of electronic medical records alone would transform the industry; consequently it is only to be expected 2018 saw record growth in startups and investors alike tackling the myriad challenges inherent in developing these solutions.

KPMG Enterprise

China tops the Q4 2018 rankings



Top 10 global financings in Q4'18

1. **Juul** — $12,800M, San Francisco
   Electronics (B2C)
   Growth

2. **ByteDance** — $3,000M, Beijing
   Information services (B2C)
   Series D

3. **Grab** — $2,850M, Singapore
   Transportation
   Series H

4. **Epic Games** — $1,250M, Cary
   Entertainment software
   Growth

5. **Tokopedia** — $1,100M, South Jakarta
   Platform software
   Series G

6. **Swiggy** — $1,00M, Bangalore
   Platform software
   Series H

7. **Chehaoduo** — $980M, Beijing
   Platform software
   Late-stage VC

8. **Instacart** — $871M, San Francisco
   Platform software
   Series F

9. **Meicai** — $800M, Beijing
   Platform software
   Late-stage VC

10. **Automation Anywhere** — $550M, San Jose
    Automation software
    Series A

Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

In Q4'18 VC-backed companies in the Americas raised

$43B

across

2,186 deals

KPMG Enterprise

VC investment in Americas dominated by US, but other tech hubs growing

The Americas reached a new high of VC investment during 2018. While the US continued to dominate VC market activity, other countries in the region saw sizable deals compared to their historical norms, including Brazil, Colombia, and Mexico.

Technology hubs sprouting well out side of Silicon Valley

While Silicon Valley continued to be the epicenter of technology innovation in the US, the eastern United States has emerged as a major hub for biotech, with powerful companies cropping up in Philadelphia, Boston, New Jersey and Maryland. This innovation cluster is well-positioned in part because of the high concentration of big pharmaceutical companies in the region combined with high-quality research institutions.

Across the Americas more broadly, Toronto has evolved into a global leader for artificial intelligence innovation, with Uber announcing a $200 million AI-focused investment in the city during 2018. NVIDIA, Etsy and Samsung also made investments in AI and machine learning in Toronto during the year. Sao Paulo, meanwhile, has grown into a dominant fintech hub in Latin America, hosting numerous accelerator programs and attracting significant investment and interest from corporates. In Q3'18, Colombia saw it's first unicorn company in Rappi following on a $200 million investment. This funding could help spark additional VC interest in the region.

Brazil sees major uptick in VC investment on back of Movile deal

Brazil experienced a big increase in VC funding to close out 2018, primarily a result of digital content provider Movile raising $524 million in Q4'18 in one of the region's largest deals ever. The deal is expected to support iFood, a food delivery focused subsidiary of Movile. Delivery company Loggi also raised $100 million during the quarter, while QuintoAndar — a rental platform — raised $64 million[4,5].

Brazil achieved a number of other milestones during 2018, including its first unicorn companies in Nubank, PagSeguro, and 99 (formerly 99taxis). Following a $180 million investment by China-based Tencent Holdings in October, Nubank is now valued at approximately $4 billion, making the fintech one of the country's largest privately held companies.

Payments and lending continued to dominate Brazil's VC market during the year. The sector even saw positive IPO activity, with payments company Stone Pagamentos raising $1.15 billion in its October IPO on the Nasdaq, while educational loan provider Arco Educacao raised $193 million in an IPO in the same month. These followed on the strong IPO exit of PagSegaro earlier in the year. Despite very high interest rates, Brazil is expected to see increasing VC investment heading into 2019, with maturing companies potentially pulling in larger deals and more global investors coming to the table[6].

Soft VC activity in Mexico to end the year

The second half of 2018 was relatively quiet for Mexico in terms of VC investment, due in part to uncertainty related to the presidential election and the subsequent president-elect's plans to cancel a large airport infrastructure project. Despite this uncertainty, healthtech, fintech, and edtech remained high priorities in Mexico, with companies in these sectors retaining relatively high valuations.

[4] https://www.pymnts.com/news/retail/2018/movile-venture-capital-funding-food-delivery/
[5] https://techcrunch.com/2018/11/13/movile-raises-400-million-for-its-ifood-delivery-business/
[6] https://www.idgconnect.com/idgconnect/analysis-review/1500292/unicorn-sightings-rise-latin-america

VC investment in Americas dominated by US, but other tech hubs growing

In September, Walmart announced the acquisition of Mexico-based on-demand delivery company Cornershop for $225 million. Cornershop, which also has operations in Chile, is expected to help support Walmart's growth in Latin America. Also in September, electric scooter company Grin, a graduate of the Y Combinator accelerator program, raised $28 million in Latin America's largest seed round ever. Grin then raised a further $45 million in October in order to fuel its expansion into the Brazilian market. Mexico is expected to see a relatively quiet Q1 before picking up steam for the remainder of 2019.

Fundraising a key focus in Canada

It was a strong year for VC investment in Canada, with deals happening right through Q4'18, including a $100 million raise by travel booking platform Hopper and an $80 million raise by Milestone Pharmaceuticals, a company working on interventions for tachycardias. While most deals focused on later stage rounds, there was some increasing interest in Series A rounds and Seed/Angel rounds by Family Offices and smaller VCs.

Fundraising activities were also strong in Canada. During Q4'18, US-based healthcare investment firm Versant Ventures raised $100 million for a fund focused on Canadian startups, while Northleaf Capital Partners announced the launch and initial closing of the Northleaf Venture Catalyst Fund II. Kensington Venture Partners also raised $85 million for a fund under the VCCI program during Q4'18.

Looking forward, Q1'19 is expected to be quite active for VC investment in Canada given the pipeline of deals at the end of 2018.

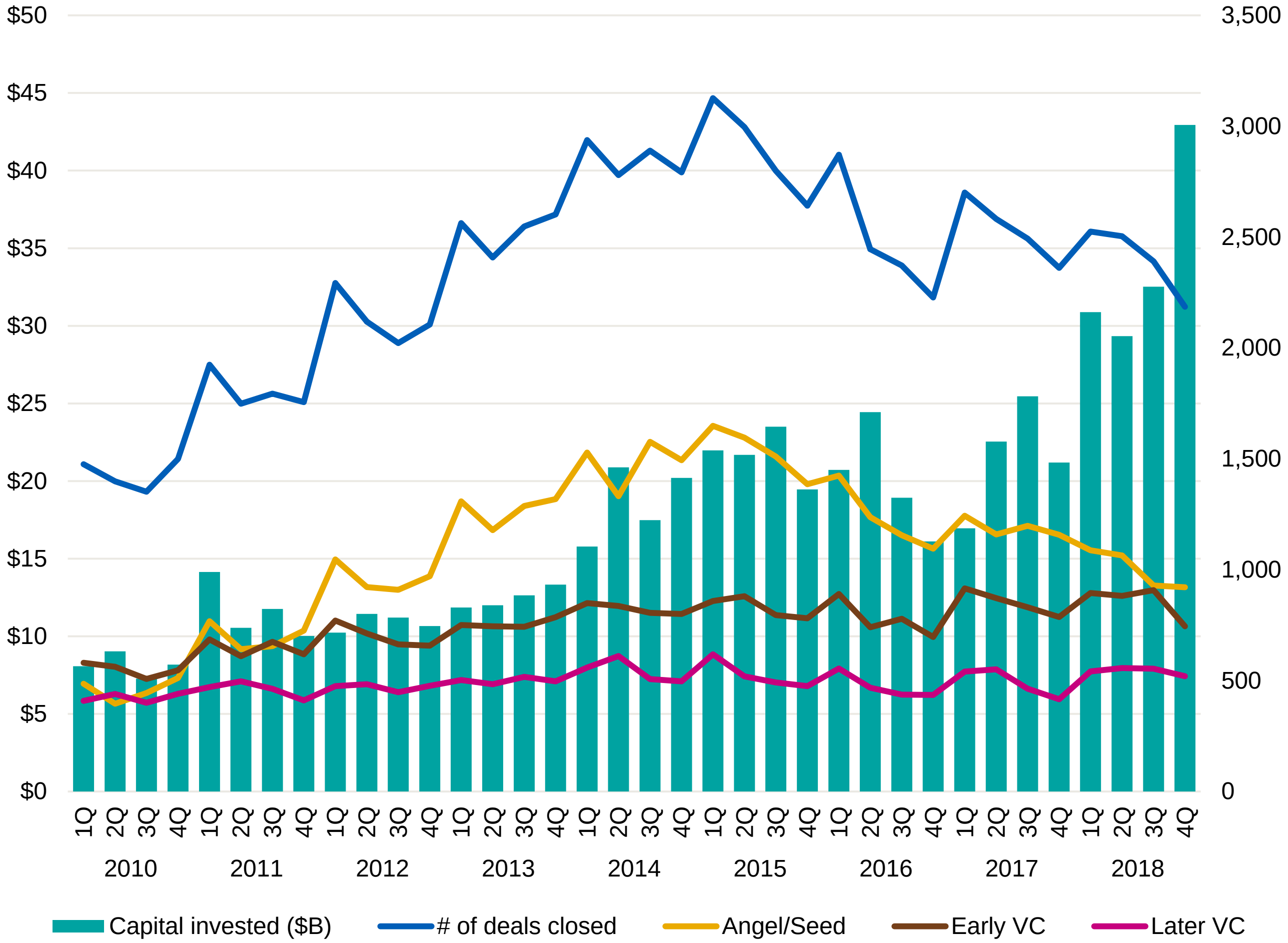
Trends to watch for in 2019

The outlook is positive for the Americas heading into 2019. US VC investors will likely continue to focus on large late-stage deals, while the year could bring additional unicorn IPOs should the public markets stabilize quickly. In Latin America, maturing Brazil-based companies in particular are expected to raise larger funding rounds in order to fuel their expansion in the region.

Another record quarter

Venture financing in the Americas

2010–Q4'18



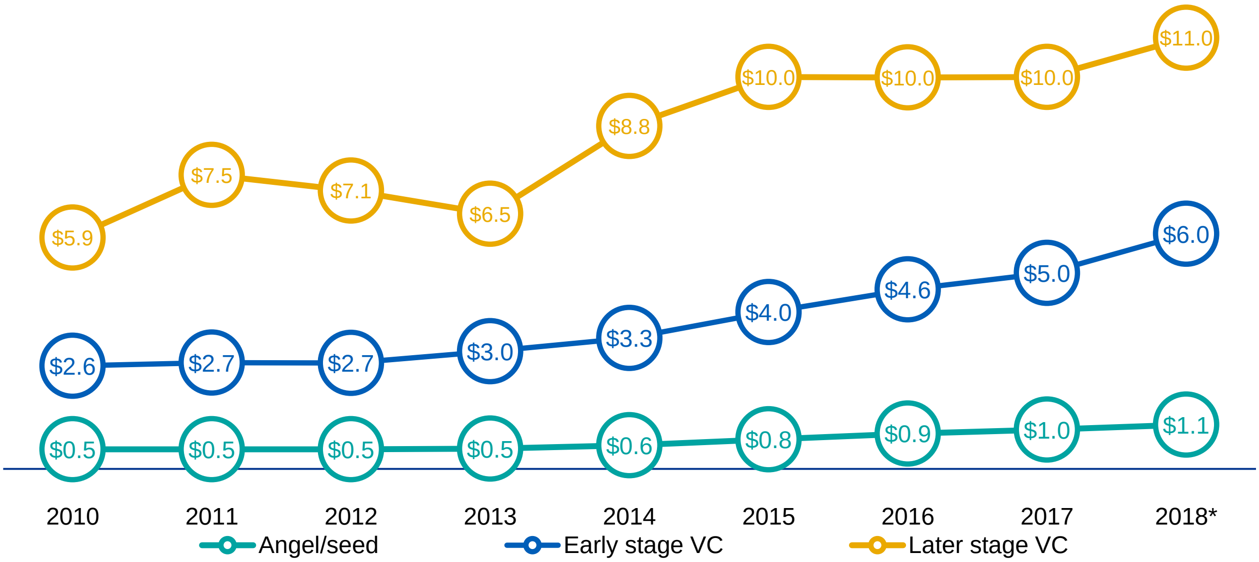
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Volume has evened out across nearly all stage by and large. And, yet, the tally of VC invested soared yet again for the third record quarter within the past year. A significant bulk of the Q4 tally was concentrated in the outlier financing of Juul, which dwells squarely in the realm between late-stage venture and private growth that has emerged with a vengeance over the past several years.

Positive sentiment abounds

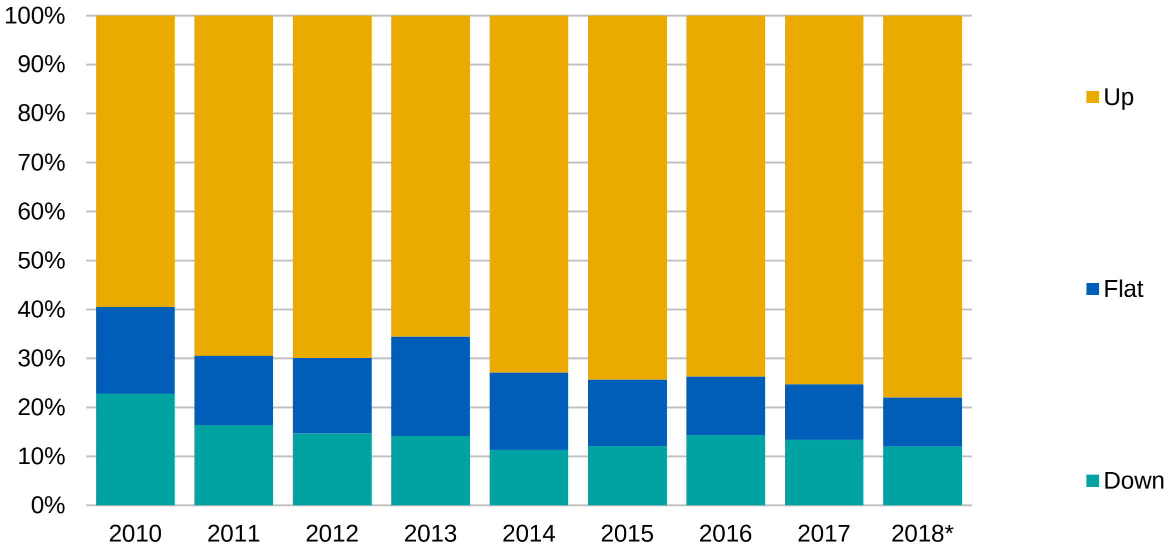
Median deal size ($M) by stage in the Americas

2010–2018*



Up, flat or down rounds in the Americas

2010–2018*

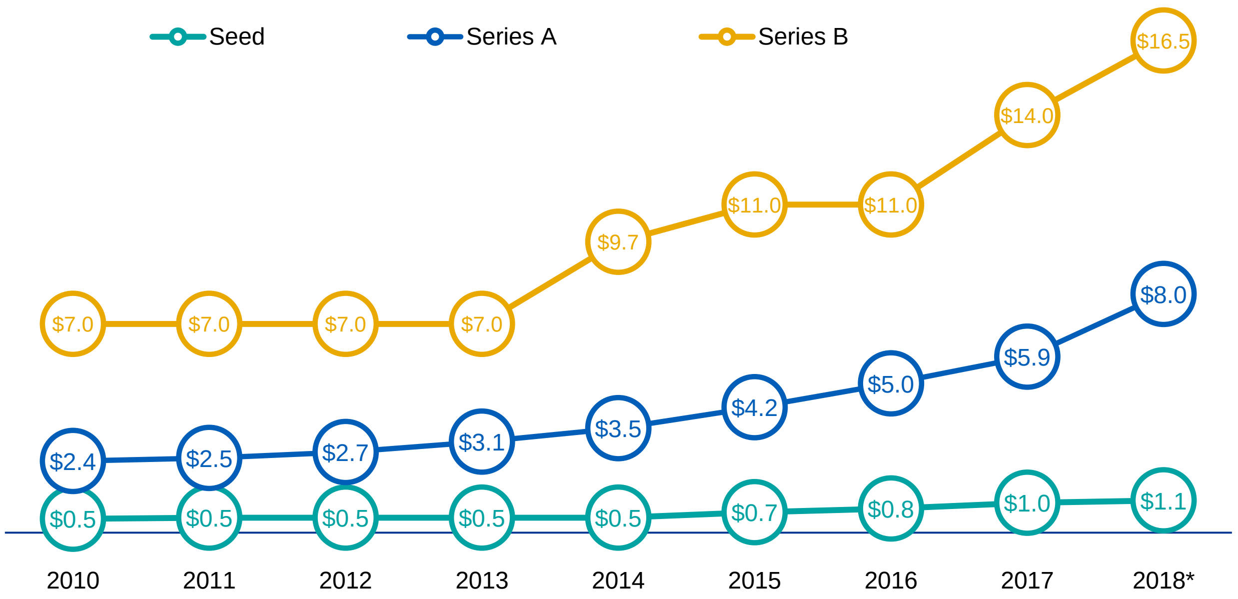


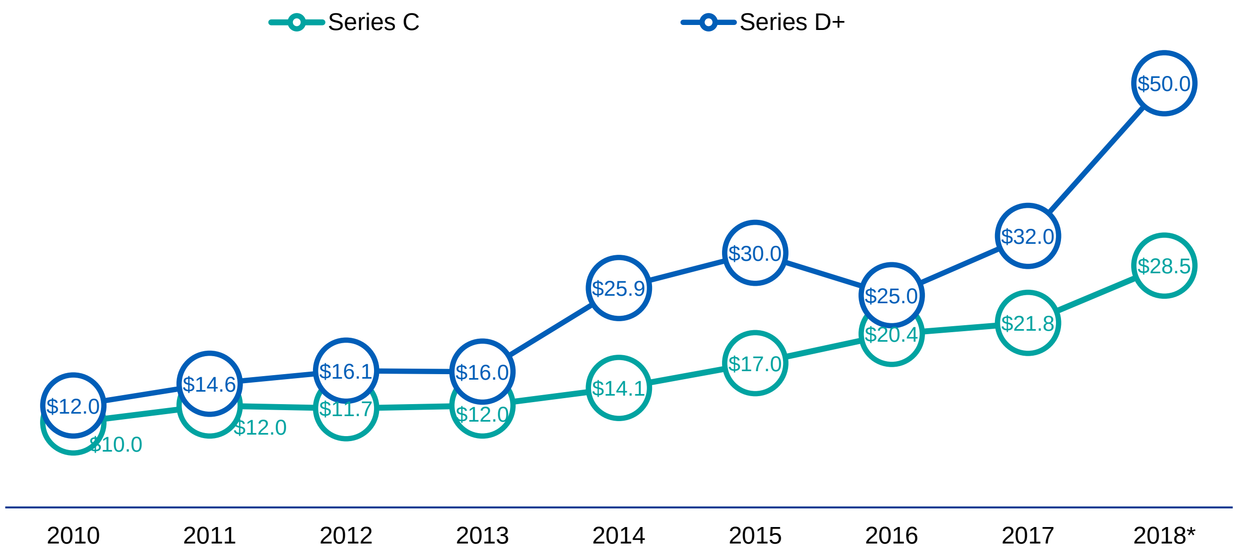
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Series D+ medians have doubled in two years

Median deal size ($M) by series in the Americas

2010–2018*



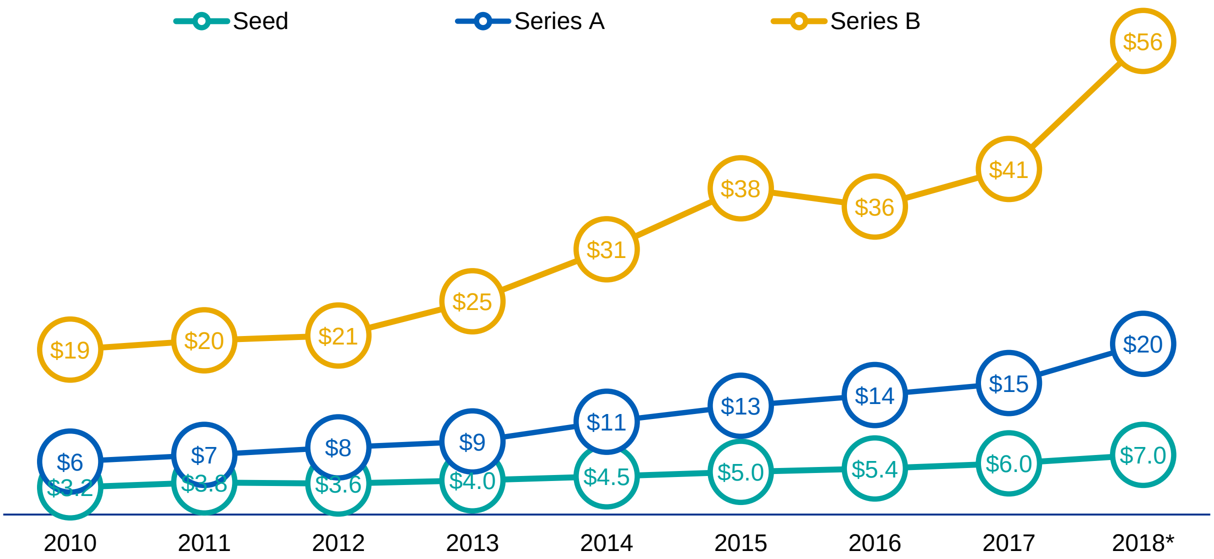


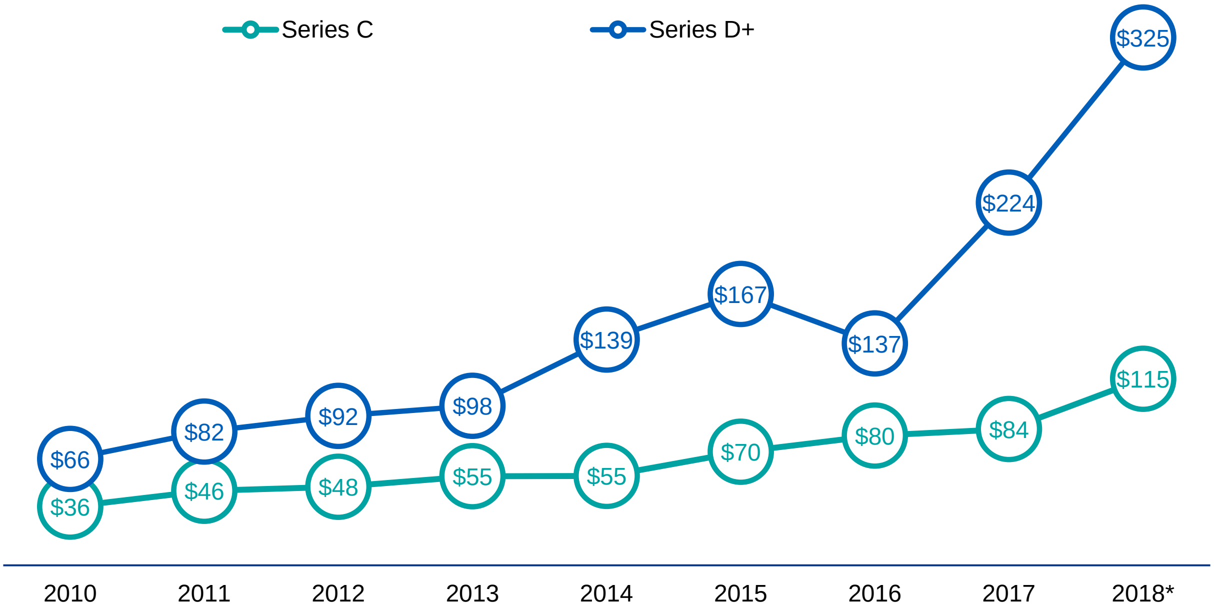
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Record highs across the board

Median pre-money valuation ($M) by series in the Americas

2010–2018*





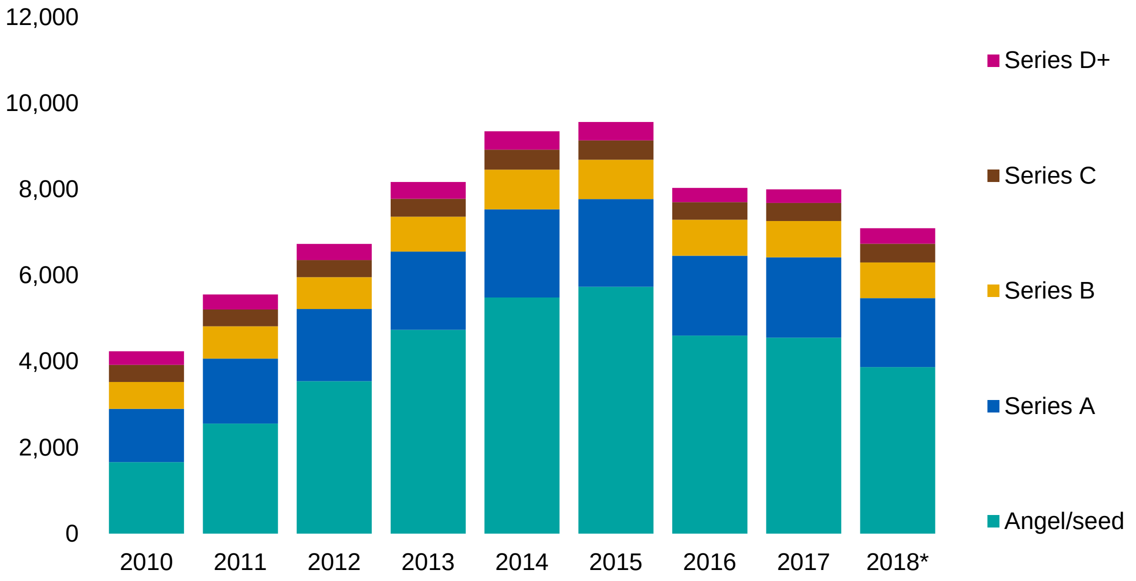
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

Series D+ rounds hit a new high

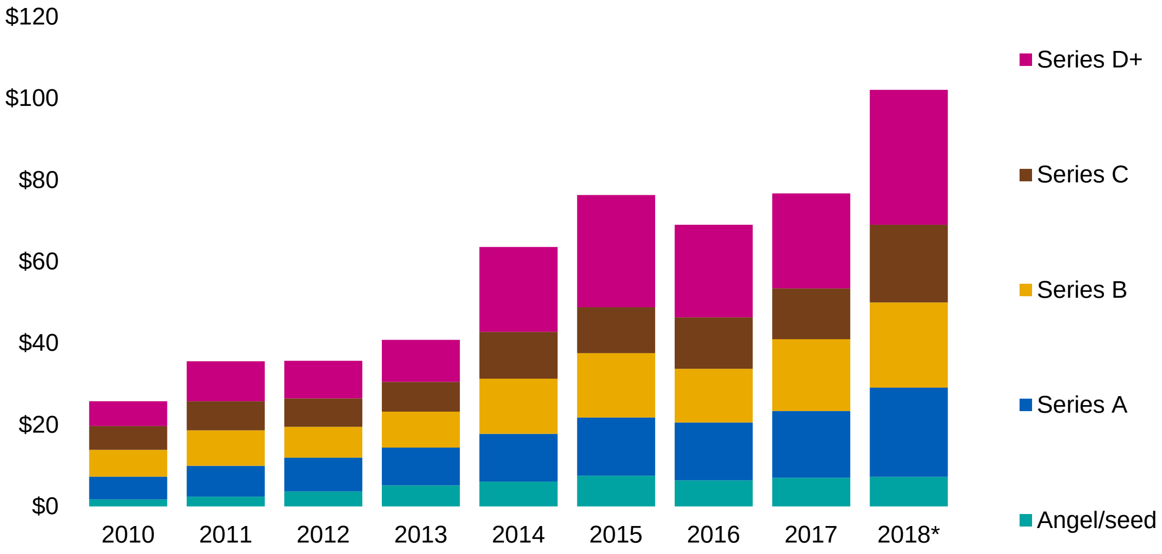
Deal share by series in the Americas

2010–2018*, number of closed deals



Deal share by series in the Americas

2010–2018*, VC invested ($B)

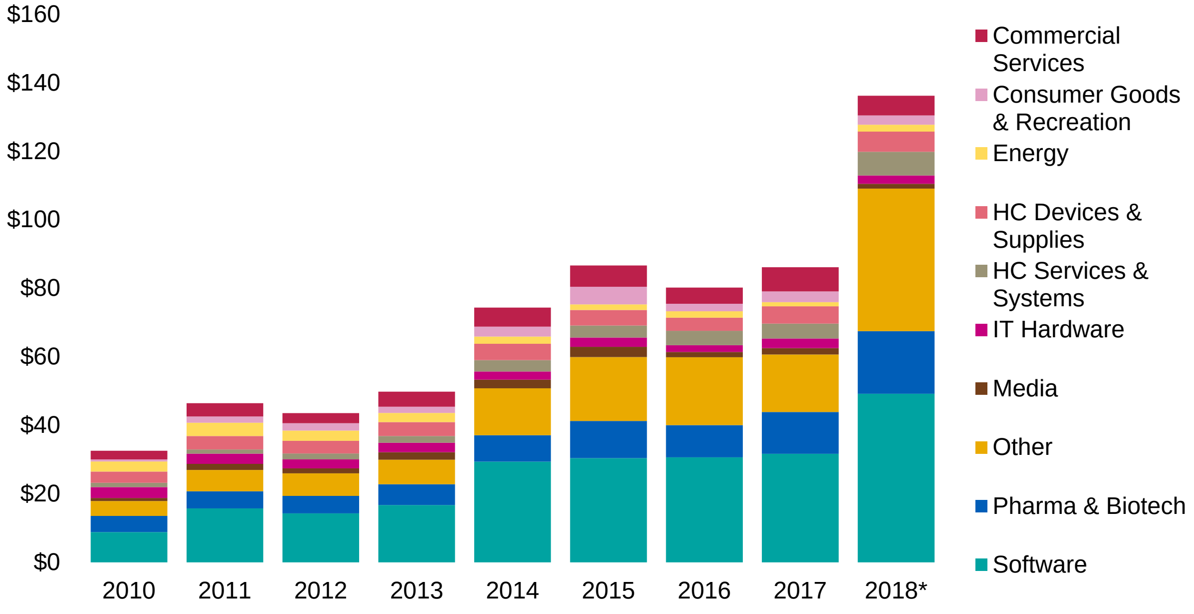


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Software dominates as healthcare soars

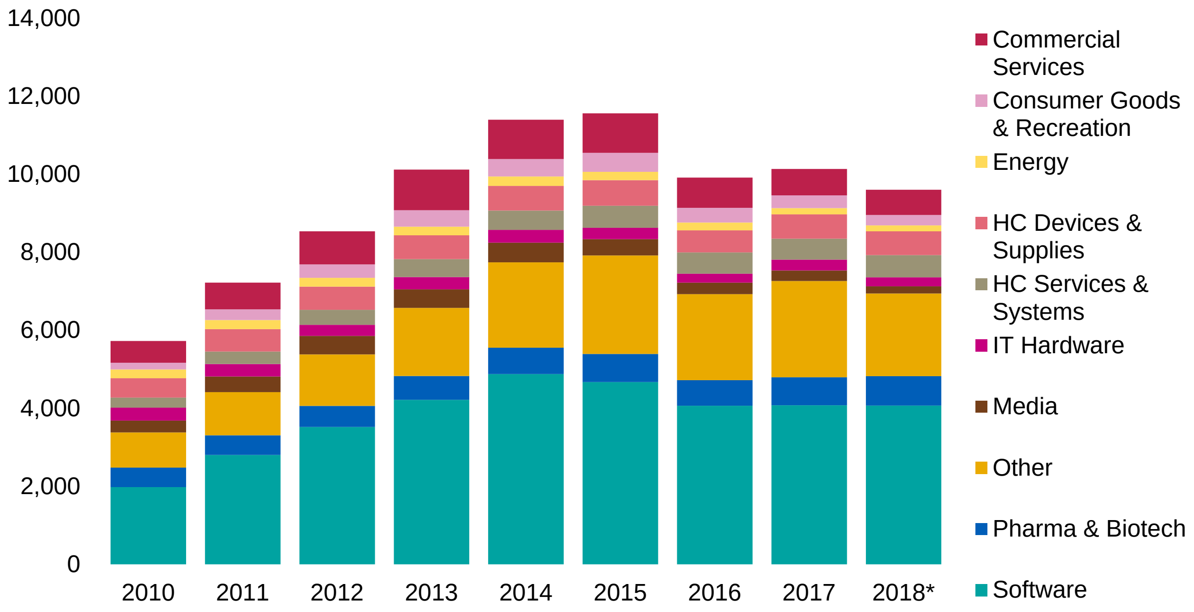
Venture financing of VC-backed companies by sector in the Americas

2010–2018*, VC invested ($B)



Venture financing of VC-backed companies by sector in the Americas

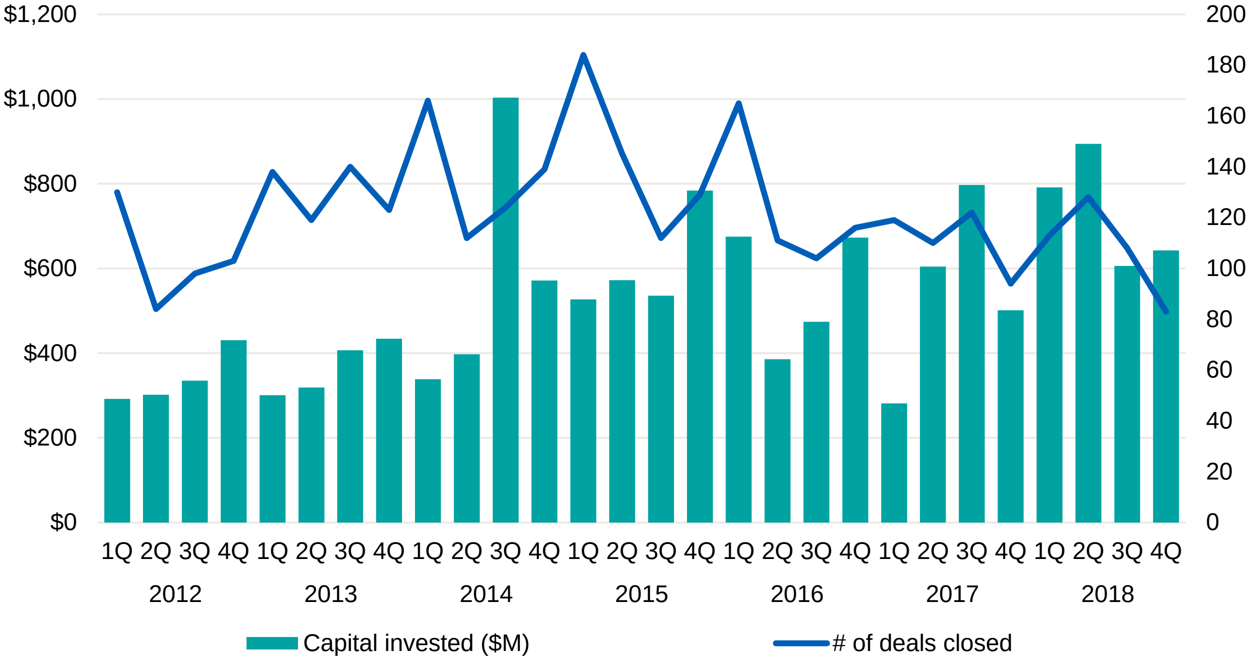
2010–2018*, # of closed deals



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Ending the year with historically healthy totals

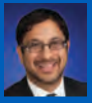
Venture financing in Canada
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

The steadiness of the pace of venture funding in Canada has been remarkable throughout the past 2 years. With the second-highest quarterly tally ever for the nation in the first half of the year, 2018 saw a new high in total VC invested — $2.9 billion, far outstripping any prior tallies, even though 2015 still saw the most volume by a long shot.

"It's been a very active year for VC in Canada — and there are still a lot of deals in the hopper. While most of the deals in 2018 focused on later stage rounds, there was increasing interest in Series A and Seed/angel stage deals by Family Offices and smaller VCs. Family Offices in particular have been looking for opportunities across industries — whether manufacturing, healthcare, or others. It wouldn't be surprising to see 2019 start on a pretty strong upswing."

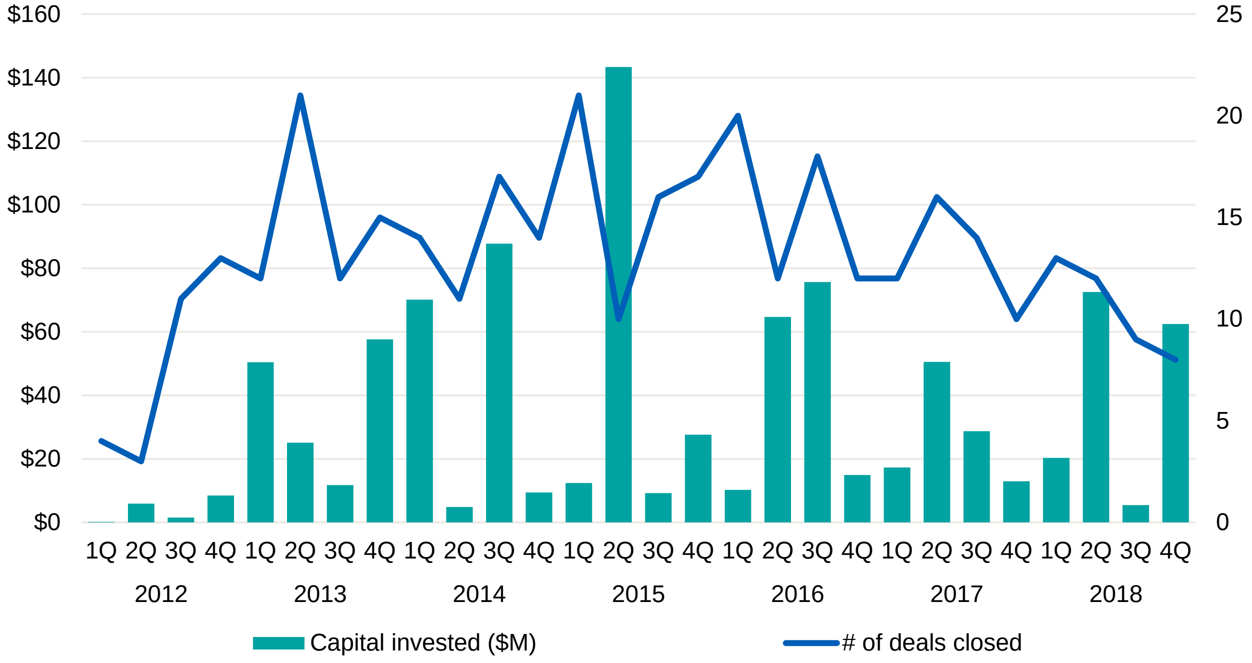


Sunil Mistry
Partner, KPMG Enterprise, Technology, Media and Telecommunications
KPMG in Canada

KPMG Enterprise

VC invested rebounds to close 2018

Venture financing in Mexico
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

The Mexican venture ecosystem is nascent and consequently prone to significant skew, particularly in regard to VC invested, although a trickle of volume is to be expected throughout recent years. In the final quarter of 2018, the surge in venture dollars invested was largely due to one company: electric scooter company Grin, which closed on $45.65 million in Series A funding in October.

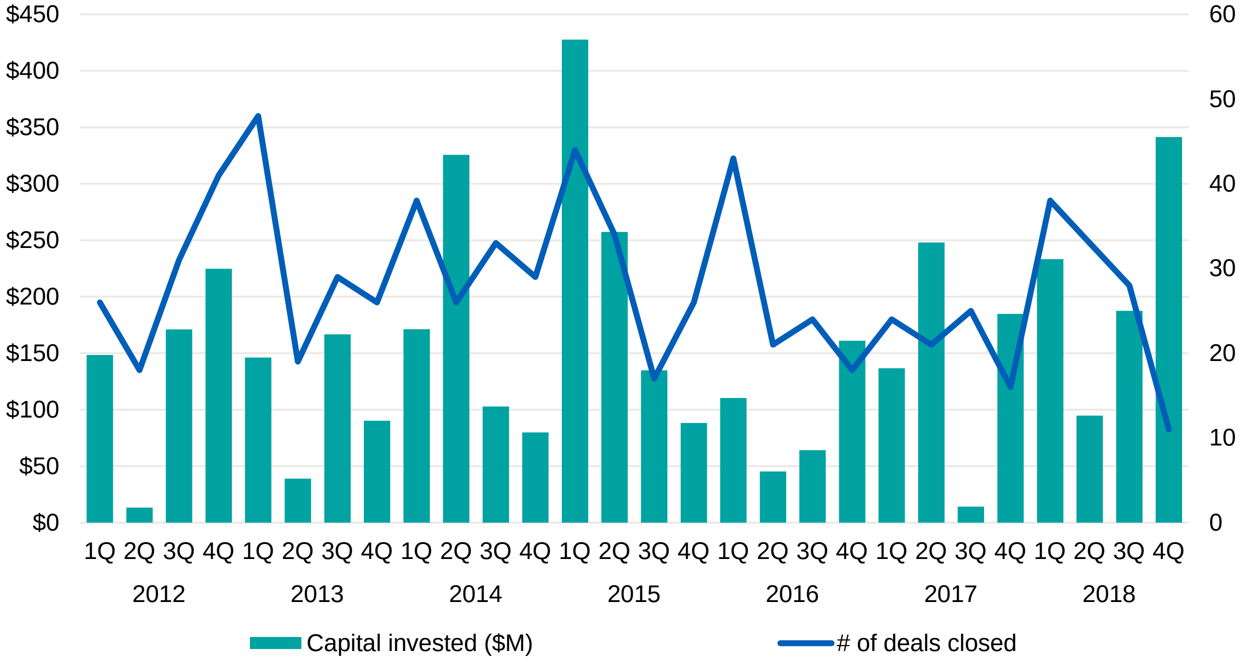
“The presidential election caused some uncertainty in Mexico, creating a bit of softness in the VC market in 2018. Yet, overall it was a good year for healthtech, fintech, and edtech — with strong valuations across the board. While there may be a slow start to 2019, activity is expected to heat up in Q2 and beyond.”

Gerardo Rojas
Partner
KPMG in Mexico

KPMG Enterprise

2018 ends on a high note

Venture financing in Brazil
2012–Q4'18



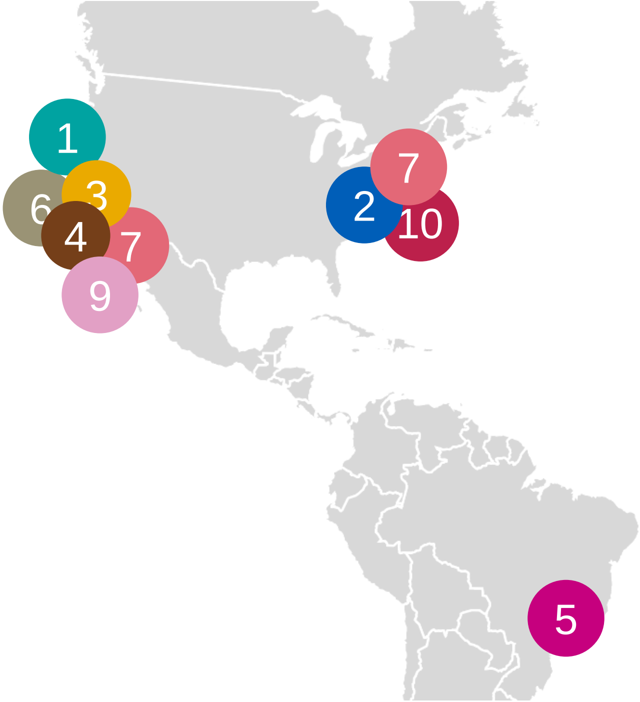
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Given the advent of a new political regime, Brazil's broader market environment prompts some questions heading into 2019, but the fourth quarter of the year ended on a high note, digital bank Banco Neon raised no less than $77 million in Series A funding, while rental marketplace QuintoAndar closed on $60.9 million in Series C capital.

"It's an exciting time for Brazil. We're seeing a lot more activity in the VC market, later stage deals, and more involvement from foreign investors. Exits are also increasing — showing the maturity of some of Brazil's earliest innovators. We saw several strong IPOs in 2018, including PagSeguro, Stone Pagamentos, and Arco Educacao."

Raphael Vianna
Director
KPMG Enterprise in Brazil

Traditional hubs of VC activity predominate to close the year



Top 10 financings in Q4'18 in Americas

1. **Juul** — $12,800M, San Francisco
   Electronics (B2C)
   Growth

2. **Epic Games** — $1,250M, Cary, NC
   Entertainment software
   Growth

3. **Instacart** — $871M, San Francisco
   Platform software
   Series F

4. **Automation Anywhere** — $550M, San Jose
   Automation software
   Series A

5. **Movile** — $524M, Campesinas
   E-commerce
   Late-stage VC

6. **Snowflake** — $450M, San Mateo
   Database software
   Series F

7. **Relay Therapeutics** — $400M, Cambridge
   Healthcare technology
   Series C

7. **Zymergen** — $400M, Emeryville
   Healthcare technology
   Series C

9. **Fair** — $385M, Santa Monica
   Leasing marketplace
   Series B

10. **Devoted Health** — $300M, Waltham, MA
    Managed care
    Series B

Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

In Q4'18 US VC-backed companies raised

$41.8B

across

2,072 deals

VC investment in the US soars to new annual high

The US experienced a perfect storm of positivity in the VC market during 2018, helping to spur investment results well above the previous year's record high. A strong public market, a record number of $100 million+ deals, renewed IPO activity, an upswell in new unicorn births, and an expansion of capital all added strength to the US VC market. While Q4'18 ended with significant turbulence in the public markets, the overall outlook heading into 2019 remains quite positive.

Massive increases in VC investment in the US

VC investment in the US increased substantially during 2019, shattering the previous record high of $83 billion set in 2017, and climbing well above the $130 billion mark for the first time. While the fourth quarter saw two mega-deals during the quarter, including a massive $12.8 billion dollar deal by Juul and a $1.25 billion raise by Epic Games, investment levels remained very strong. Four $500 million+ deals helped propel US results, including an $871 million Series F raise by Instacart, a $550 million Series A raise by Automation Anywhere, and a $524 million raise by Movile.

Early-stage deals volume remains weak as VC funds get larger

Fundraising in the US was also strong throughout the year, with significant raises by Lightspeed Venture Partners and Index Ventures. In order to put these bigger funds to work, VCs have focused intensively on later-stage deals with bigger dollars. This has led the bigger VCs to take their eyes off early-stage opportunities. This, combined with the growing availability of less traditional pre-Series A financing, has helped to keep the volume of early-stage deals quite low.

At the same time, the lack of focus on early-stage deals from the larger funds has opened the door to smaller funds and niche funds to enter the market. Given the smaller size of these funds, it is no surprise that they have been more selective with their investments, focusing on higher value opportunities and on companies with proven business models. This increase in the quality of early-stage companies being funded will likely lead to more robust deals at Series A and beyond as funded companies mature.

Consumer centric solutions and convenience plays dominating investment

A common theme over the latter half of the year has been the focus VC investors have been giving to consumer centric solutions. While B2B plays related to AI and automation continued to attract funding, VC deals activity was dominated primarily by companies focused on transforming the consumer experience in some way or catering to the increasing demand for convenience. Companies able to attract funding were varied, ranging from Devoted Health, a company focused on providing personalized medical plans, to home delivery provider Instacart.

Unicorn companies poised for big showdown in the IPO market

While the IPO market in the US gained strength in 2018, many US unicorn companies remained on the fence waiting to see longer-term results. Given the turbulence in the US stock market during Q4'18, there could be some hesitation heading into Q1'19. Yet, there are some indications that the number of unicorn IPO exits could pick up over the course of 2019. The showdown between unicorn companies will be one to watch in early 2019, with its corresponding ripples no doubt setting the pace for other potential unicorn IPOs later in the year.

VC investment in the US soars to new annual high

VC investor interest in healthtech and biotech continues to rise

Healthtech and biotech remained clear winners in terms of VC investor interest during Q4'18, continuing a longer-term trend. During the quarter, SmileDirectClub raised $380 million, while Devoted Health raised $300 million.

Biotech companies also continued to show strong leadership on the exit front to close out 2018. In December, Moderna Therapeutics hosted the largest biotech IPO ever, raising $604 million with a valuation of $7.5 billion[7]. The first day of trading however, came with a massive $1.4 billion decline in market value, which has placed some scrutiny on the company which has a strong development pipeline focused on using the body's own cellular structures to fight disease but no commercial products.

Food delivery sectors continue to evolve as companies fine tune their business models

2018 saw ongoing interest in the food and home delivery space, a trend that continued during Q4'18 with the $871 million Series F raise by Instacart. While the acquisition of Whole Foods by Amazon might be sparking some investment interest as companies look to compete, much of the interest has been driven by companies recognizing that they need to provide cost-effective home delivery options.

Companies such as GrubHub have been working to take advantage of this growing interest, focusing their acquisition strategies on companies able to help improve the efficiency, quality, and speed of their home delivery. Over time, the companies best able to fine tune their value proposition should be better able to separate themselves from the competition in the space and, therefore, continue to attract capital over time as other companies fade into oblivion.

M&A market strong, particularly in the SaaS space

The M&A market continued to be strong in the US during 2018. In October, the Microsoft acquisition of GitHub closed for $7.5 billion in what was the largest acquisition of a VC-backed SaaS company in history. The record was short-lived, however, with the announcement of SAP's acquisition of survey software company Qualtrics coming in November, a deal expected to close early in 2019. A number of the companies looking to exit have taken a two-track approach, catering to either an IPO or an M&A deal. Qualtrics, for example, was slated for an IPO within days of the announced acquisition.[8] For a company's investors, M&A can make for a lucrative exit, given that companies looking to make strategic acquisitions are more likely to do so at a higher number than the public market valuation.

Trends to watch for in 2019

Should the US stock market stabilize in Q1, 2019 could see more unicorn IPO exits. Regardless of IPO results, the VC market in the US is expected to remain robust, as there is a large inventory of unicorns that will likely need additional funding in order to stay private, in addition to a big pipeline of pre-unicorns.

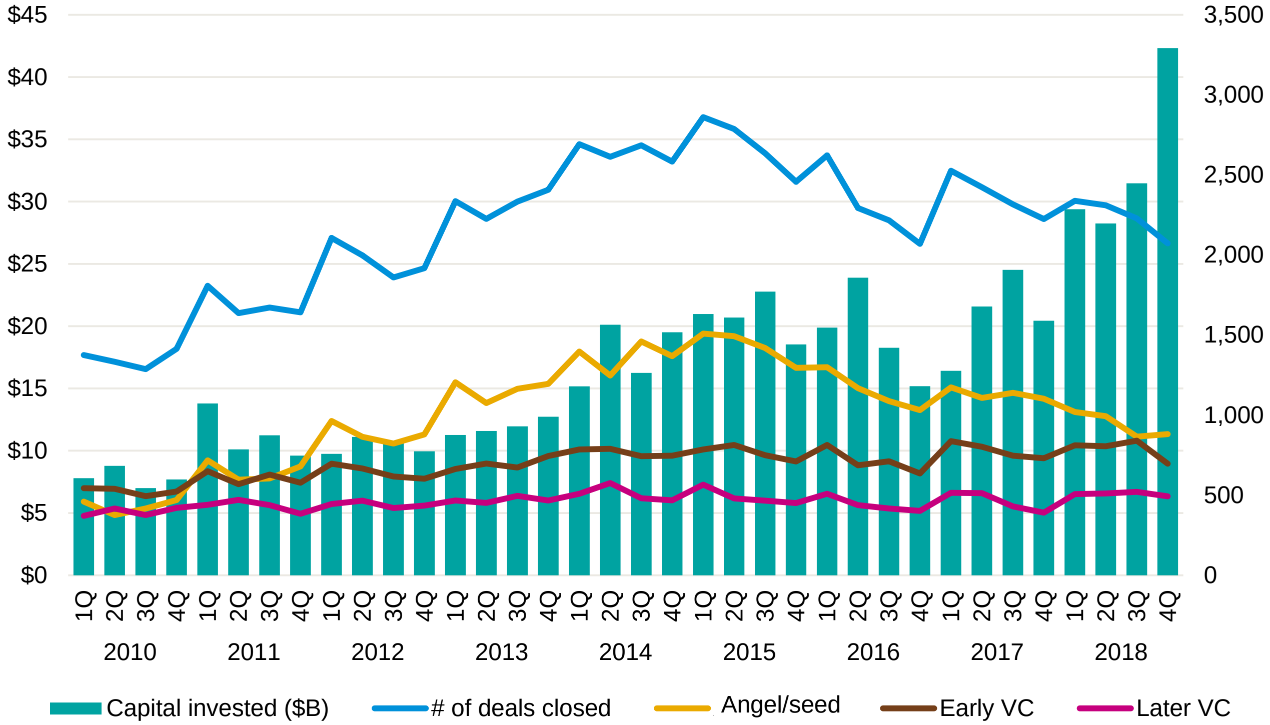
Healthtech, biotech, and transportation are expected to remain hot areas of VC investment well into 2019, in addition to technologies that easily cross industries, such as artificial intelligence, robotics process automation, and virtual or augmented reality.

[7] https://www.cnbc.com/2018/12/10/cramer-dont-judge-biotech-moderna-on-its-stocks-post-ipo-drop.html
[8] https://pitchbook.com/news/articles/qualtrics-quits-ipo-plans-to-conduct-vcs-biggest-saas-sale-in-history

2018 soars to even higher level at the end

Venture financing in the US

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

The evolution of the late-stage venture, high-growth investment realm continued apace as 2018 wound down in the US The final quarter of the year saw well over $40 billion invested across 2,000+ financings, boosted heavily by the $12.8 billion Juul raised in a massive growth round.

"2018 was an outstanding year for VC investing and exits. We saw an increase in both new unicorn births and $500 million + deals as well as strength in the IPO markets which was the best since 2014. Expect 2019 to be the year of the Mega IPO with many Unicorns coming public."

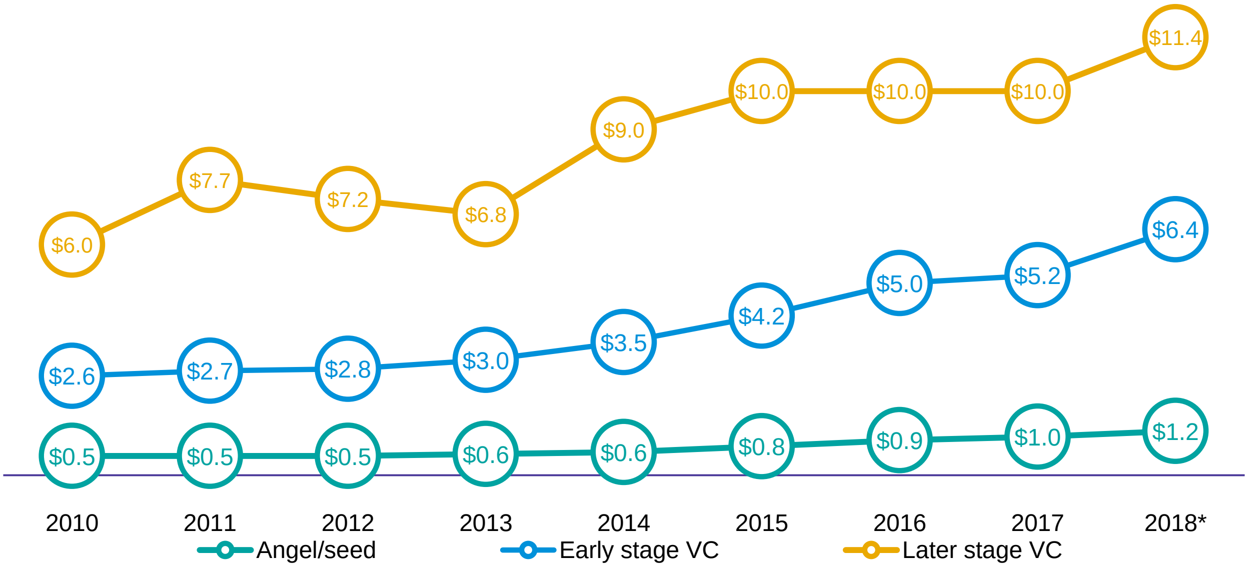
Brian Hughes
Co-Leader, KPMG Enterprise Innovative Startups Network, KPMG International and National Co-Lead Partner, KPMG Venture Capital Practice, **KPMG in the US**

KPMG Enterprise

New highs for every stage

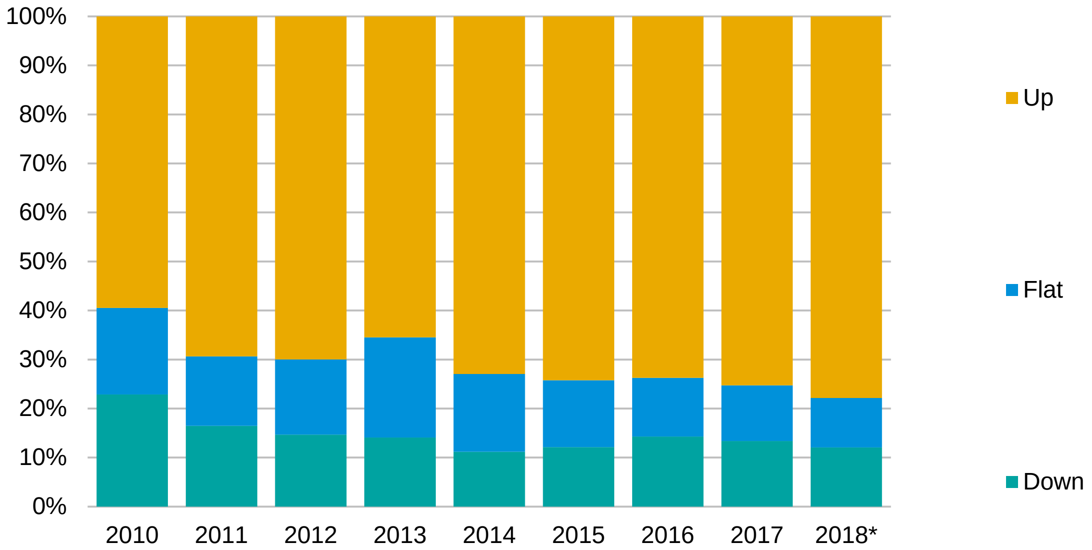
Median deal size ($M) by stage in the US

2010–2018*



Up, flat or down rounds in the US

2010–2018*

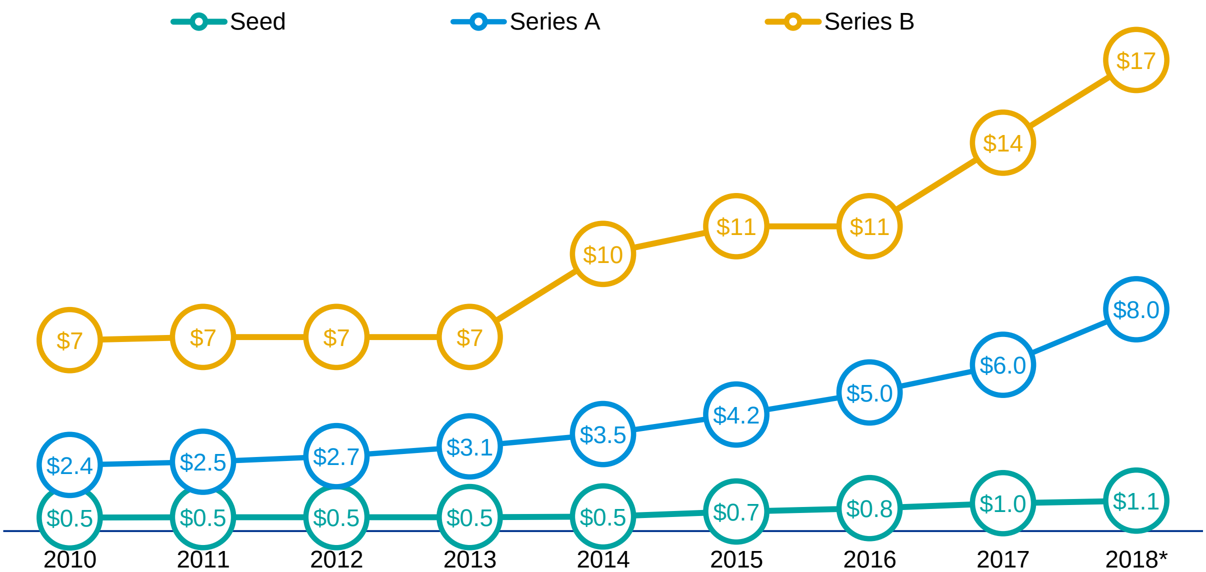


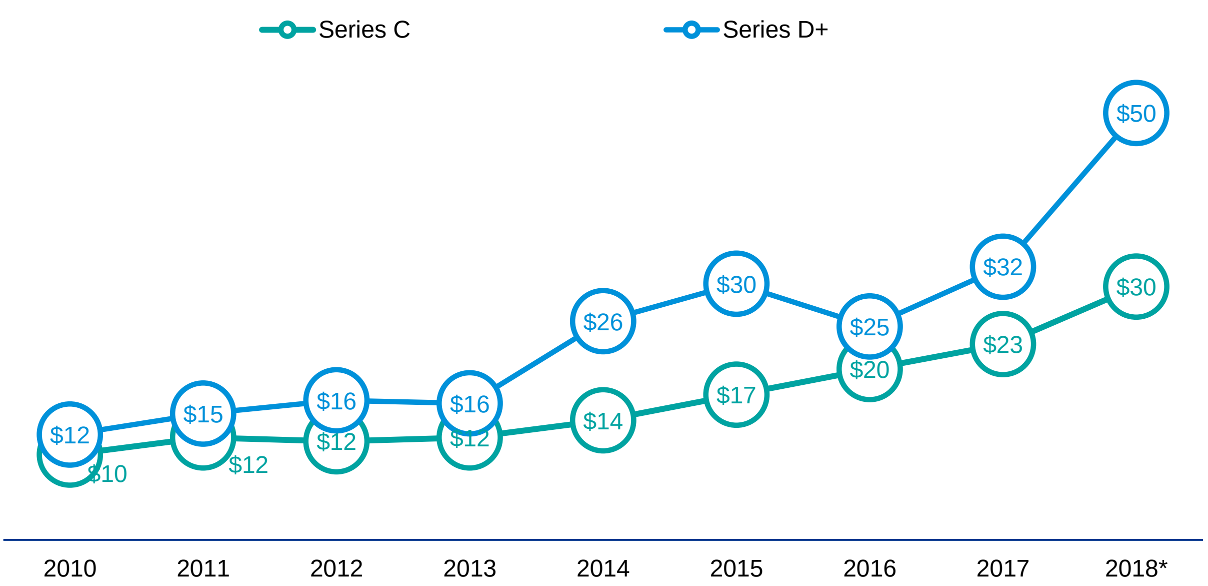
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

The latest stage hits unprecedented tally

Median deal size ($M) by series in the US

2010–2018*





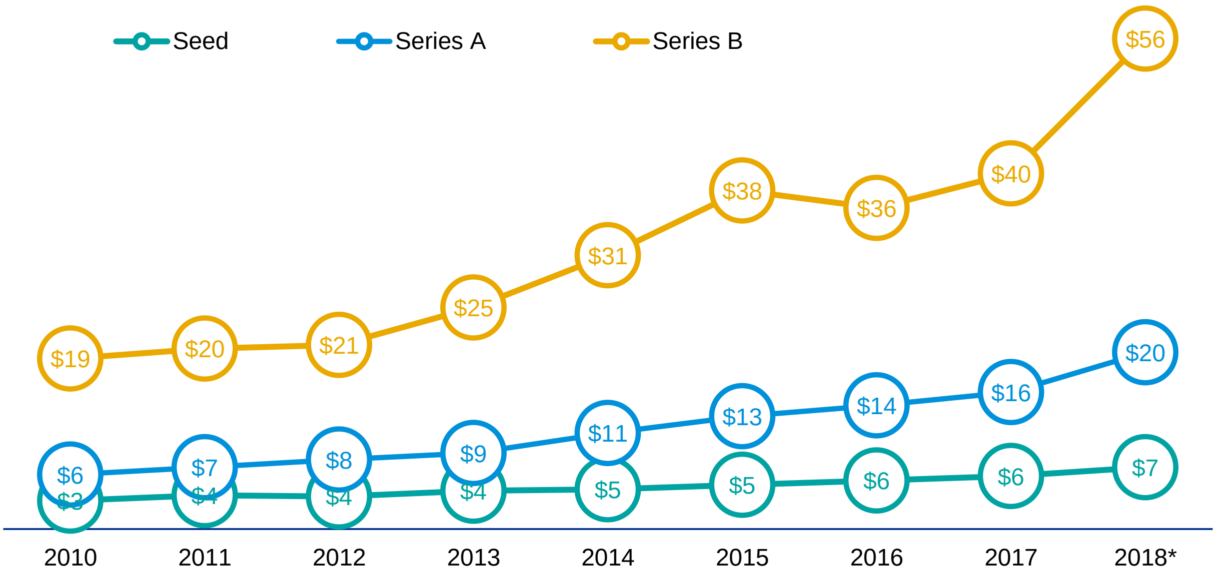
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.
Note: Figures rounded in some cases for legibility.

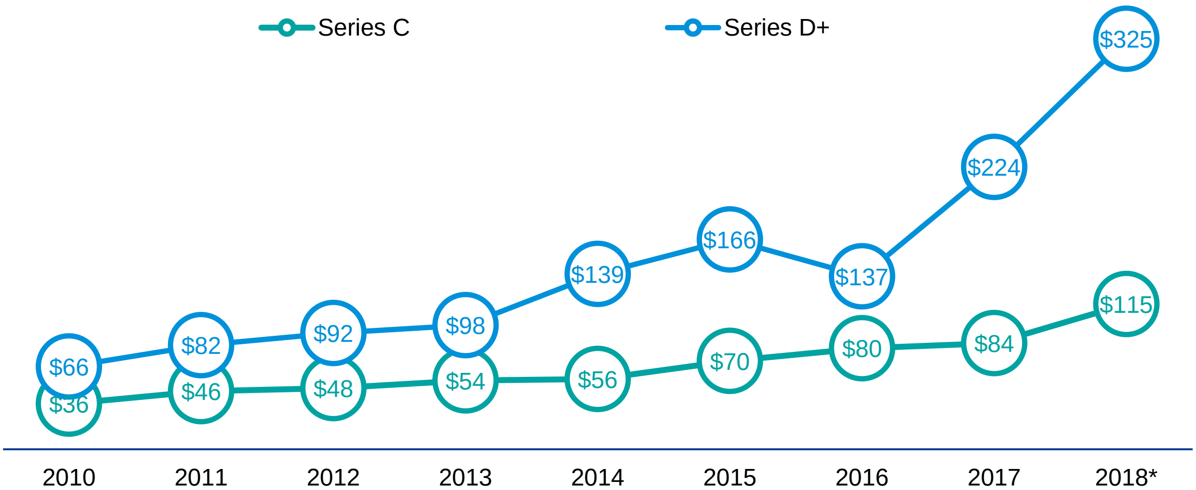
Enterprise

An unceasingly frothy environment

Median pre-money valuation ($M) by series in the US

2010–2018*





Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

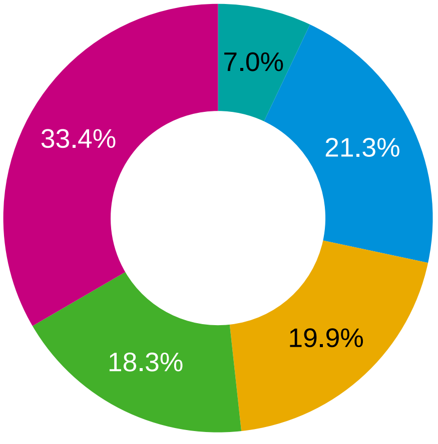
Note: Figures rounded in some cases for legibility.

The rate of growth in the latest-stage valuations has been remarkable, to say the least. From $137 million to $325 million in the span of 3 years is such a rapid pace of growth it is fair to ask whether it is justifiable. The reality is that in some cases it may well be; yet the environment is certainly characterized by a superabundance of capital still and, thus, inflation is also highly probable.

The early-stage contracts further in volume

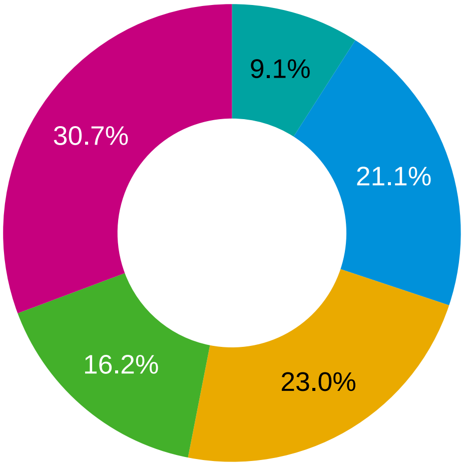
Deal share by series in the US

2018*, VC invested ($B)



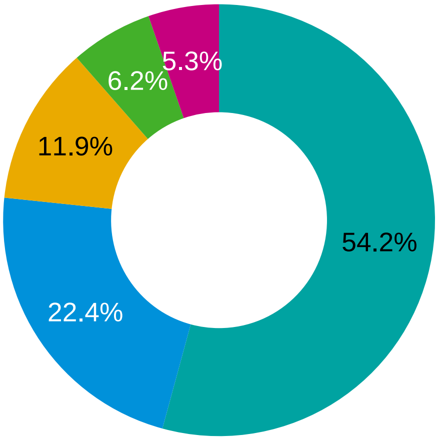
Deal share by series in the US

2017, VC invested ($B)



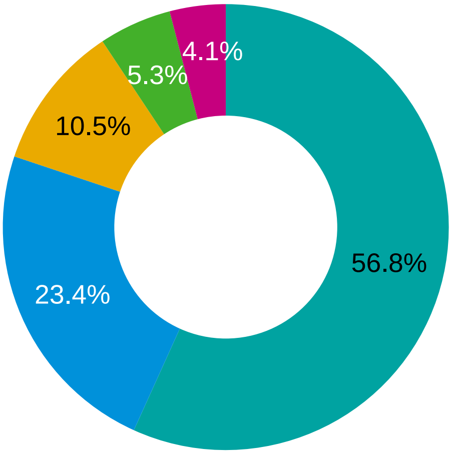
Deal share by series in the US

2018*, number of closed deals



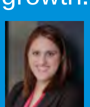
Deal share by series in the US

2017, number of closed deals



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

"While there is plenty of capital available for startups here in the US, most of it went to later stage companies. In order to attract funding, early stage companies had to become more cash flow positive earlier in their lifecycle or create a robust path to profitability that could win over cautious investors. In 2019, fundraising will continue to be challenging for early stage companies. To succeed, they will need to focus more on sustaining their business rather than simply on revenue growth."

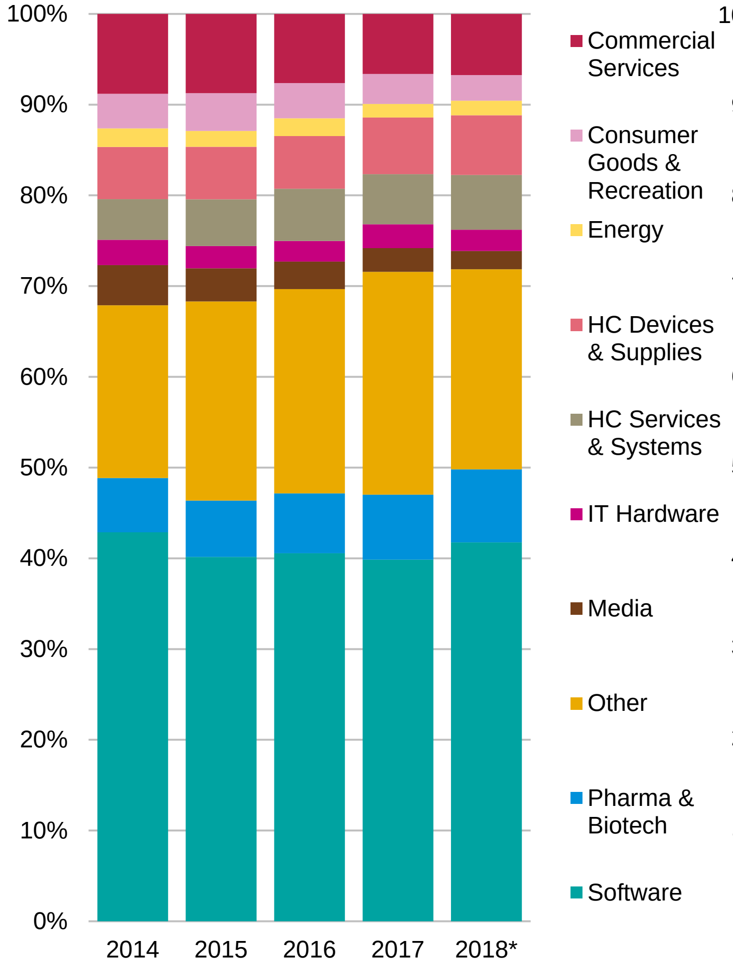


Shivani Sopory
Partner
KPMG in the US

Sector lines blur further

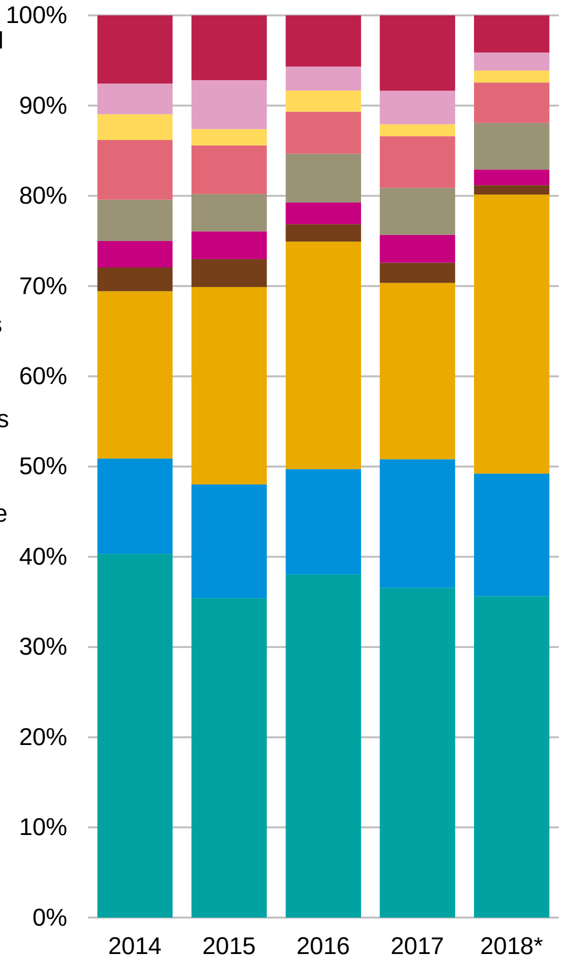
Venture financing by sector in the US

2014–2018*, number of closed deals



Venture financing by sector in the US

2014–2018*, VC invested ($B)



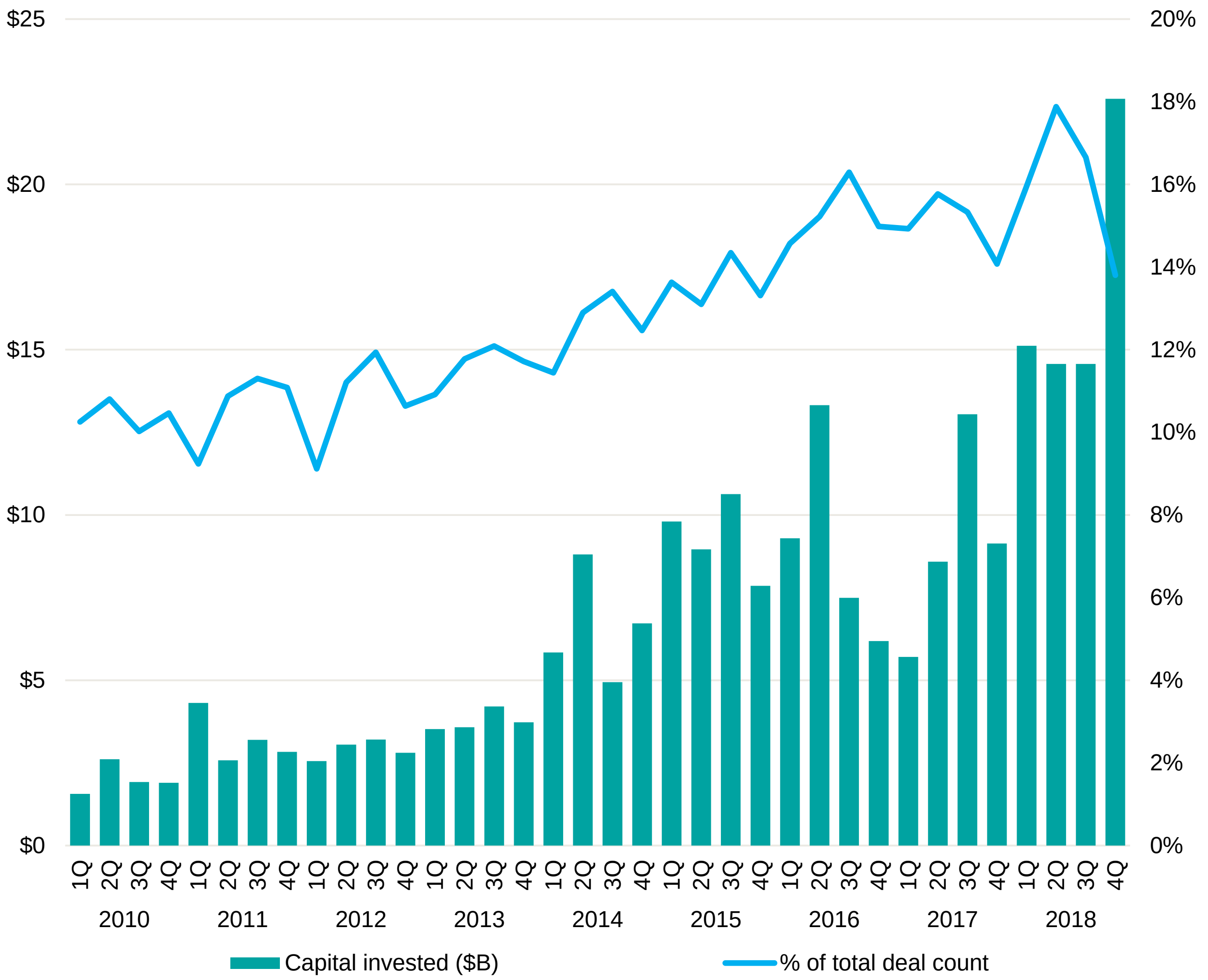
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Software products have become more of a horizontal than a vertical at this point, spanning multiple industries. Accordingly, the other category has attracted a record sum of investment in 2018 in terms of overall capital, even if software by volume still handily dwarfs any other category in the US.

CVC participation takes an unexpected plunge

Corporate participation in venture deals in the US

2010–Q4'18



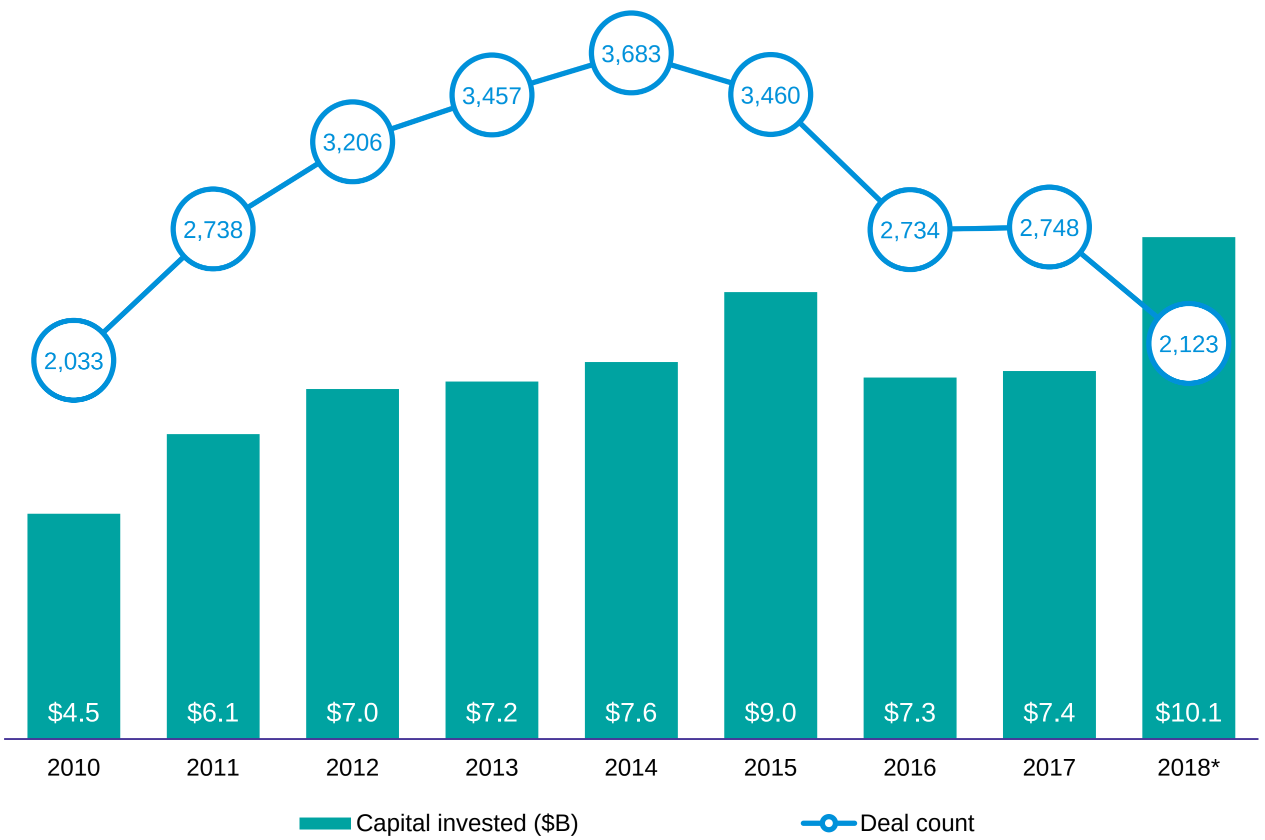
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Intriguingly, corporate rounds and participation took an unexpected plunge at the end of 2018, hitting a low unseen since 2015. The sharpness of the decline, coupled with a lack of any true economic shock, leads one to suspect that it is more of a temporal aberration than anything else, as all the drivers that led to increased participation prior are still in place.

Divergent VC invested & volume point to innovation cycle entering later innings

First-time venture financings of companies in the US

2010–2018*



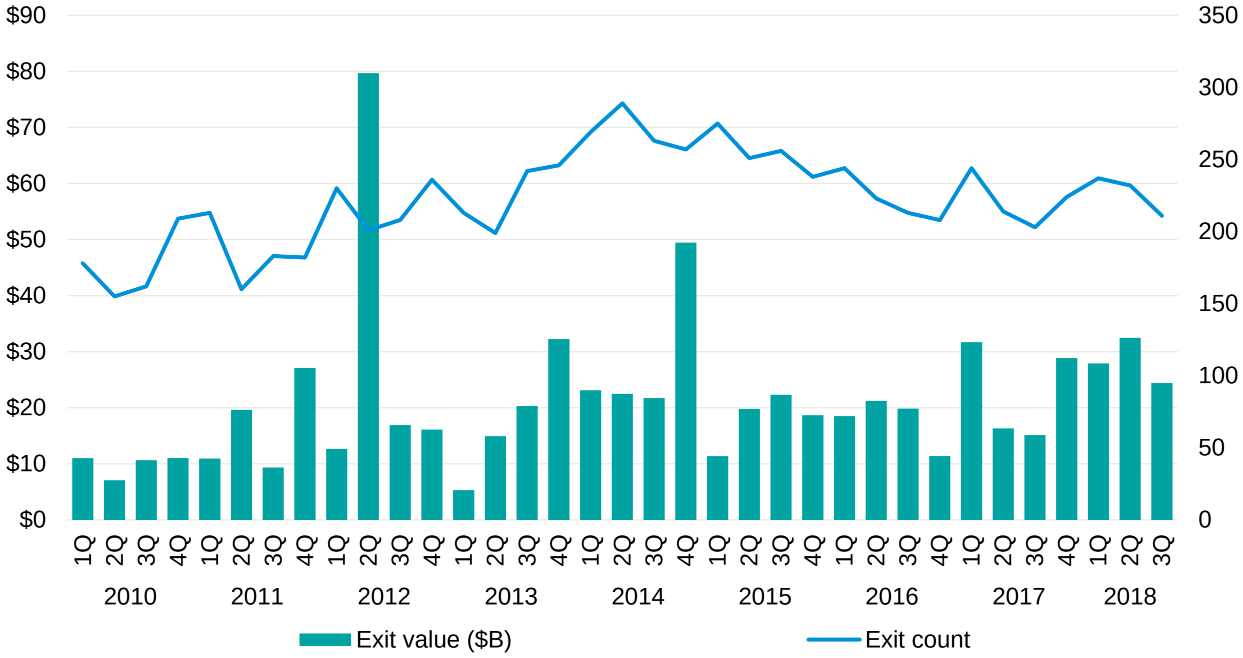
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

For the first time in the decade, the sums invested in first-time rounds exceed $10 billion. At the same time, the final tally of volume was the lowest it has been in several years. It is likeliest that these coincident trends are due primarily to how capital-rich the environment currently is; investors are competing avidly for the best opportunities and when they are able to fund, they do so lavishly, yet fewer companies are able to command that typical size of capital.

Exits stay steady to end year at historically robust totals

Venture-backed exit activity in the US

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

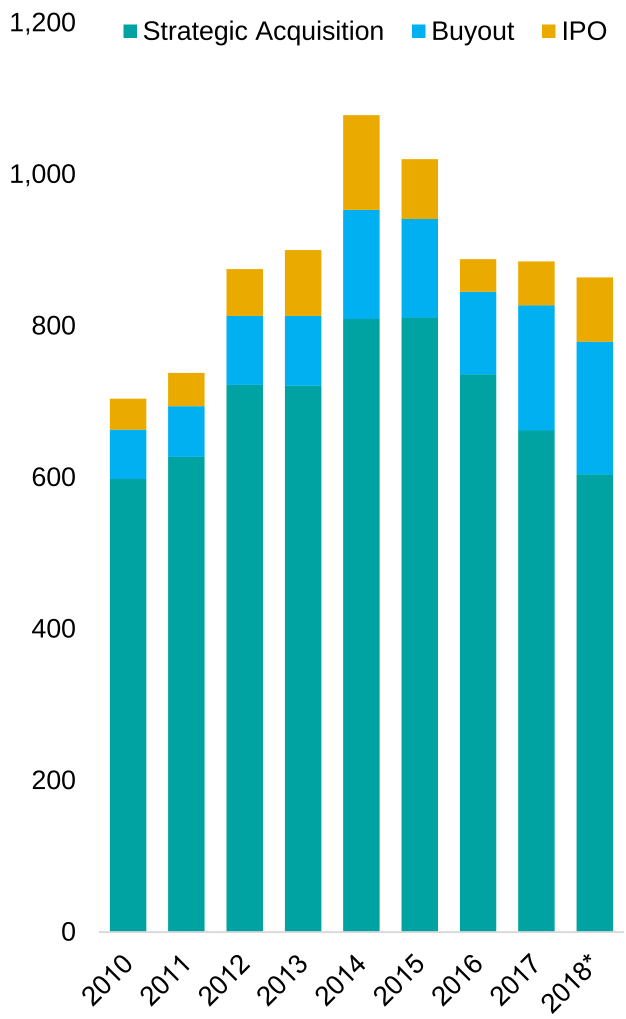
2018 may have seen some resurgence in IPO volume, but with the return of significant market volatility, 2019 may have more question marks for companies looking to debut, although it is unlikely that they will be significantly discouraged. Overall, the exit cycle for US venture-backed companies has stayed quite steady, allaying prior fears of slow subsiding.

KPMG Enterprise

IPO outliers propel 2018 to strong finish

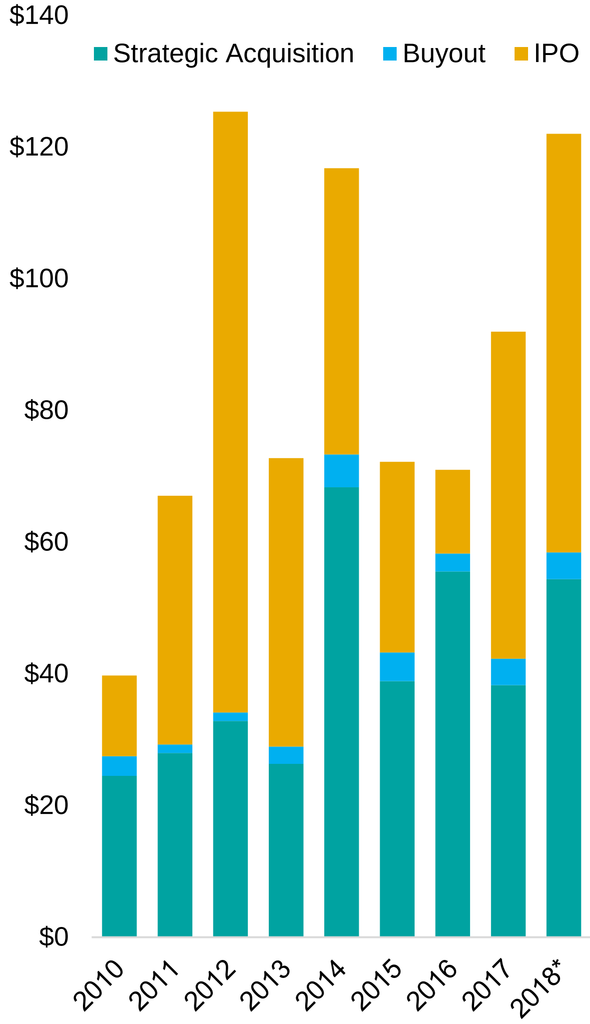
Venture-backed exit activity (#) by type in the US

2010–2018*



Venture-backed exit activity ($B) by type in the US

2010–2018*



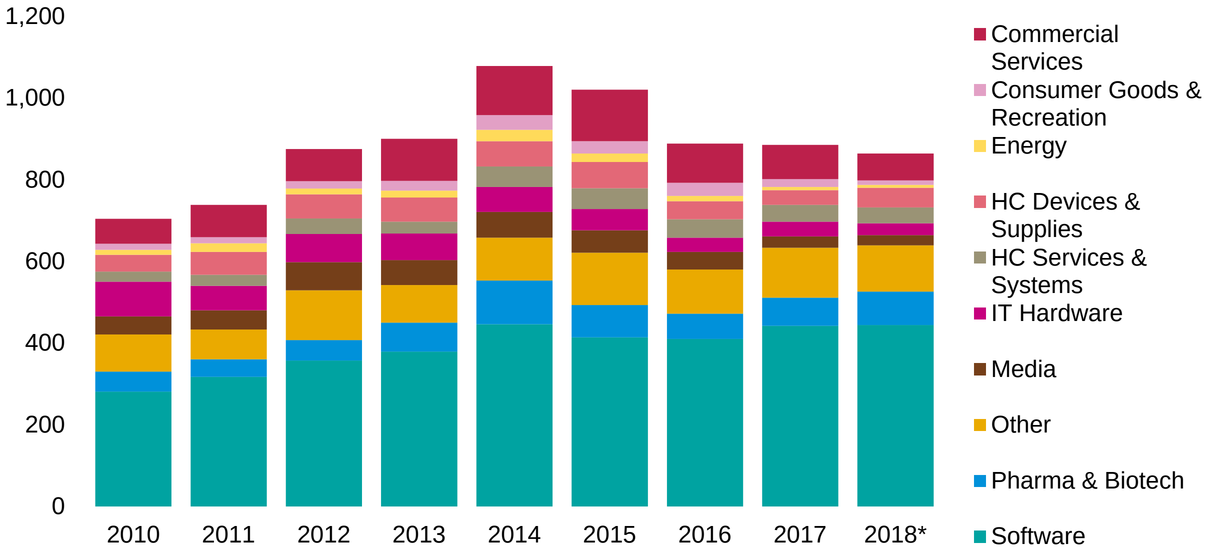
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Given the methodology shift incorporated in the prior edition of the Venture Pulse, IPOs remain a key driver of value in the venture landscape, but in terms of volume, it is clear M&A will remain critical to sellers' hopes for liquidity in the coming year.

Pharma & biotech on pace for record year

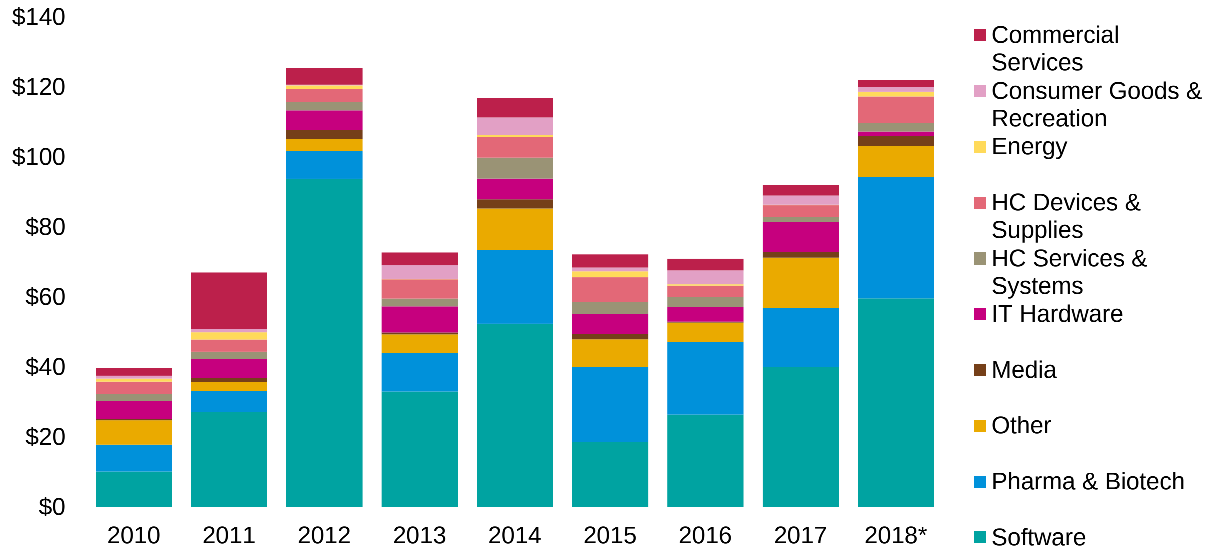
Venture-backed exit activity (#) by sector in the US

2010–2018*



Venture-backed exit activity ($B) by sector in the US

2010–2018*

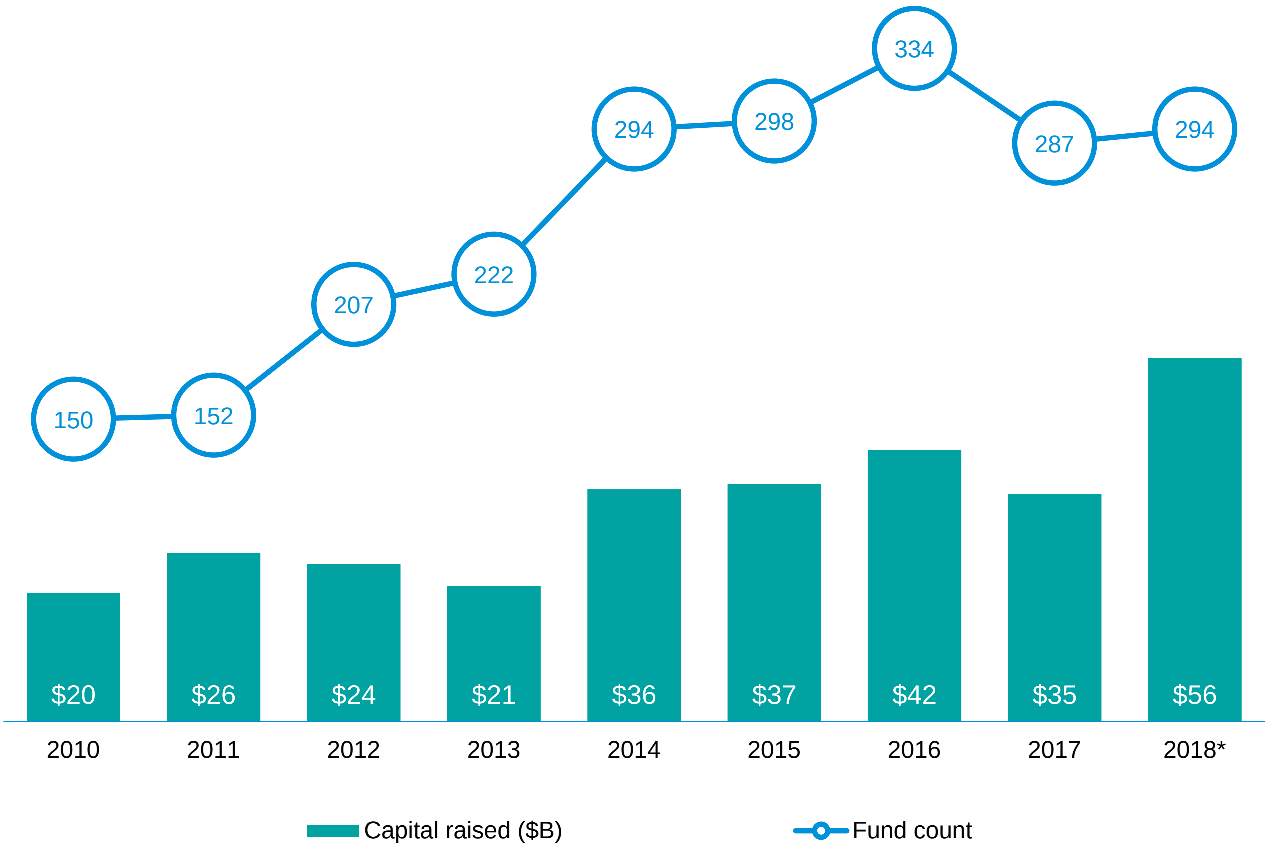


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Fundraising hits a grand new high in 2018

U.S. venture fundraising

2010–2018*



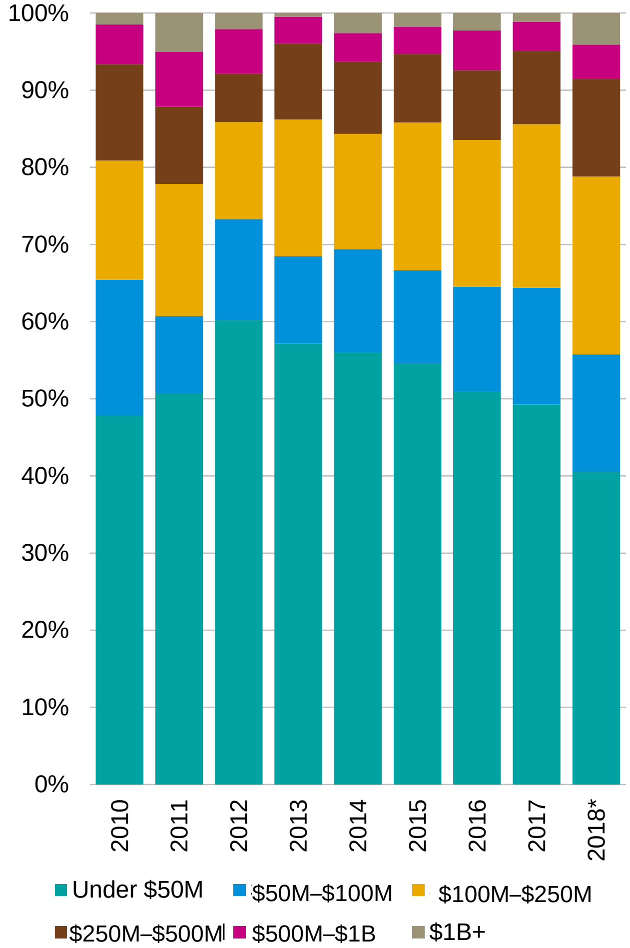
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

It still may appear that limited partners may have unlimited appetite for exposure to the venture asset class, contrary to what the two prior editions of the Venture Pulse stated. However, that is still simply not the case. The massive haul of capital raised in 2018 was due to the most successful venture firms to date, that is, closing on massive sums, with 11 funds of 2018 vintage alone closing on $1 billion or more in the US.

First-time funds close 2018 on a high note for the whole decade

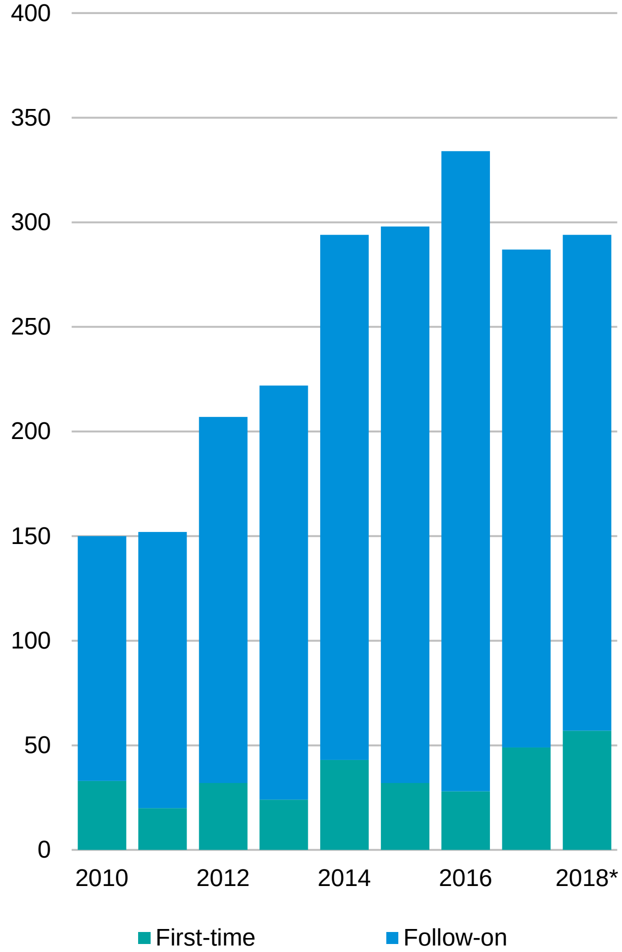
Venture fundraising (#) by size in the U.S.

2010–2018*



First-time vs. follow-on venture funds (#) in the U.S.

2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

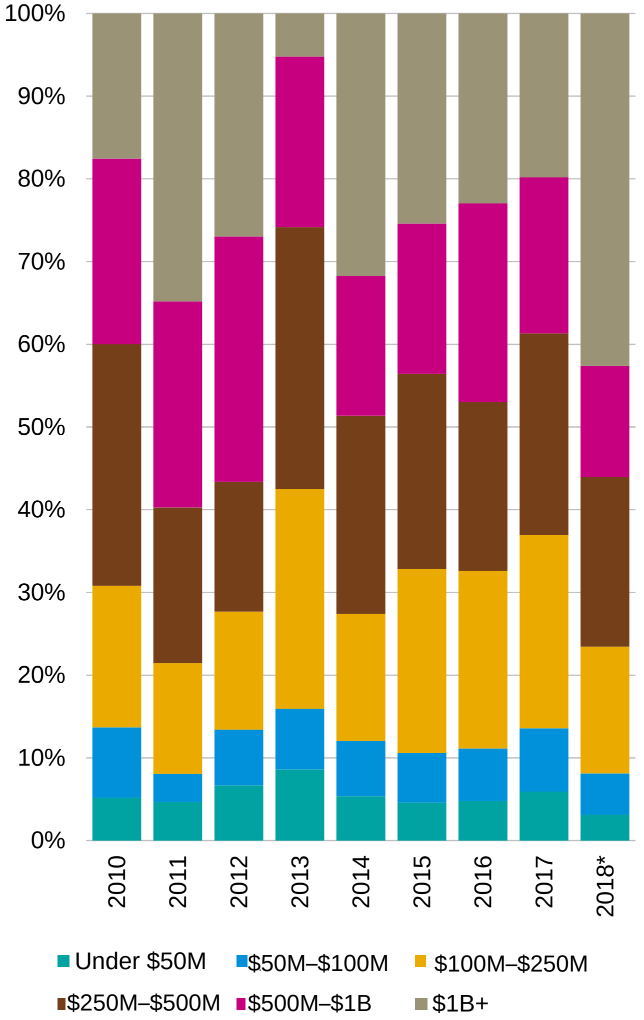
First-time funds managed to finish the year at a proportionally healthy and, moreover, nearly record tally for the decade in terms of volume, attributable in large part to the longevity and strength of the venture cycle producing plenty of spinoff general partners raising their own vehicles.

KPMG Enterprise

The lucrative environment leads to largesse once again for even first-time fundraisers

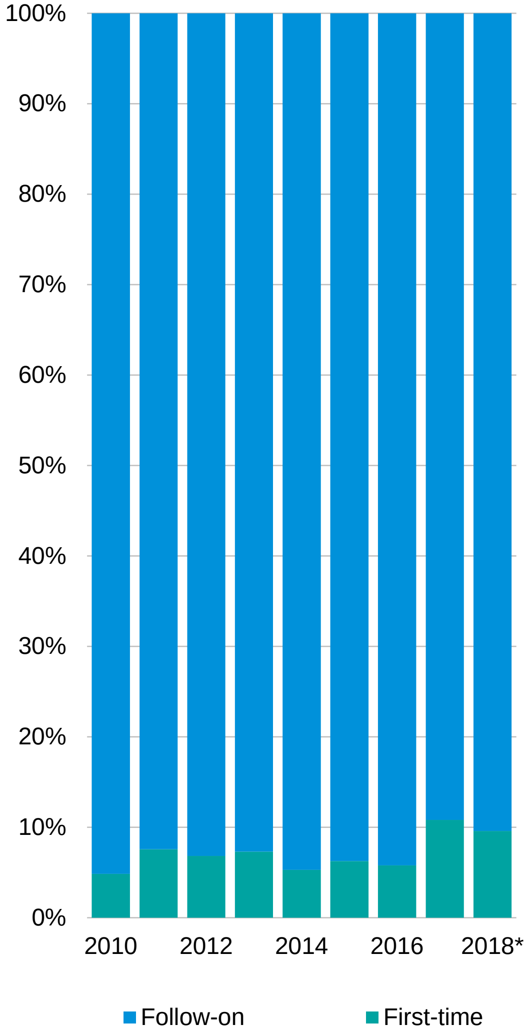
Venture fundraising ($B) by size in the US

2010–2018*



First-time vs. follow-on funds ($B) in the US

2010–2018*



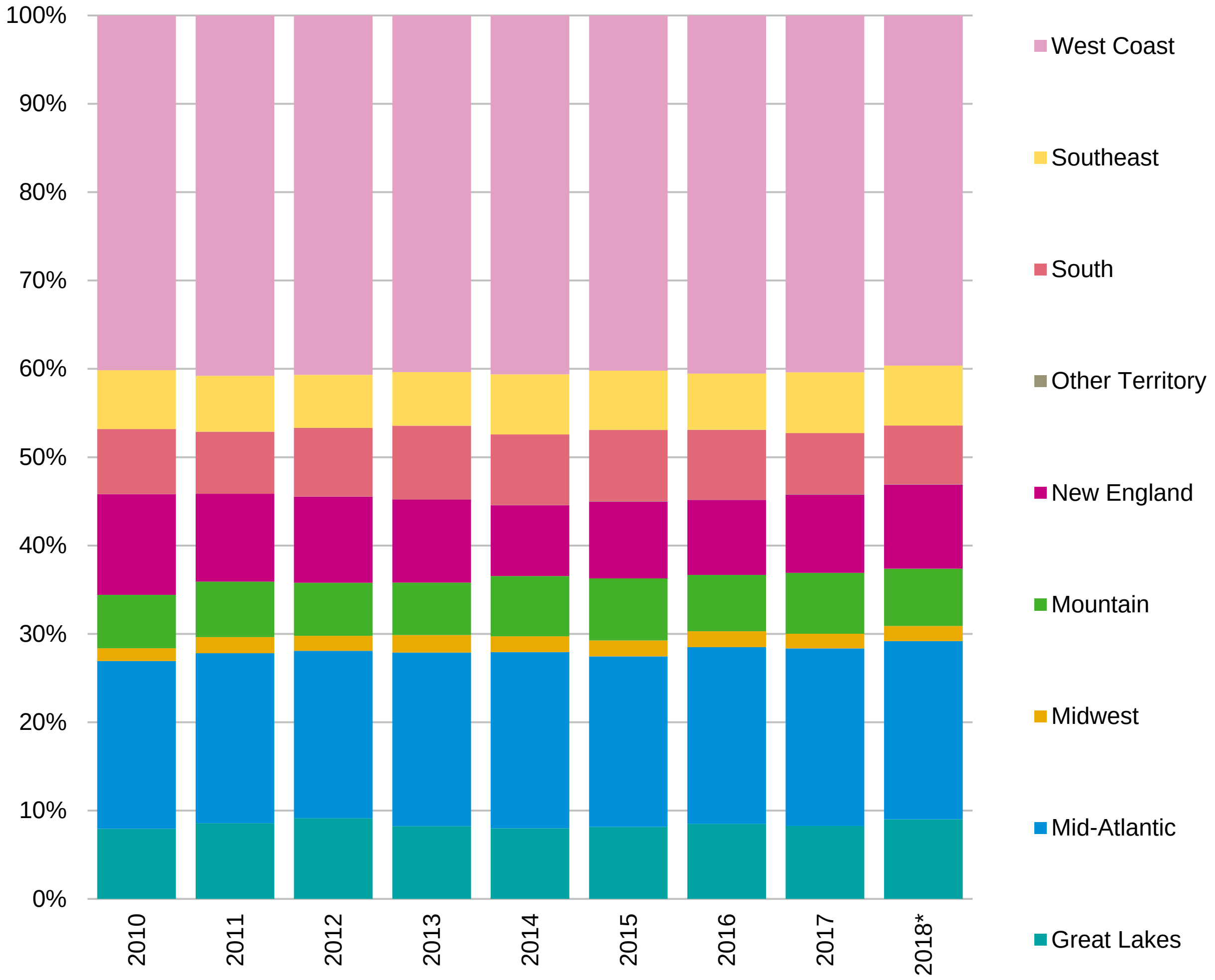
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

2018 sees marginal increases in proportional strength for non-coastal tech hubs

US venture activity (#) by US region

2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

In Q4'18 European VC-backed companies raised

$5.9B

across

574 deals

KPMG Enterprise

Innovation hubs across Europe spur record levels of VC investment

VC investment in Europe reached $24 billion in 2018, surpassing 2017's record numbers. While substantially lower than VC investment in the US and Asia, the strengthening investment level bodes well for Europe's growing nexus of innovation activity. In Q4'18, the 10 largest deals spanned six diverse countries, including the United Kingdom, Germany, France, Ireland, Denmark, and Israel.

Unicorn births during 2018 also showed diversity, with the 10 new unicorns coming from six different countries — as opposed to 2017, when the three new unicorns were all born in the UK[9].

VC investor interest remains strong in UK despite growing Brexit uncertainty

The UK bucked expectations in 2018, continuing to attract significant levels of VC funding despite ongoing uncertainty around Brexit outcomes. While VC investment in the UK remained steady, deal volume fell dramatically year-over-year. The decline in deals volume, however, reflected a broader European trend, whereby investors have increased their focus on larger and later stage deals.

The robustness of the UK's innovation ecosystem remained apparent in Q4'18, with UK-based deals accounting for four of Europe's largest deals, including the region's largest two deals — a $200 million raised by Graphcore and a $156 million raise by property sales company Nested. Fintechs also attracted a significant amount of investment in Q4'18, with challenger banks Monzo and Zopa and blockchain company BitFury also among the top funding rounds in the UK.

Regulation continued to be a big focus area for the UK government, with a big push in 2018 for the development of frameworks to guide the development and ethical use of AI.

Heading into 2019, fintech is expected to remain a hot area of investment, in addition to AI, healthtech, and life sciences. Following Funding Circle's IPO in 2018, other mature fintech companies might also look to exit over the coming quarters, whether through IPO or M&A.

France sees strong growth in VC ecosystem in 2018

In 2018, France truly came into its own as an innovation ecosystem, building on activities in prior years. BlablaCar[10] — a carpooling service — raised one of the largest deals in Europe in Q4'18: a $117 million Series D raise. The global mobility player is a stellar example of France's innovation success with global operations now spanning three continents. In 2018, the company was highly focused on acquisitions, purchasing both Russia-based carpooling platform BeebCar and long-distance bus service Ouibus. AI company Dataiku also raised $101 million during Q4'18 to help fuel its global expansion.

Fintech was particularly hot in France throughout 2018, with rounds raised by a range of companies including cryptocurrency and blockchain focused security provider Ledger ($61 million), online financing platform October ($37 million), digital health insurance company Alan ($25 million) and Qonto — a digital bank aimed at SMEs and freelancers ($23 million).

A significant number of new funds were introduced in France over the course of the year, which should complement the ongoing support being given to startups by Bpifrance, the French Public Investment Bank.

[9]https://pitchbook.com/news/articles/six-big-things-its-raining-unicorns
[10]https://techcrunch.com/2018/11/12/blablacar-to-acquire-ouibus-and-offer-bus-service/

KPMG Enterprise

Innovation hubs across Europe spur record levels of VC investment

Looking ahead to 2019, AI, healthtech, biotech, and adtech are expected to remain hot, while foodtech, e-sport, and e-tourism are expected to gain increasing attention from VC investors. New funds are also expected to be announced in Q1 in tandem with state measures to support the country's startup ecosystem — including the launch of the new French Tech Community Fund.

VC investment in AI poised for significant growth in Germany

Germany had a solid end to 2018 with respect to VC investment, led by transportation option price aggregator GoEuro's $150 million Series D funding round. Over the course of the year, VC investment in Germany followed broader European trends, including an increasing investor focus on later-stage deals and bigger funding rounds. Throughout the year, investors in Germany focused on a broad range of deals, with fintech, mobility, blockchain, and AI among the most prevalent. Germany also saw a number of targeted early-stage and seed funds created during 2018 focused on helping companies become closer to the founder ecosystem. Looking ahead, AI is poised for strong investment growth in Germany given its relatively early-stage of maturity in the country and its significant cross-industry application potential.

Lack of early-stage funding in Ireland could pose future challenges

Ireland continued to attract significant interest from VC investors during 2018, with healthtech, pharmaceuticals and biotech, in particular, seeing a growing number of deals. In Q4'18, for example, Dublin-based GC Aesthetics raised $97 million in one of Europe's largest deals of the quarter.

In line with other jurisdictions, Ireland has also experienced an drop in early stage funding. As with other locations, this has caused some concern about a potential stifling of the innovation pipeline down the road. At present, however, the investor focus on late-stage deals has been positive, with well-positioned companies able to attract the funding needed to scale and compete internationally.

Israel sees strong Q4 to end the year

VC investment in Israel was robust for the fifth year in a row, in part due to strong corporate participation in the VC space. US corporates were particularly active, with acquisitions high on their radar, due to the lower valuations of companies in Israel compared to the US. The positive investment climate attracted a number of corporates that have not invested in Israel historically; for example, Walmart made several substantial investments in Israel-based companies during Q3 and Q4'18[11].

Looking ahead, further investment in biotech, medtech, and autonomous vehicles is expected in Israel, in addition to increasing investment in agtech and foodtech. Cybersecurity, a historical stalwart for investment in Israel, is expected to remain relatively buoyant, although increasing crowding in the space could make it less attractive over time.

Trends to watch for in 2019

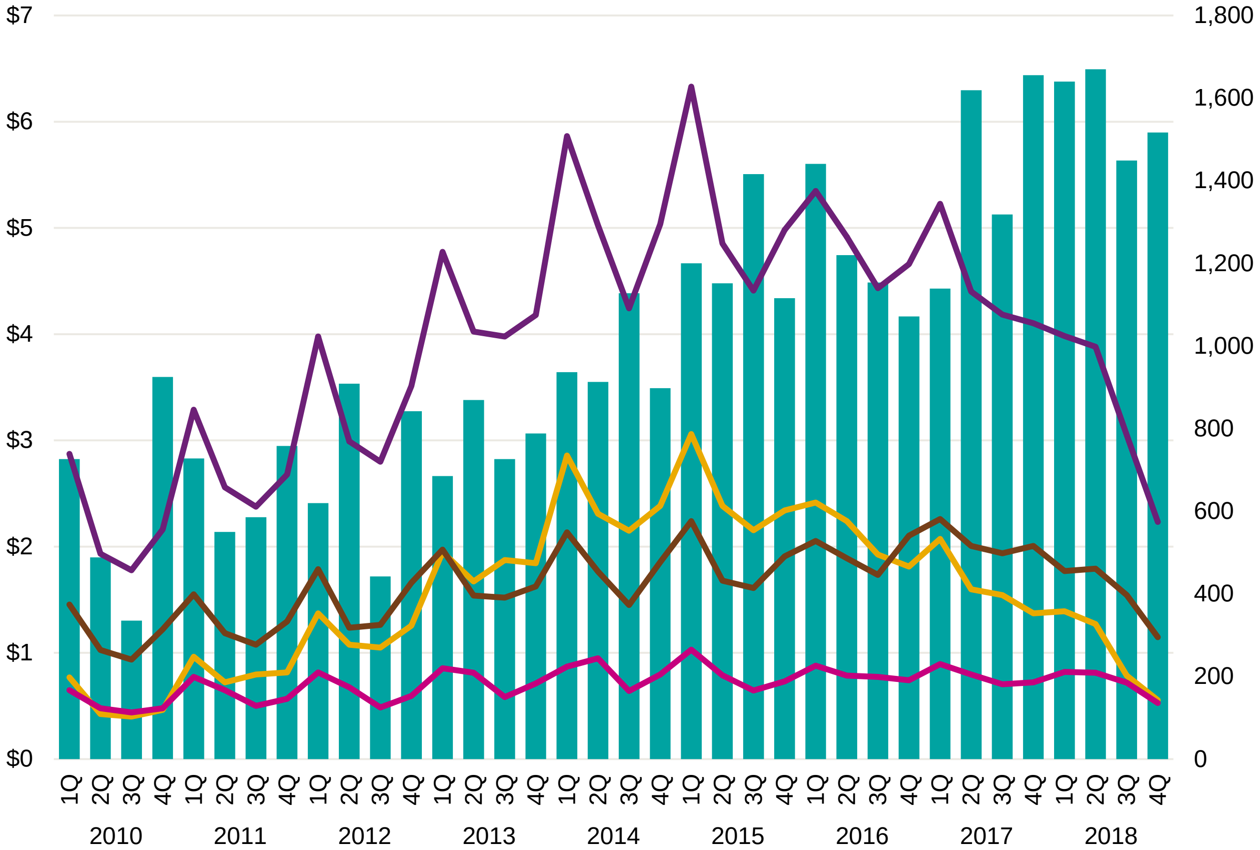
In 2019, there may be some additional IPO exits in Europe as companies look to take advantage of the momentum built by the 2018 IPOs of Ayden, Funding Circle, and Farfetch. Fintech is expected to remain a hot ticket for VC investment across most of Europe, although it will likely see some consolidation as some fintechs shift to become more like banks, thereby needing to adhere to more stringent regulations. Biotech and healthtech are also poised to see strong investment heading into Q1'19.

[11] https://en.globes.co.il/en/article-walmart-to-invest-250m-in-israeli-interactive-video-co-eko-1001256153

Volume of completed financings takes temporal nosedive to close 2018

Venture financing in Europe

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

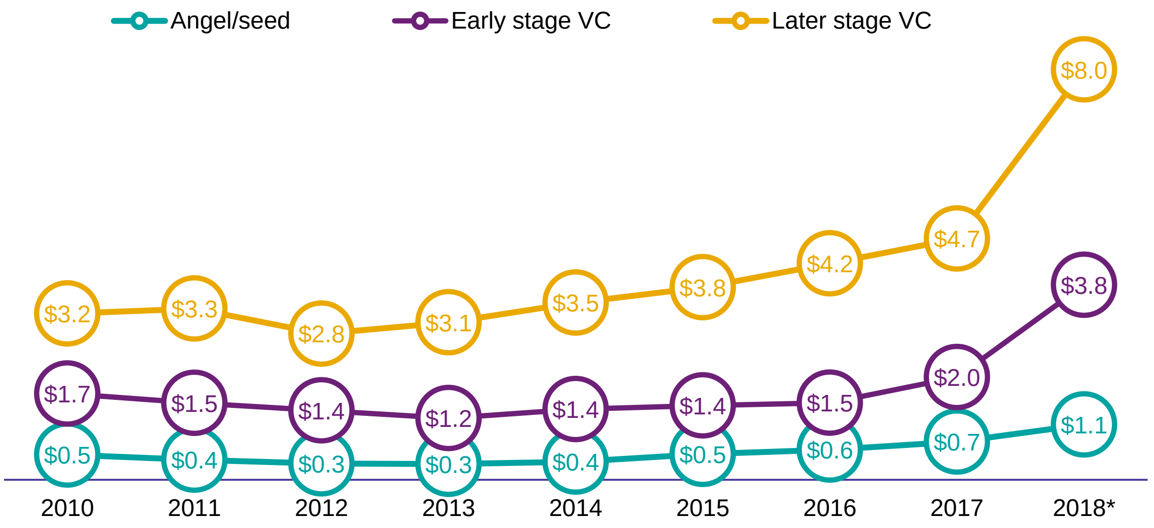
The sudden plunge in venture financing volume in Europe may cause some alarm, but it is actually more likely that in the past two quarters, data lags and political uncertainty have simply prolonged processes. In short, the plunge is unlikely to be truly that steep, although it is worth noting it has continued for 2 straight quarters. VC invested remains more than healthy, however.

KPMG Enterprise

New highs for median deal sizes across every stage, particularly the later

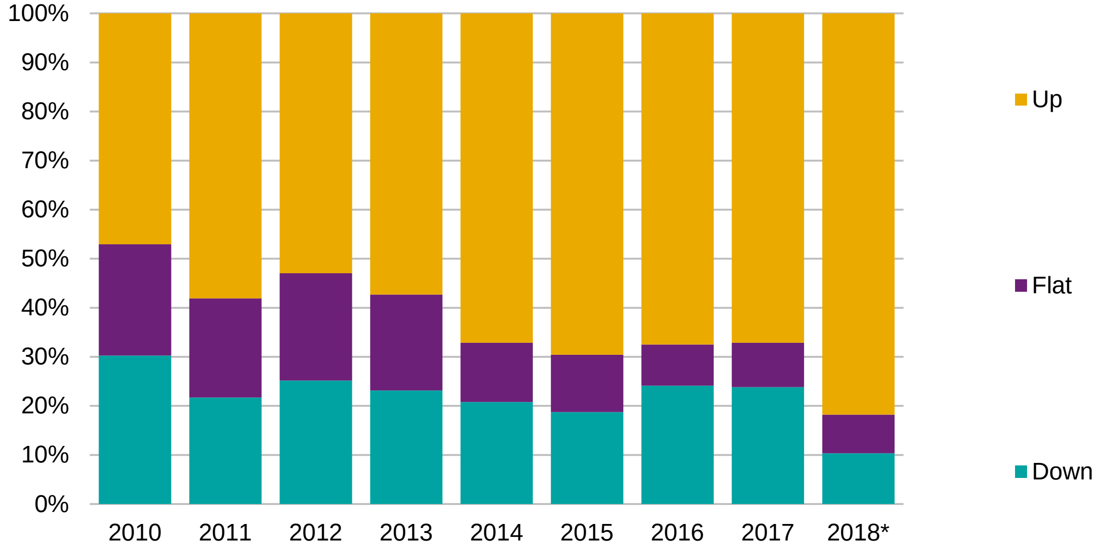
Median deal size ($M) by stage in Europe

2010–2018*



Up, flat or down rounds in Europe

2010–2018*

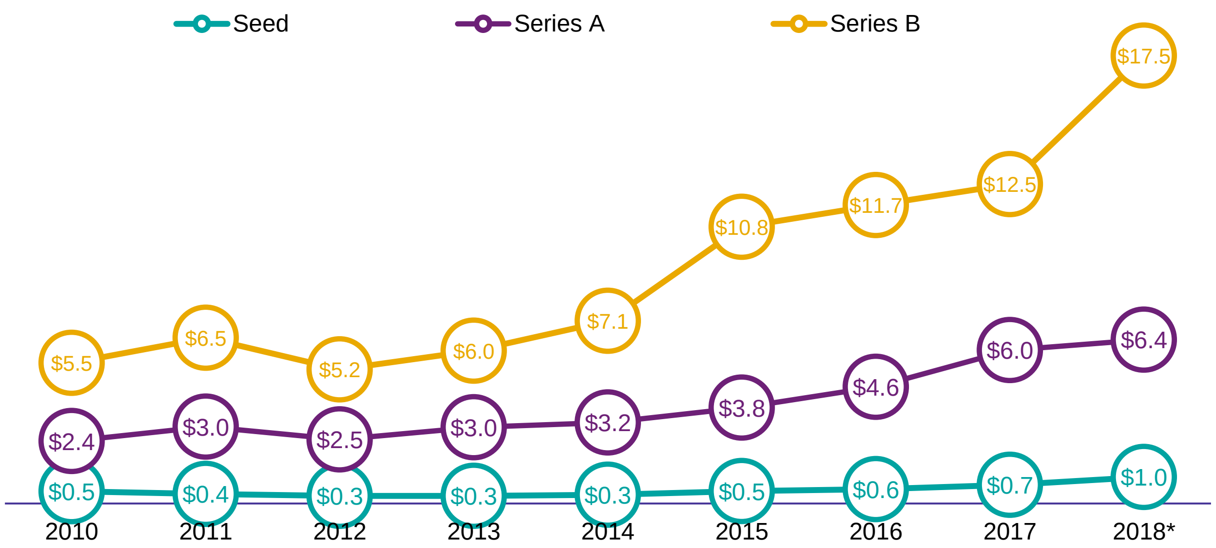


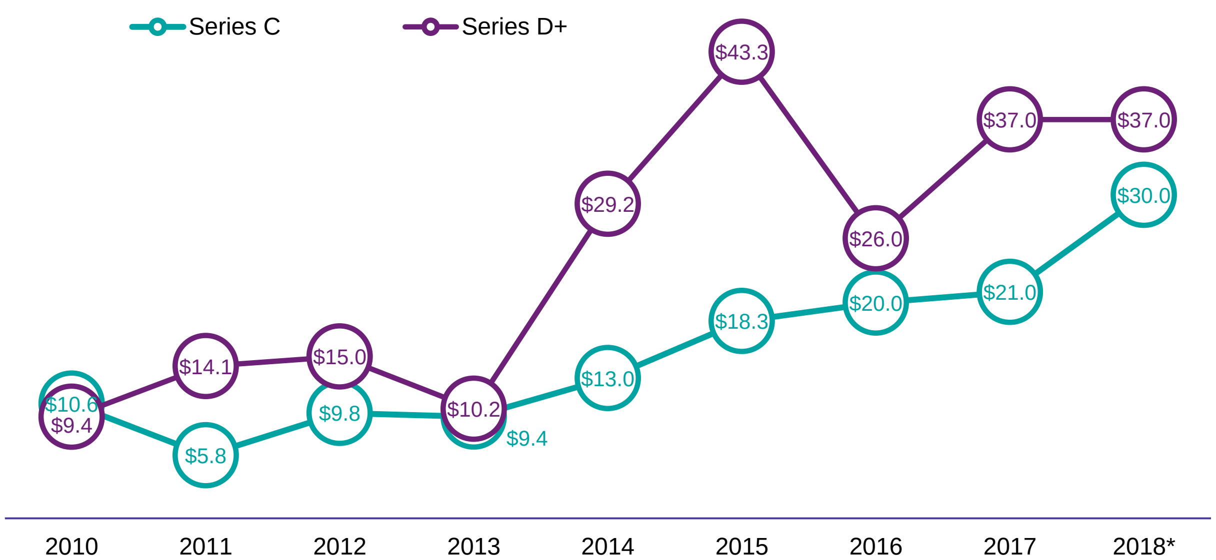
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

The late-stage aligns further

Median deal size ($M) by series in Europe

2010–2018*



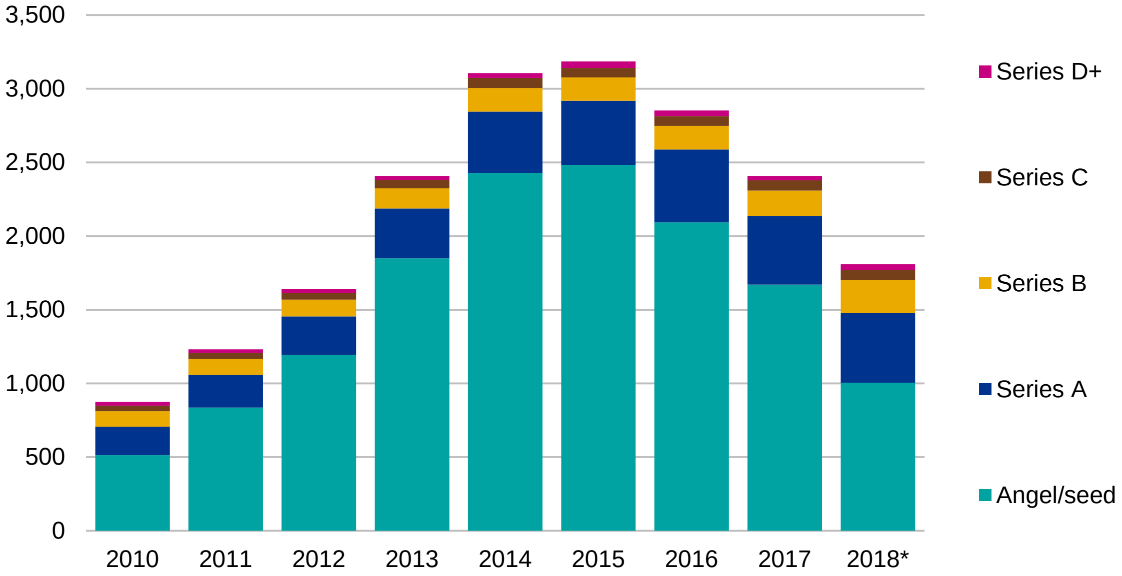


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Volume declines across all stages

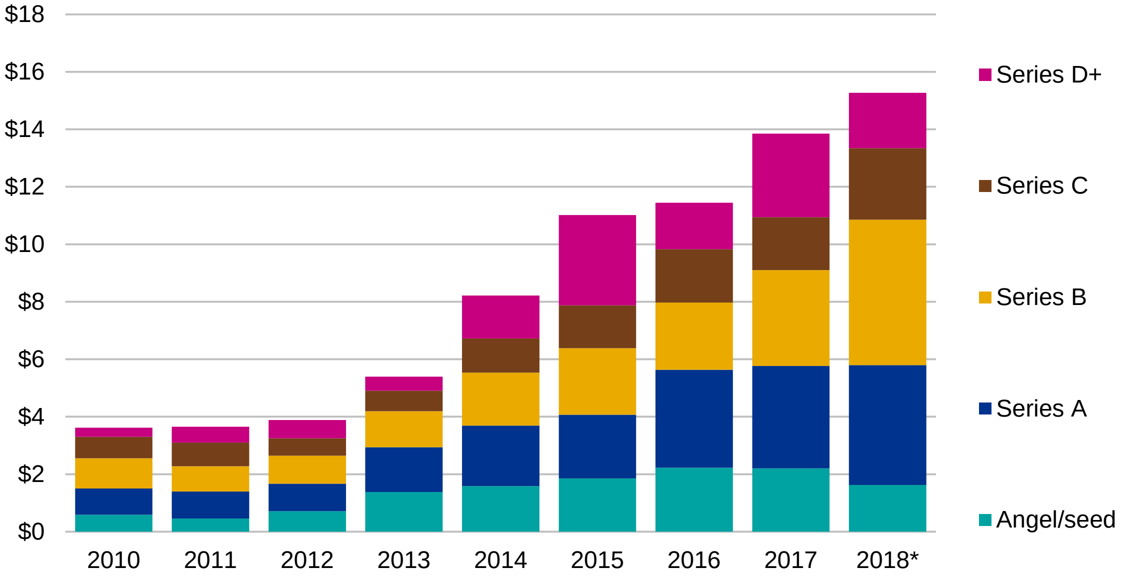
Deal share by series in Europe

2010–2018*, number of closed deals



Deal share by series in Europe

2010–2018*, VC invested ($B)



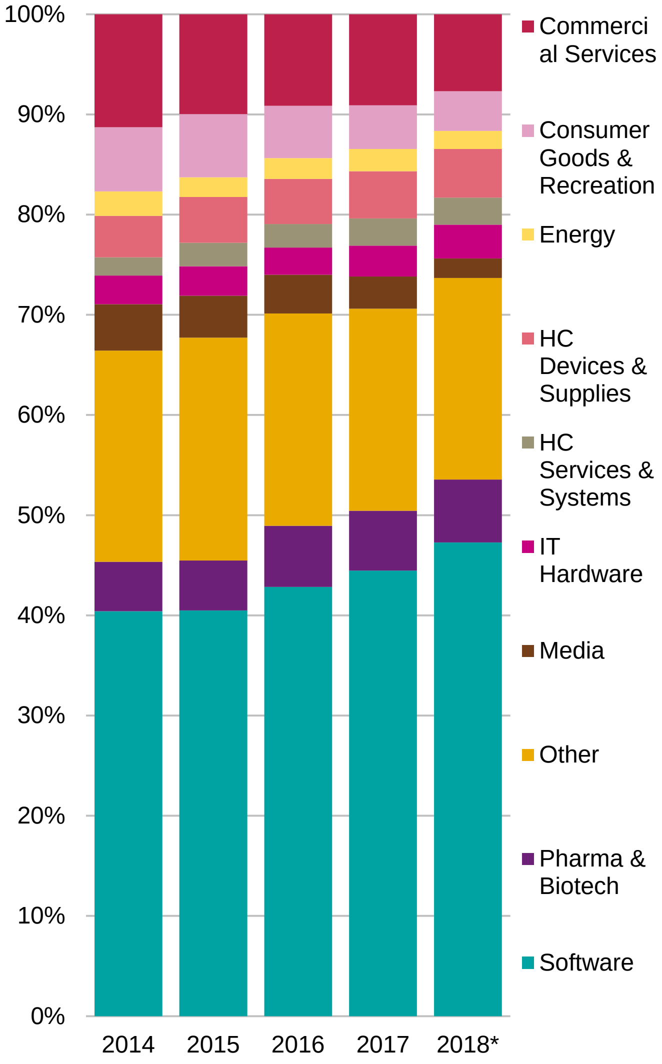
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

Pharma & biotech hits a record high

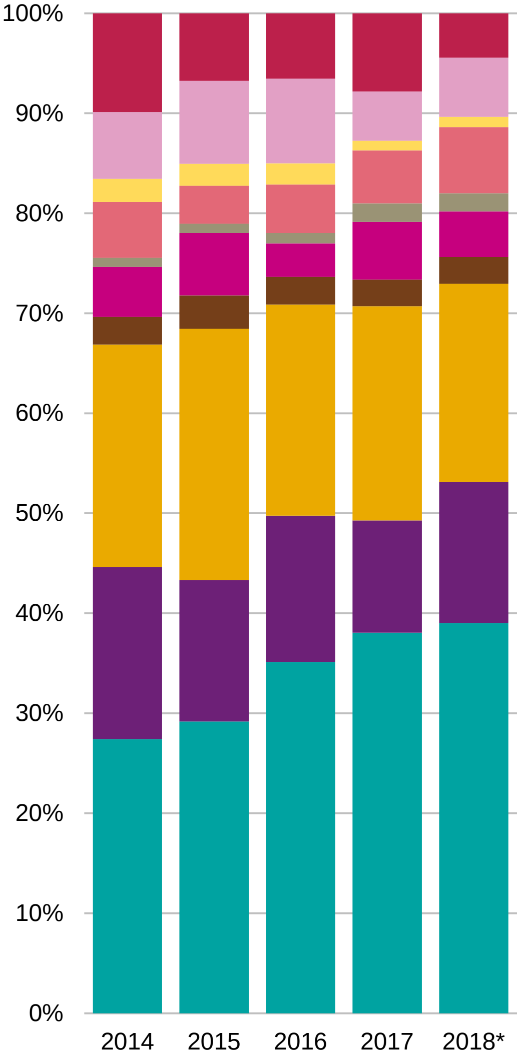
European venture financings by sector

2014–2018*, number of closed deals



European venture financings by sector

2014–2018*, VC invested ($B)

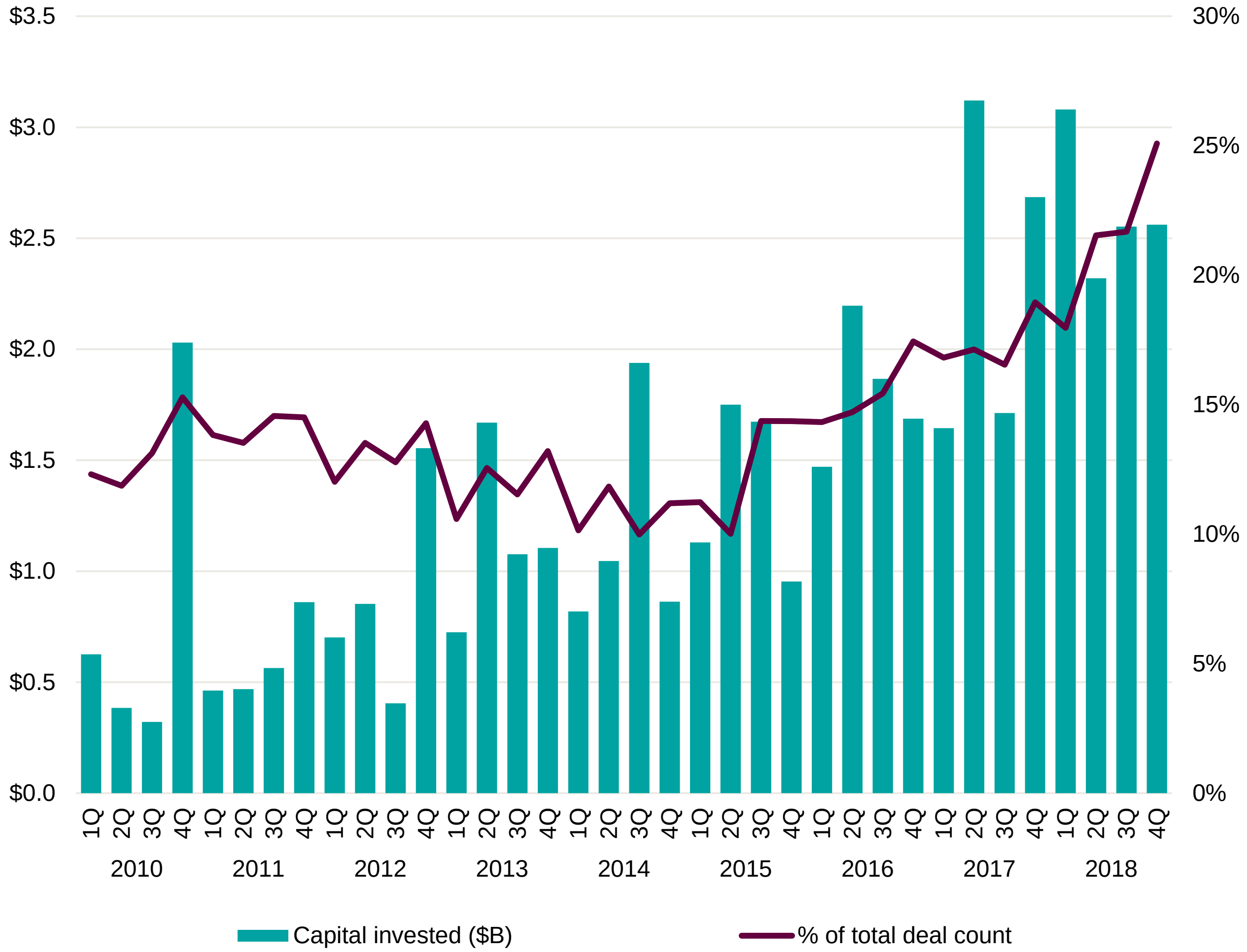


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

CVCs end year on a high note

Corporate VC participation in venture deals in Europe

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

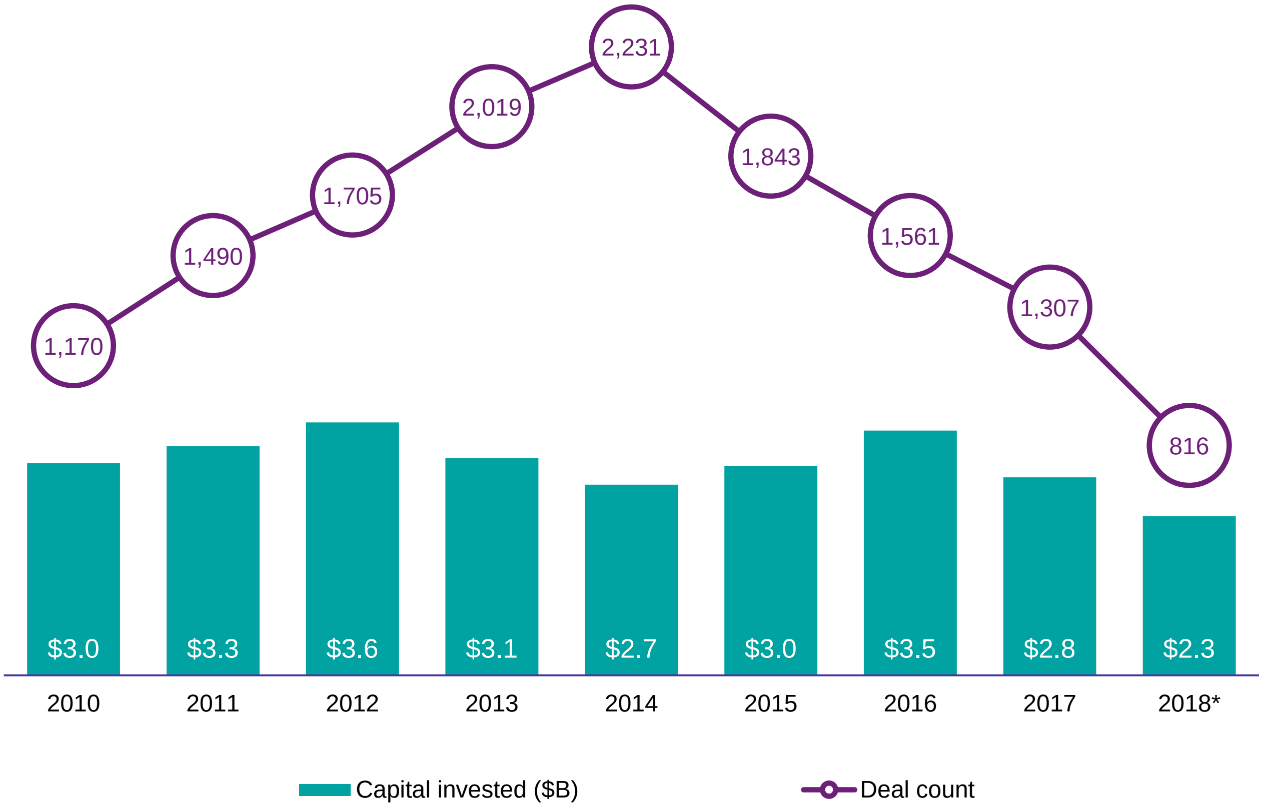
Unlike the US, corporate participation in Europe soared to an even newer high in terms of percentage of overall activity. Corporations and their venture arms remain key to the European venture ecosystem, joining in many of the larger rounds across multiple sectors.

KPMG Enterprise

Albeit a potential data lag, 2018 still records a new low across both volume & value

First-time venture financings of companies in Europe

2010–2018*



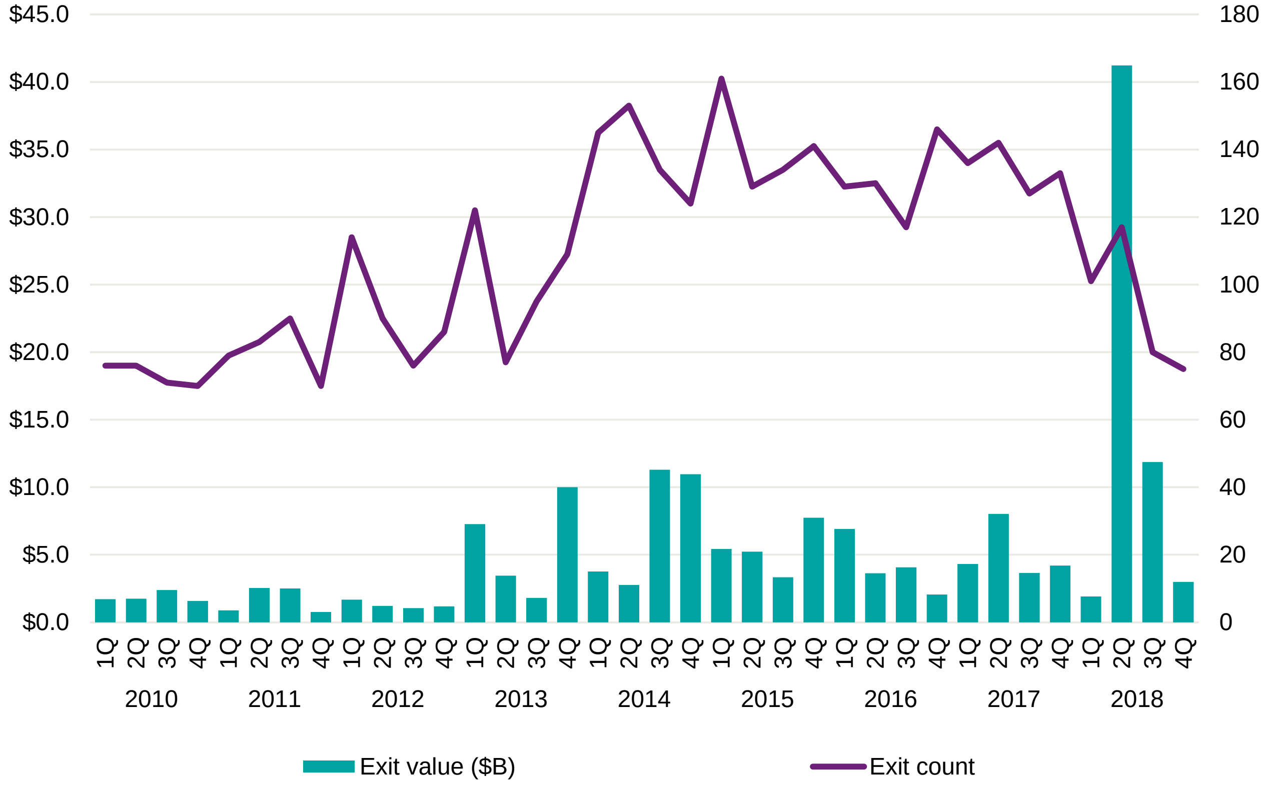
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

Once again, it must be noted that new business creation is notoriously difficult to track and, moreover, historical lags affect not only venture financing tracking, but also such figures (as, frankly, lagging affects all private financial and economic data). Moreover, new businesses in many European nations likely seek alternatives to venture funding initially. Having said that, it is striking that the decline of investors willing to back fledgling businesses for the first time has been so pronounced in Europe overall for some years now.

Exit cycle subsides at the end of the year

Venture-backed exit activity in Europe

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

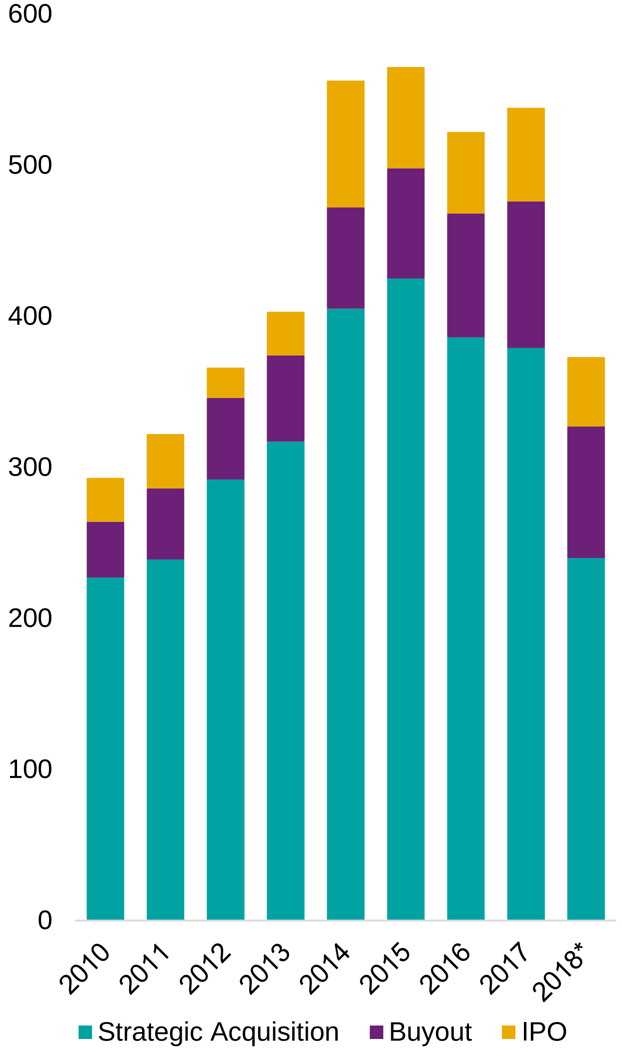
The outlier exit of Spotify masks the fact that the back half of 2018 actually saw relatively strong exit values, even as volume continued on its downward trend, commenced at the end of 2016. As opposed to the US, Europe relies even more heavily on acquisitions and, thus, any downturn in the M&A cycle has a disproportionately depressing effect.

KPMG Enterprise

Spotify & Adyen propel 2018 to a strong record in terms of value

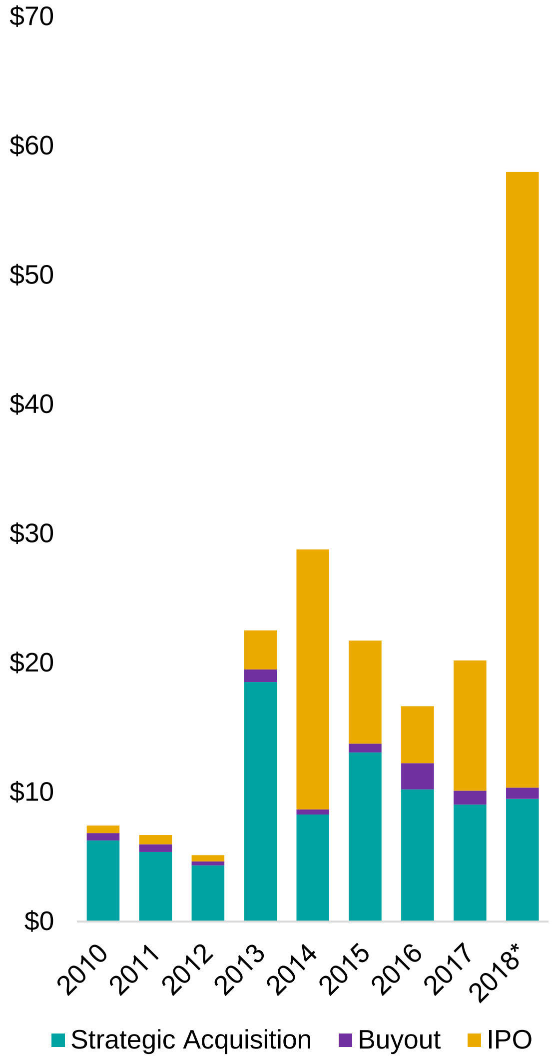
Venture-backed exit activity (#) by type in Europe

2010–2018*



Venture-backed exit activity ($B) by type in Europe

2010–2018*



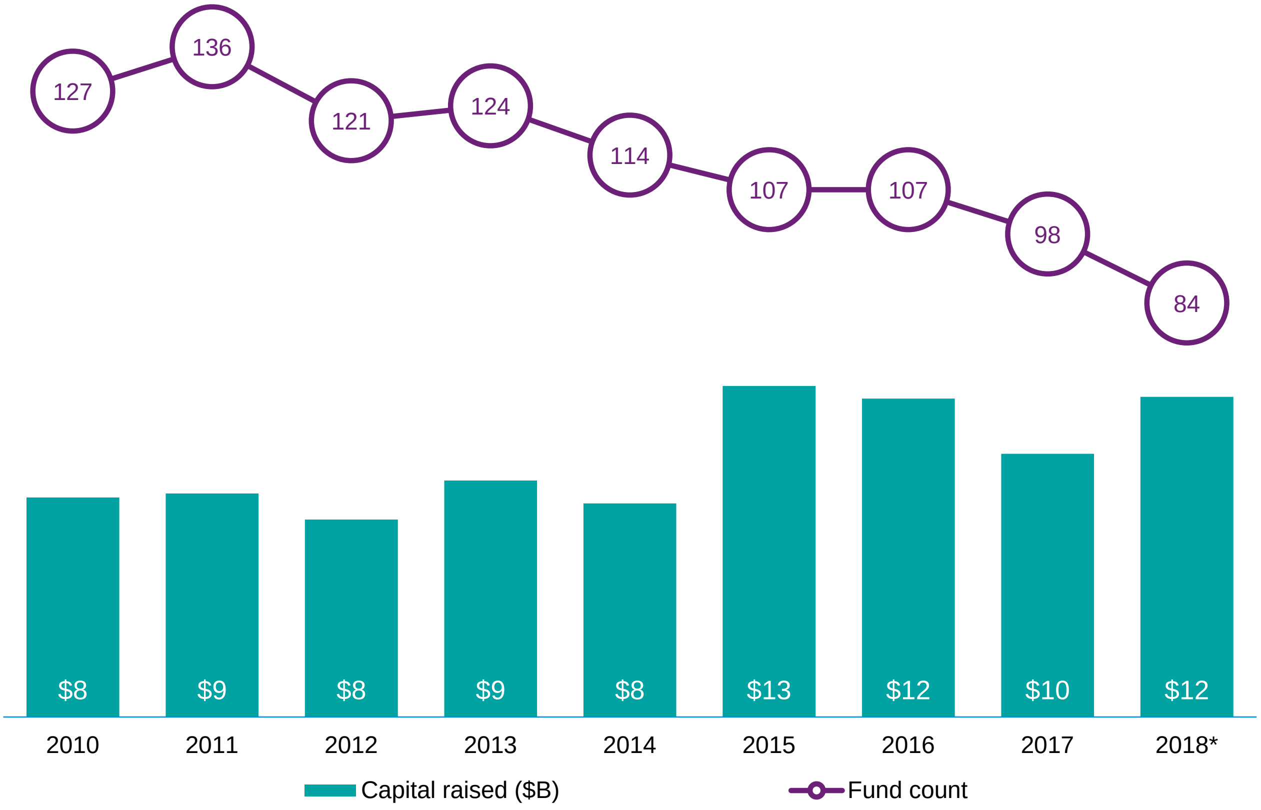
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

A gentle decline in volume still results in a strong year for fundraising value

European venture fundraising

2010–2018*



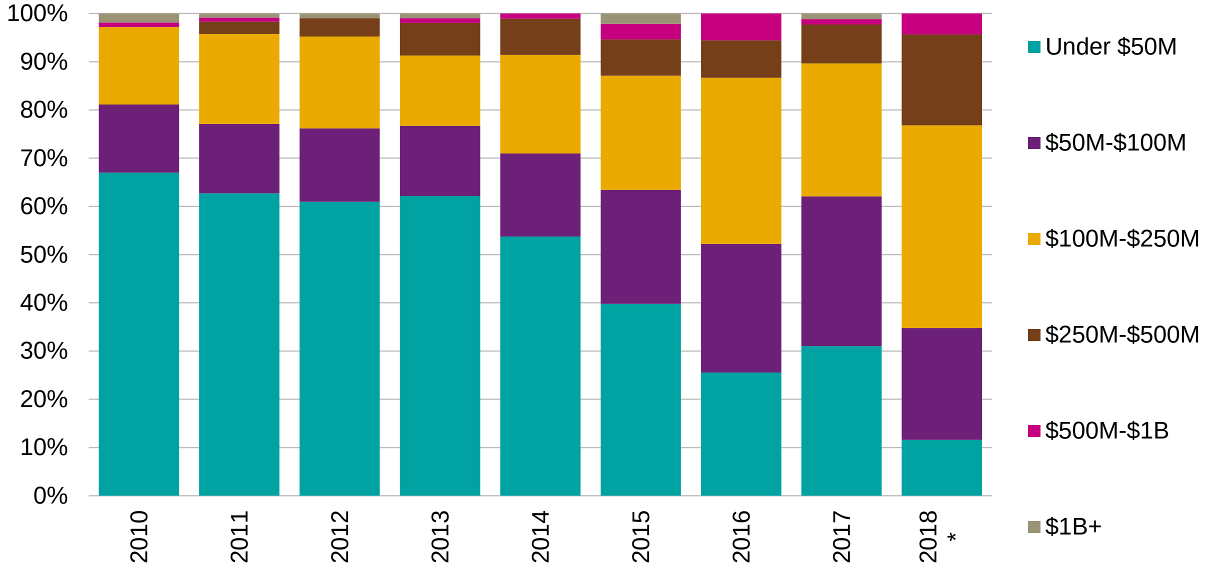
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

With year-end tallies in, it's clear now that the European venture scene has experienced a gradual slide in fund counts throughout the decade. However, the past 4 years have seen double-digit tallies of VC invested in the billions apiece, ensuring the continent has plenty of active funds with large sums to dispense in the years to come.

Fundraising completes dramatic shift to larger end of the market

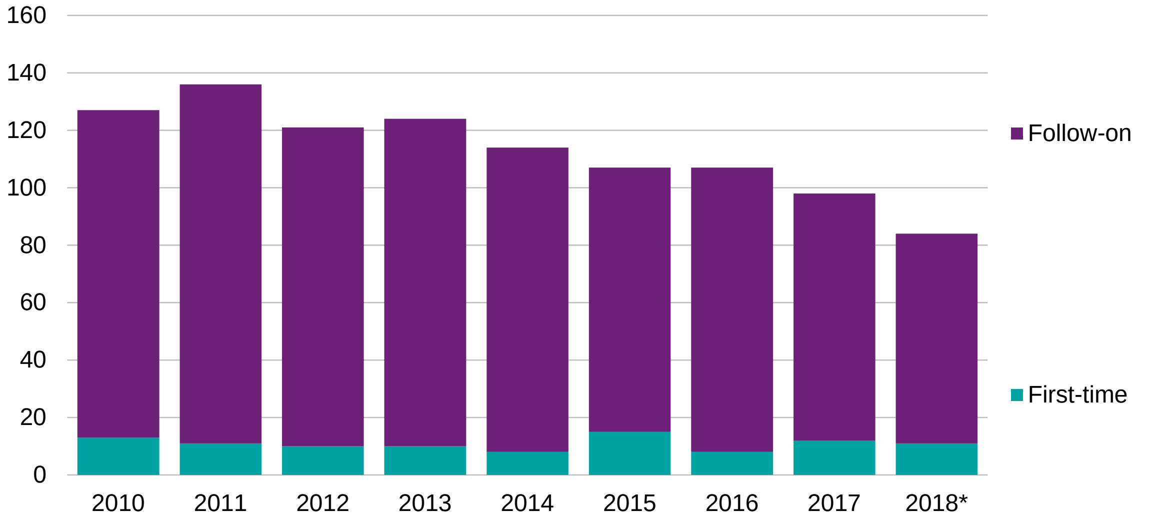
Venture fundraising (#) by size in Europe

2010–2018*



First-time vs. follow-on venture funds (#) in Europe

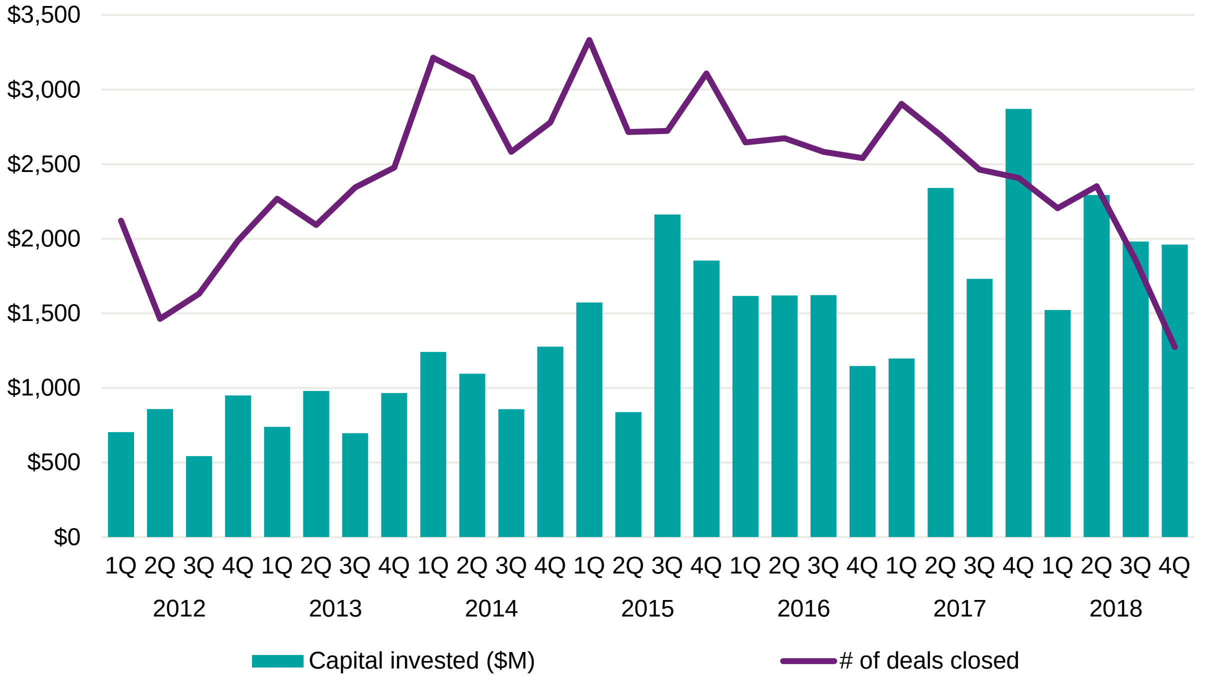
2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

2018 ends with a slide in volume deepening

Venture financing in the United Kingdom
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

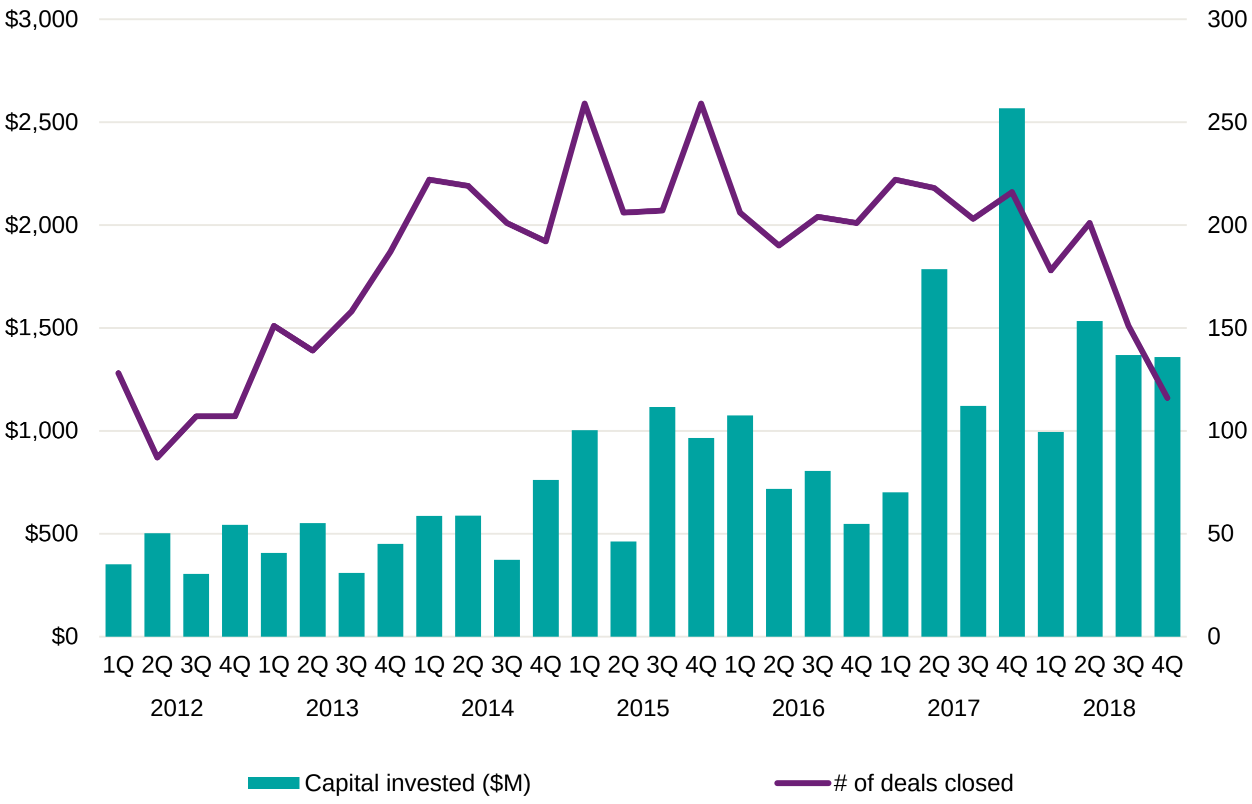
For years now, the true implications of Brexit have remained open questions. While some companies have responded by planning to shift headquarters, the venture ecosystem would appear to not have been much affected thus far, although, anecdotally, there are concerns around competing for talent. However, the back half of 2018 finally saw a dramatic decline in the volume of completed financings, indicating that as the deadline approaches, investors are growing even more cautious, waiting to see whether a plan materializes.

"Real estate is one of the the biggest asset classes globally, but to date, disruption has been limited to specific parts of the value chain. In 2018, we saw large amounts of Venture capital going into PropTech businesses, both in the UK with businesses like Nested, and globally with companies such as OpenDoor. We expect this momentum to accelerate in 2019."

Patrick Imbach
Head of KPMG Tech Growth, **KPMG in the UK**

London sees majority of volume slide

Venture financing in London
2012–Q4'18

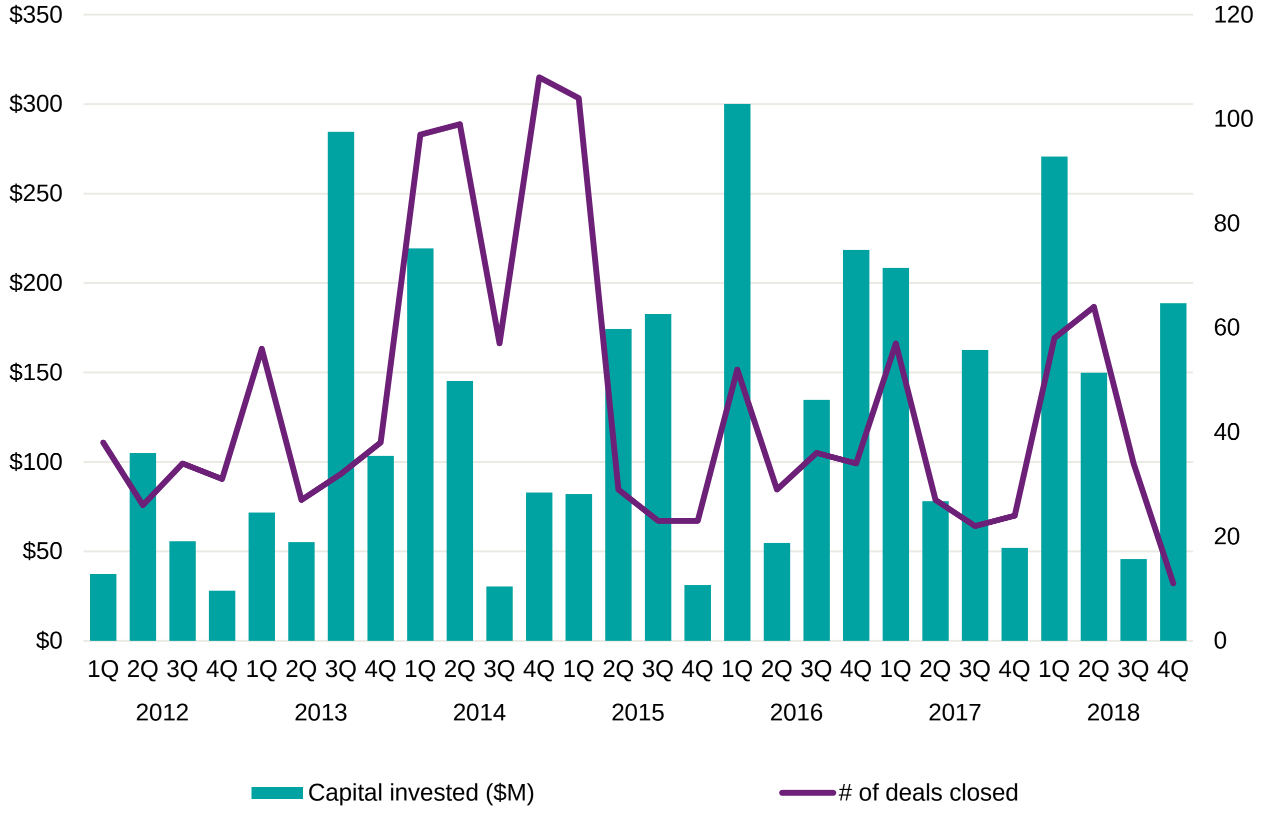


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

London is not going to lose its status as a global financial center and concentration of traditional private investment managers overnight. Having said that, London's financial industry continues to endure rumblings of losing its status as major banks relocate due to Brexit. As the deadline approaches, it is likely that any decline is due to investors pressing pause and waiting to see how ramifications may unspool in 2019.

2018 ends on a high note

Venture financing in Ireland
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

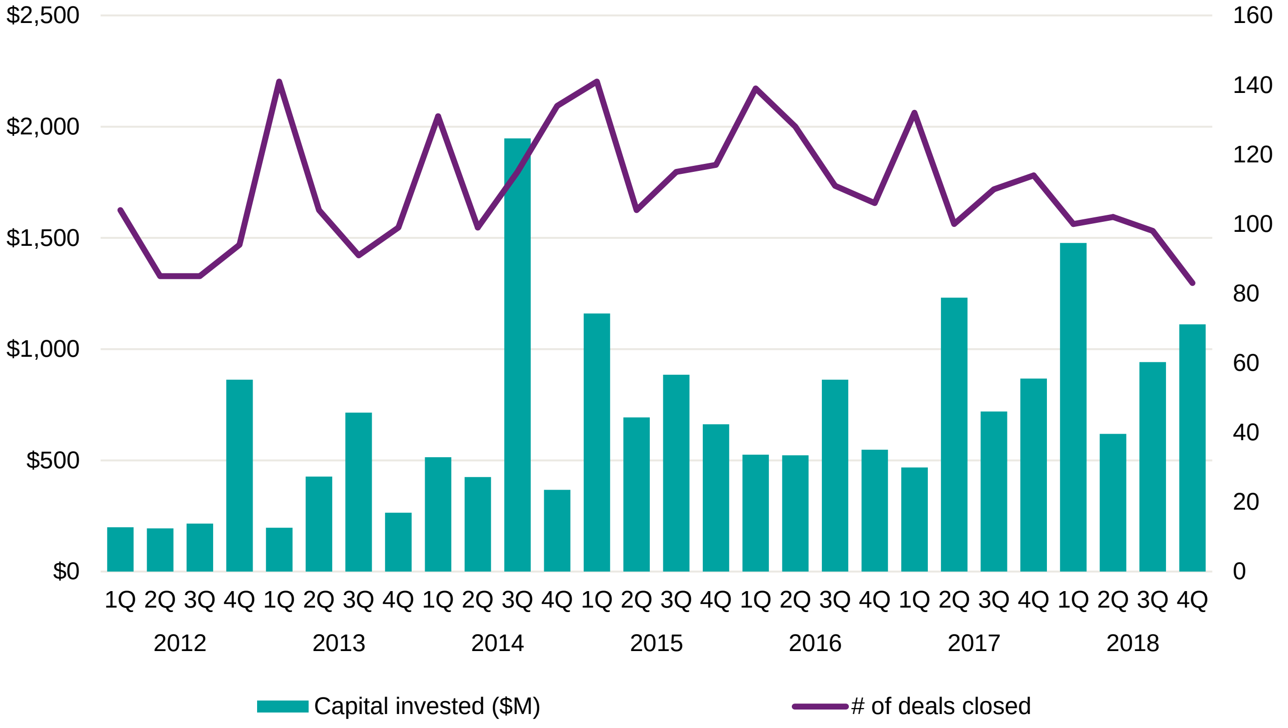
The Irish venture ecosystem continues to see significant skew, with the last quarter of 2018 closing the year on a high note primarily due to the massive raises by surgical devicemaker GC Aesthetics and biotech Inflazome.

"Q4'18 was a strong quarter in Ireland, driven principally by significant investments in pharma and biotech companies. Companies in these sectors tend to require considerable funding to grow and scale. Well-funded Irish pharma and biotech companies are competing impressively on the global stage."

Anna Scally
Partner, Head of Technology and Media and Fintech Lead, **KPMG in Ireland**

Quarterly volume seems set in steady plateau

Venture financing in Germany
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

The Germany venture scene enjoyed steady tallies of completed financings as well as healthy, very historically healthy, sums of VC invested throughout much of 2017 and 2018, and the slight decline at the end of 2018 is likely to be due more to data lags than anything else.

"In Germany, we have seen many established VCs growing and moving into larger and larger funds. This trend is expected to continue into 2019, along with the rise of smaller seed funds that are actively involved in providing professional guidance and mentorship to their portfolio companies."

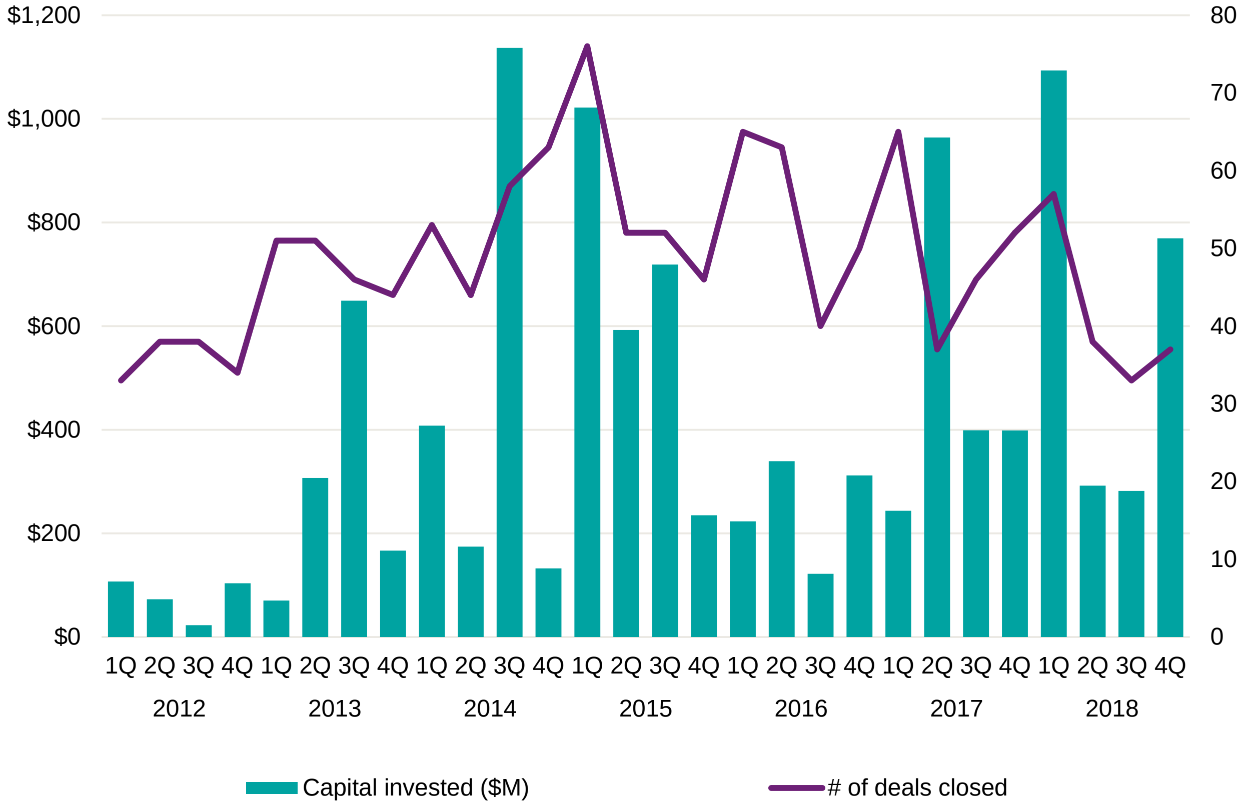
Tim Dümichen
Partner
KPMG in Germany

KPMG Enterprise

A blockbuster Q4 results in a strong 2018 overall

Venture financing in Berlin

2012–Q4'18

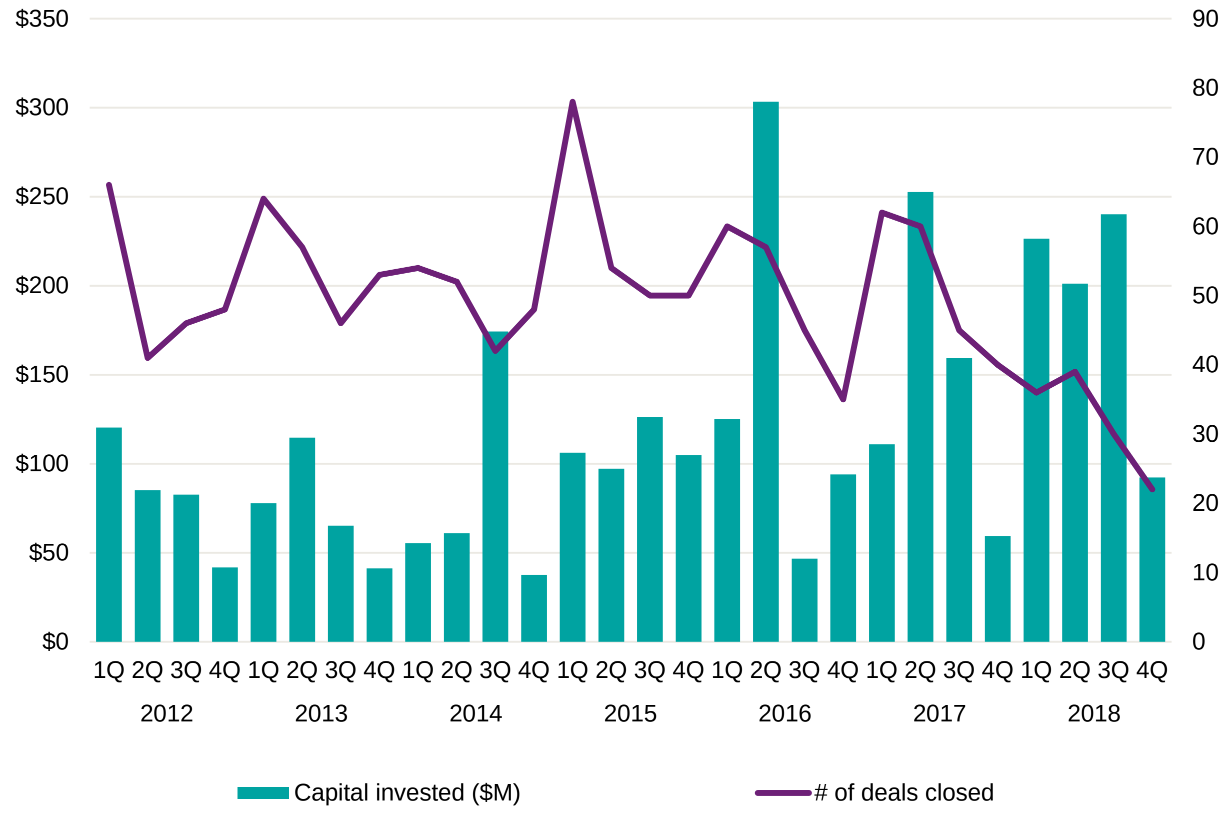


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Despite the new, lower level of quarterly volume persisting throughout 2018, the Berlin ecosystem still recorded a significant influx of capital to close the year, due primarily, to the outlier, twin financings of $150 million apiece that occurred in Q4 — travel planning platform GoEuro and vacation rental HomeToGo, coincidentally enough, were responsible.

Spain finally sees slower quarter at 2018's close

Venture financing in Spain
2012–Q4'18



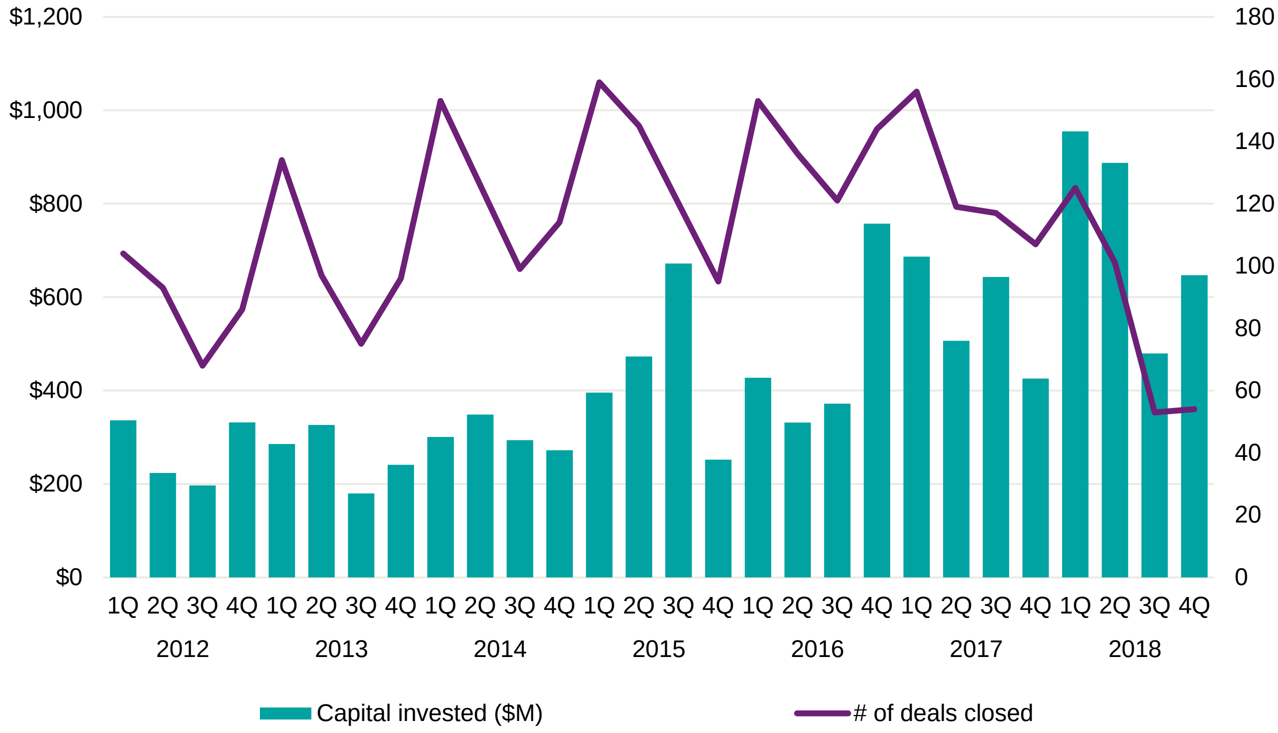
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

At this point, Spain's venture ecosystem is still skewed by outlier raises on a quarterly basis but, once again, it's worth noting the fact it still exhibits such companies speaks to the intriguing, varied dynamics of its startup scene as well as economy. In the final quarter of the year, only one company raised a hefty sum, however — business travel management platform TravelPerk.

After a blockbuster half, a stabilization

Venture financing in France

2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

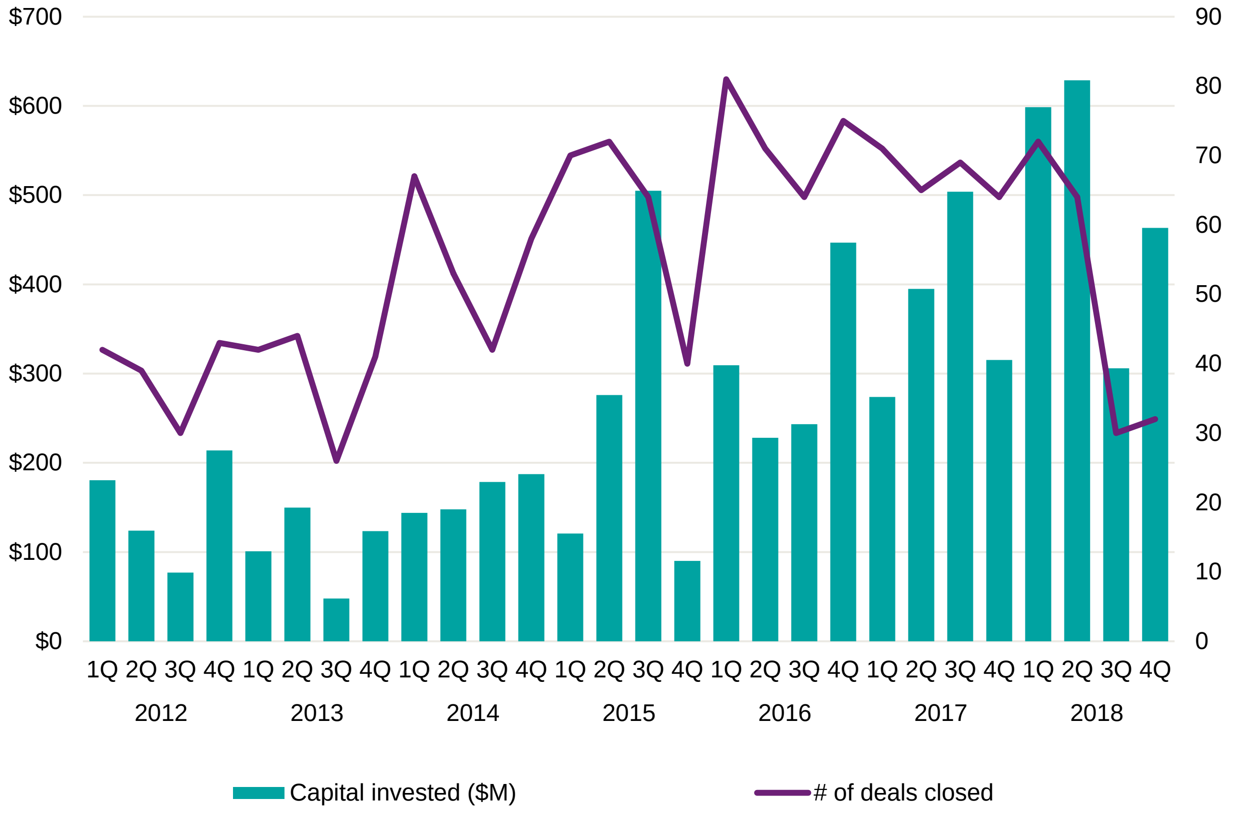
After a blockbuster first half in terms of VC invested, France saw a stabilization at a subdued volume to close out the year, with notable financings including BlaBlaCar closing upon nearly $118 million in VC in November, and InnovaFeed, a company focused on developing insect-based protein for animals and aquaculture.

KPMG Enterprise

The epicenter of French VC sees rebound

Venture financing in Paris

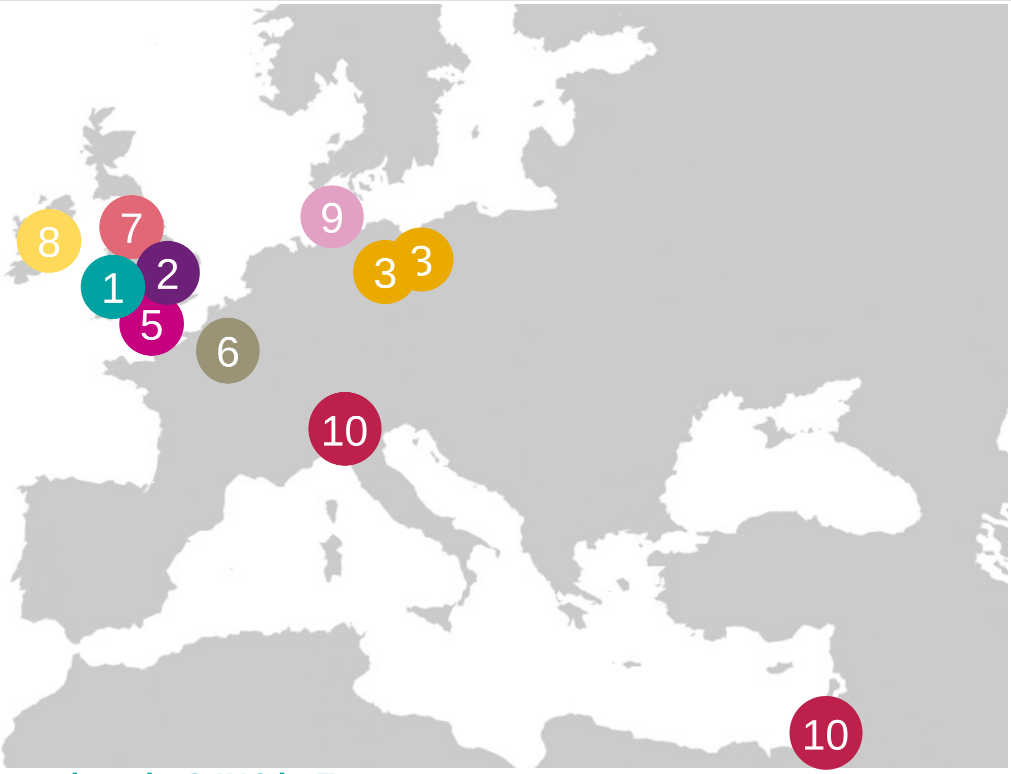
2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Most of the money in French VC still flows to Paris, so the city of lights of almost necessity recorded the downturn in counts more sharply than the nation on the whole but, again, that downturn stabilized at the end of the year; VC invested, however, rebounded.

Q4 sees a host of cities raise the largest sums



Top 10 financings in Q4'18 in Europe

1 **Graphcore** — $200M, Bristol
Electronic components
Series D

2 **Nested** — $156.45M, London
Real estate
Early-stage VC

3 **HometoGo** — $150M, Berlin
Platform software
Late-stage VC

3 **GoEuro** — $150M, Berlin
Platform software
Series D

5 **Moonbug** — $145M, London
Entertainment
Series A

6 **BlaBlaCar** — $117.7M, Paris
Transportation
Late-stage VC

7 **Monzo** — $110.6M, London
Financial software
Series E

8 **GC Aesthetics** — $97M, Dublin
Surgical devices
Late-stage VC

9 **Galecto** — $92M, Copenhagen
Drug discovery
Series C

10 **Team8** — $85M, Tel Aviv
Cyber-defense
Early-stage VC

10 **Nexthink** — $85M, Lausanne
Business software
Late-stage VC

Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

In Q4'18 VC-backed companies in the Asia region raised

$15B

across

262 deals

Massive deals drive VC investment in Asia throughout 2018

Asia continued to be the trendsetter in the area of massive deal-making in 2018, a fact epitomized by Ant Financial's record $14 billion raise in Q2'18. While a significant outlier in terms of dollar value, the deal reflects the growing reality that $1 billion+ deals are becoming normal in the region. In Q4'18, Asia saw four deals above $1 billion, led by a $3 billion raise by China-based ByteDance.

Big winners across Asia to end 2018

While China dominated VC investment in Asia during 2018, Q4'18 highlighted the growing maturity of startups across Asia and the widespread VC activity in the region as a whole. Notably, Grab in Singapore,[12,13], Tokopedia in Indonesia and Swiggy in India each raised $1 billion+ rounds during the quarter, while India-based Zomato raised $360 million and Woowa Brother in Seoul raised $320 million.

These giant deals reflect a widespread trend toward late-stage deals in Asia, with investors making bets on a smaller number of bigger deals in the region. While this trend mirrors one seen globally, some of the impetus towards larger deals in Asia may simply be the enormous size of the Asia market and the large consumer population being targeted by specific companies.

Continued support for China startups

The Chinese government continues to support the rapid development of an innovation ecosystem. In September, it issued an entrepreneurship and innovation development guideline focused on enhancing the incubator system in the country. These changes could spark consolidation among China's thousands of startup incubators to better attract new funding.

Strong VC investment activity in India to end 2018

The VC market in India gained strength in 2018, with a number of notable investments in Q4'18, including Swiggy's billion dollar raise in December and restaurant search and rating platform Zomato's $360 million raise in October. Deal sizes in the country grew considerably, a sign of the increasing maturation of the India VC market. Fintech continued to be a big bet for VC investors in India throughout the year, in addition to marketplace platforms and ride hailing.

After experiencing no new unicorns in 2017, India saw four new unicorns emerge during 2018. The new unicorns reflected the growing diversity of India's startup ecosystem, with each unicorn representing a different industry (i.e. Byju — edtech, Policy Bazaar — fintech, Swiggy — food delivery, and Oyo — hospitality). Heading into Q1'19, VC investment in these industries is expected to continue to grow. There will also likely be an increase in a number of niche innovation areas, such as digital platforms to facilitate used car sales.

[12] https://ca.news.yahoo.com/indonesias-jek-starts-trial-launch-singapore-challenges-grab-082628621--sector.html
[13] https://www.japantimes.co.jp/news/2018/11/22/business/softbank-invest-2-billion-coupang-s-koreas-largest-online-retailer/#.XAPvivZFyVM

Massive deals drive VC investment in Asia throughout 2018

IPO activity increasing in Hong Kong

The number of IPOs on the Hong Kong Stock Exchange reached a new record in 2018, capping off a very positive year for exits in the region. Changes to listing rules for tech companies with dual-class share structures and for biotech companies earlier in the year helped drive some of this activity. To date, the post-IPO performance of a number of these companies has been somewhat tepid, however, global market volatility late in 2018 is likely to blame more so than company-specific factors.

Despite some caution about private valuations potentially being higher those within the public markets, sentiment remains favorable for future listings in Hong Kong.

Interest in AI growing exponentially

VC investor interest in artificial intelligence and machine learning grew significantly throughout 2018, with VC investors across Asia drawn by a variety of solutions applicable across multiple industries. Facial recognition was a particularly hot technology of interest in Asia, in addition to motion detection and natural language processing.

China-based SenseTime has quickly become one of the dominant market leader in facial recognition, making it somewhat more difficult for smaller AI-focused companies to gain traction. However, there will likely continue to be strong growth in other areas of AI given the widespread applicability of solutions and the growing interest from corporates to embed such technologies within their own applications. However, with the focus of investors primarily on late-stage deals, it will likely be difficult for AI-focused startups to attract funding without strong use cases.

Trends to watch for in 2019

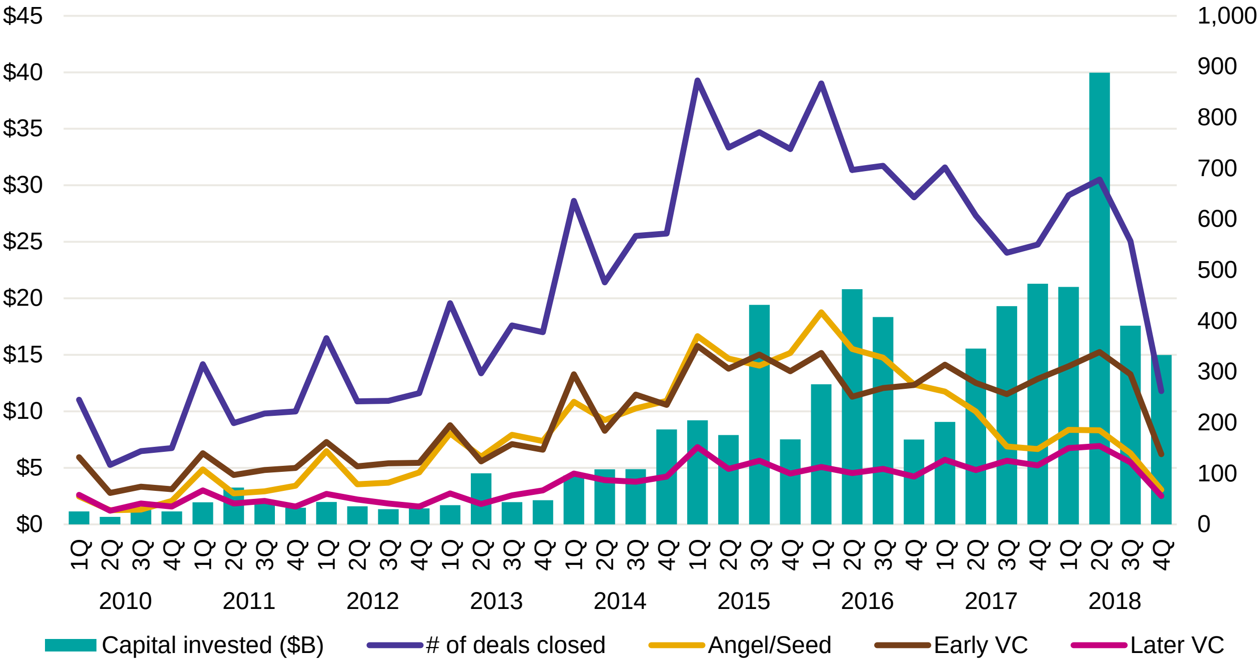
Asia-based VC investment is expected to start off on a somewhat cautious note in 2019 given the global volatility in the public markets seen globally at the end of 2018. Despite shifting macroeconomic and geopolitical factors, industries such as healthcare, life sciences, and education, in addition to technologies like artificial intelligence and other highly innovative technologies with broad applicability are expected to continue to attract significant funding. While some VC investors may be more cautious, particularly in Q1'19, strategic corporate investors are expected to remain active.

KPMG Enterprise

A historic year sees a slide in volume at the finish

Venture financing in Asia

2010–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

2018 was characterized largely by even more mega-deals than anyone could have expected at the start of the year and, thus, on the whole, remains historic for the region. Although data will come in and boost the total, it is likely that the final quarter volume will show investors were restrained.

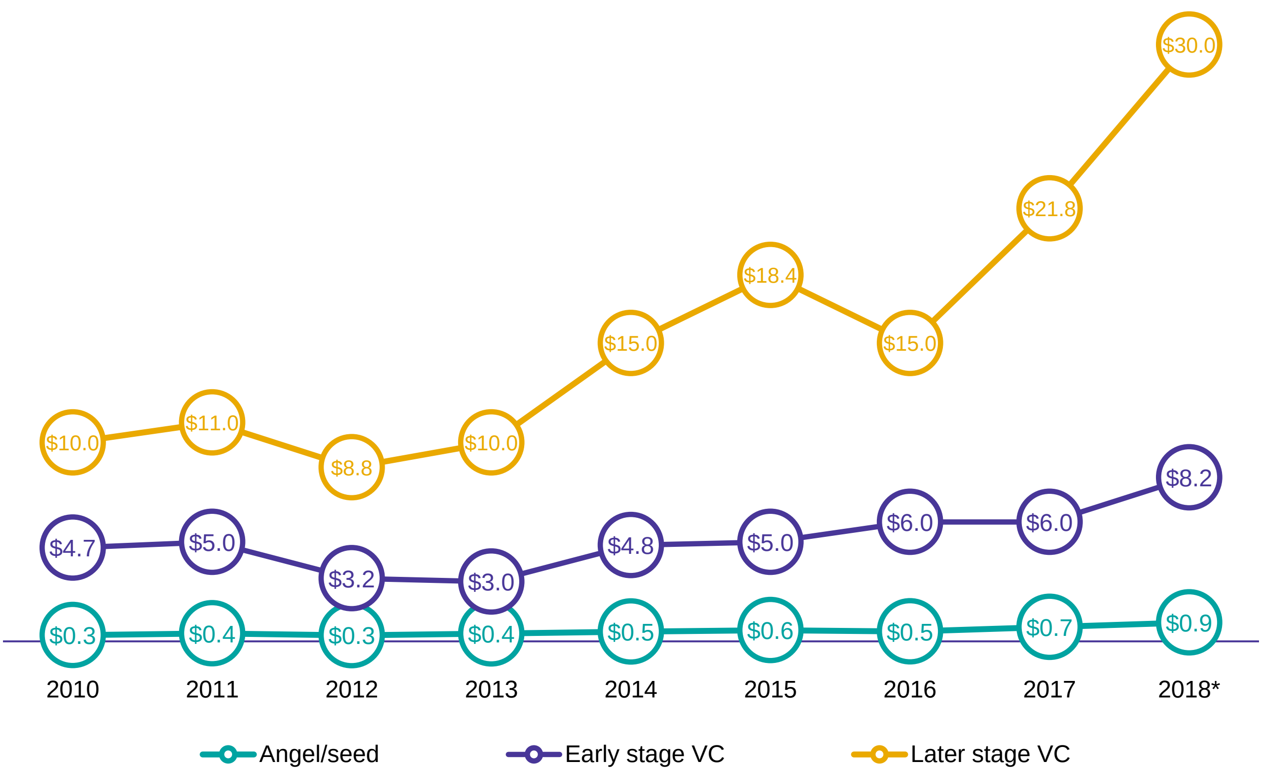
"There's no end in sight for massive deals in Asia. That is because of the significant size and scale of this market. While these deals are big compared to those done elsewhere, they are increasingly typical of companies looking to dominate the regional market."

Egidio Zarrella
Head of Clients and Innovation Partner, **KPMG China**

Late-stage median size closes 2018 at twice the mark of 2016

Median deal size ($M) by stage in Asia

2010–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

It is worth noting that 2016 saw a slight dip relative to 2015 but, still, doubling the median size of late-stage rounds between 2016 and 2018 clearly illustrates the boom in late-stage funding that has occurred within the Asia-Pacific region.

KPMG
Enterprise

The volume of late-stage funding leads to skews

Median deal size ($M) by series in Asia

2010–2018*

Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

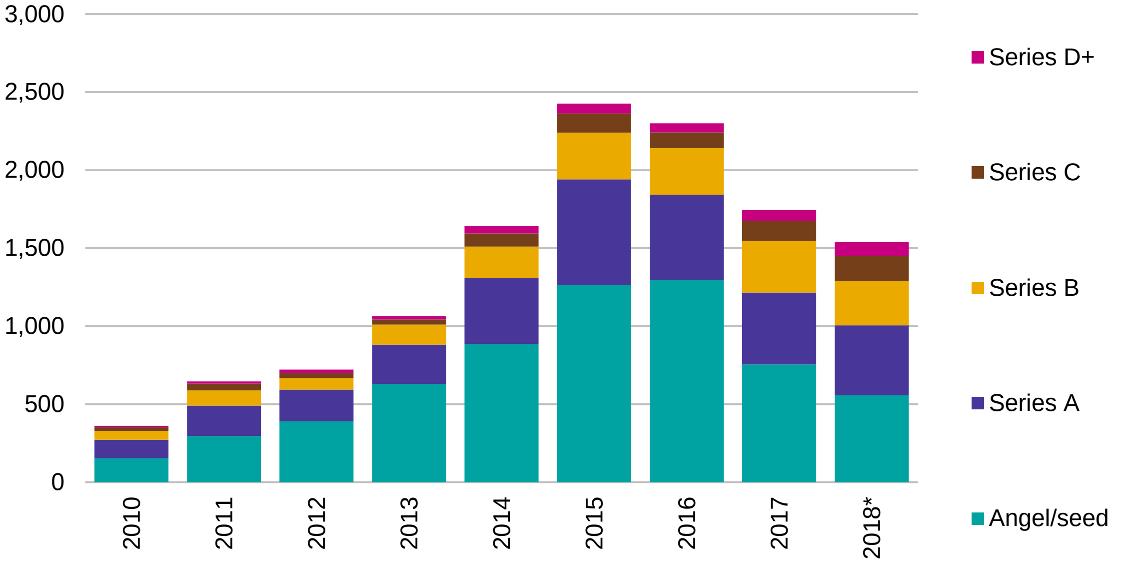
Note: Select figures are rounded for legibility.

KPMG Enterprise

Series C, D & later blend into a massive late-stage funding spree in 2018

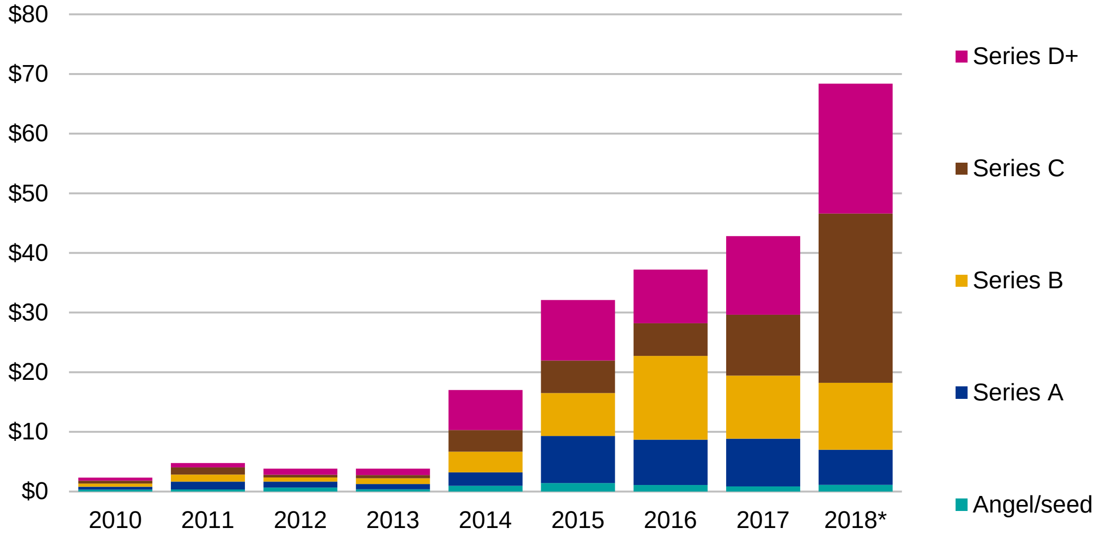
Deal share by series in Asia

2010–2018*, number of closed deals



Deal share by series in Asia

2010–2018*, VC invested ($B)



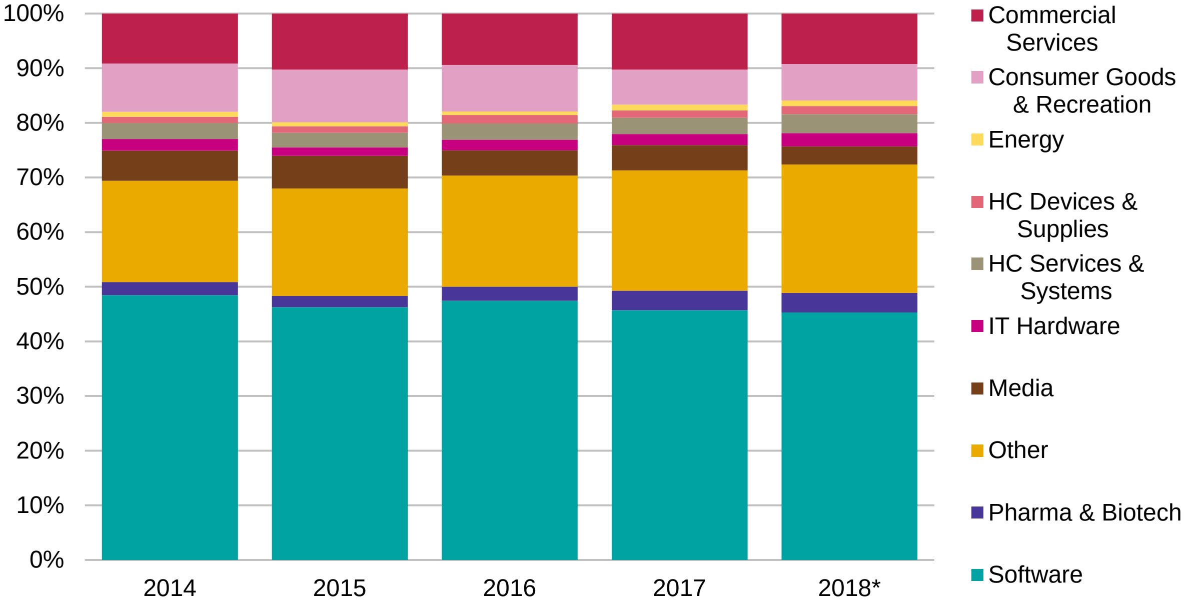
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

Software platforms raked in the most in 2018

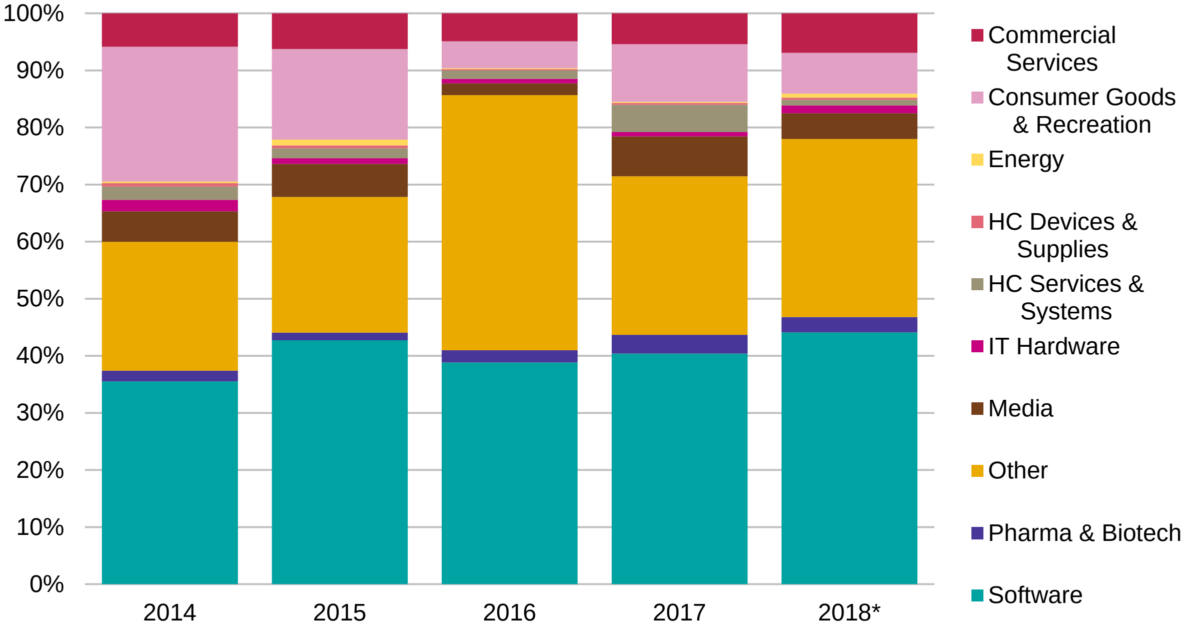
Asia venture financings by sector

2014–2018*, number of closed deals



Asia venture financings by sector

2014–2018*, VC invested ($B)

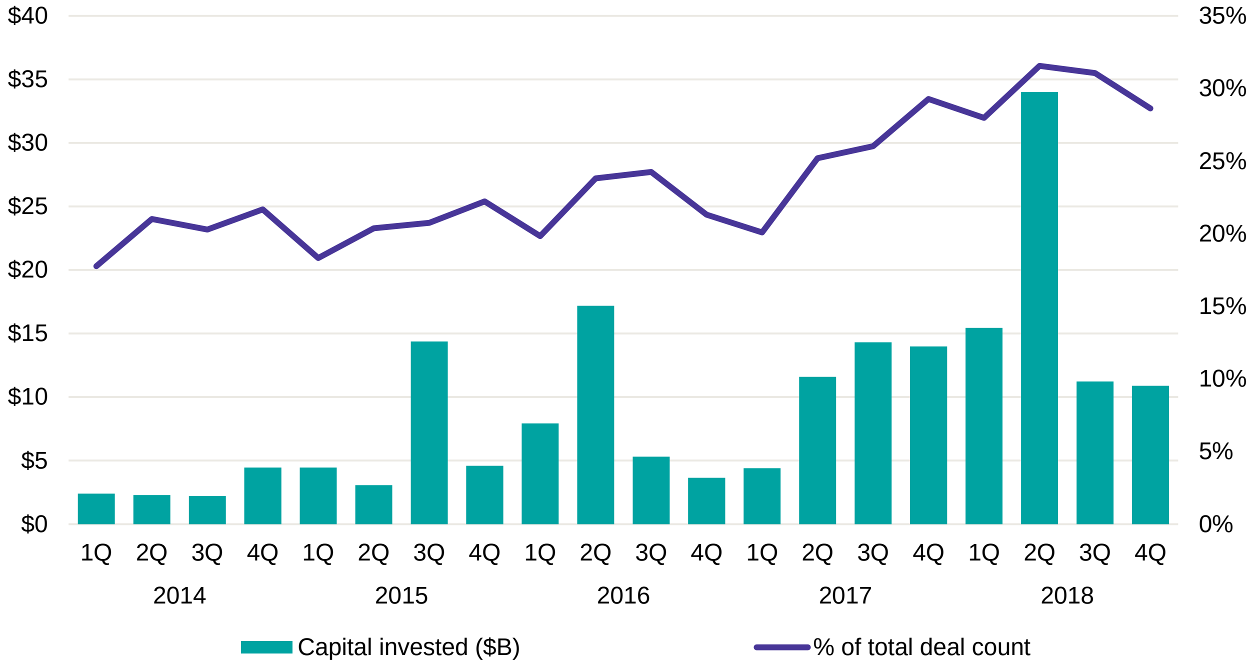


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

The Asian model intensifies

Corporate participation in venture deals in Asia

2014–Q4'18



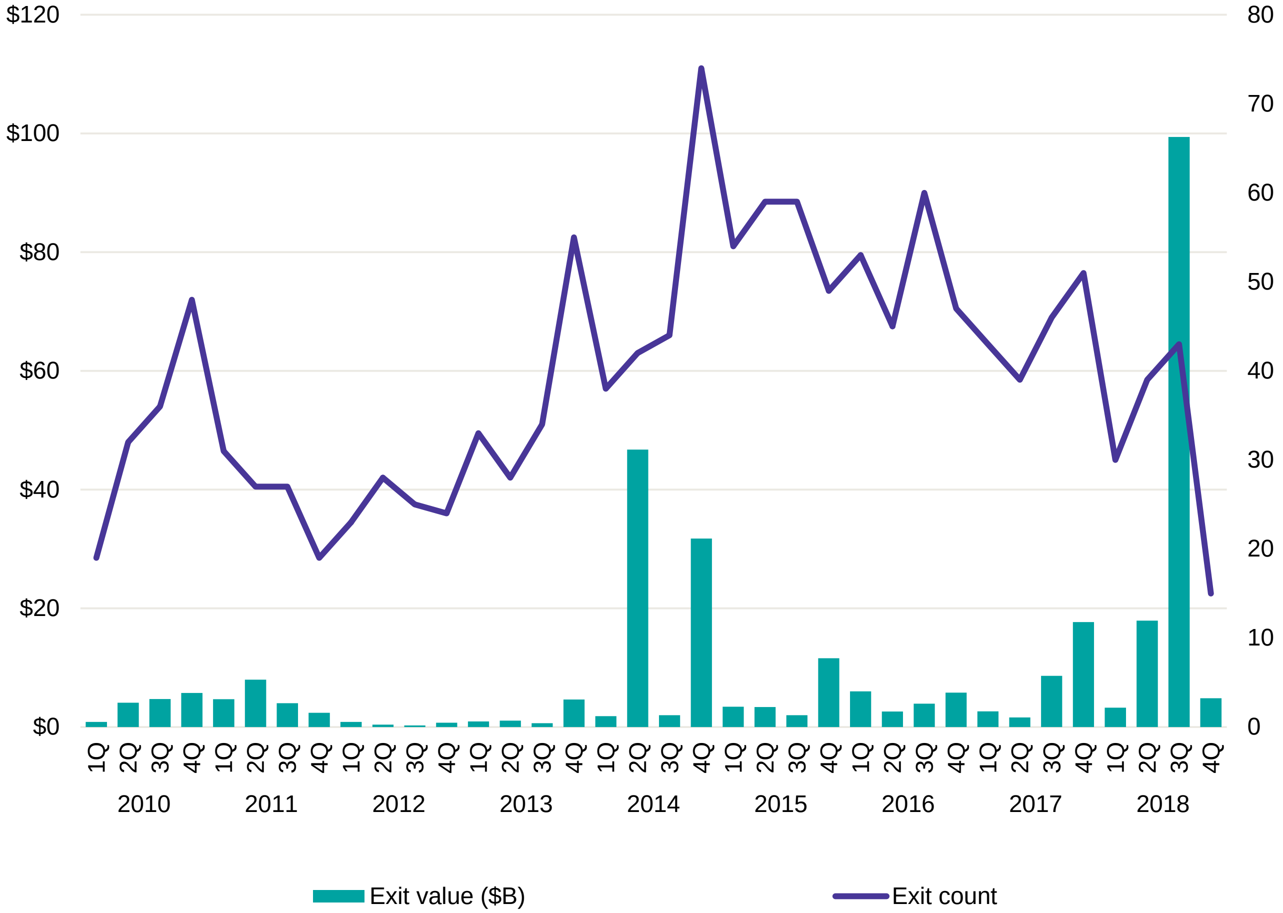
Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Silicon Valley evolved to its current status today due in no small part to favorable government regulations and enablement of the venture industry. In many ways, the Asia-Pacific venture ecosystem is mimicking that same model, yet with much more active fostering via government-affiliated investment corporations and firms. The elevation of participation throughout 2018 shows that that mimicking is intensifying.

After a record quarter, a downturn

Venture-backed exit activity in Asia

2010–Q4'18

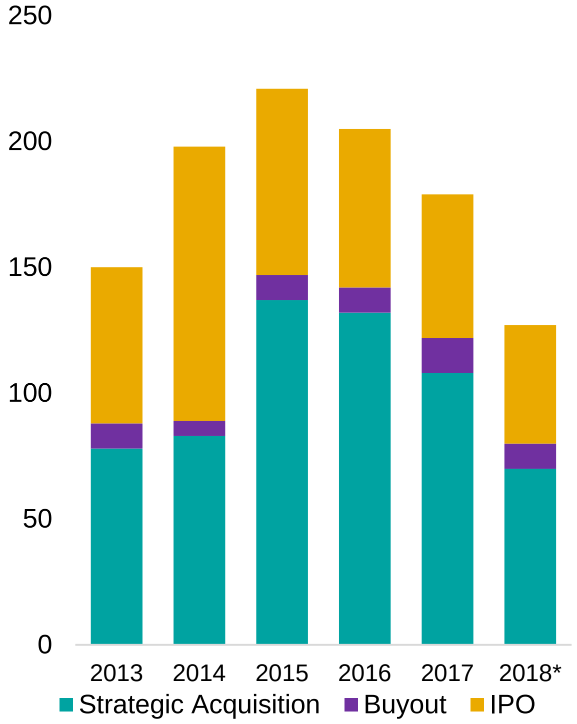


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Largely due to inclusion of IPOs' pre-valuations, aggregate exit values hit record highs

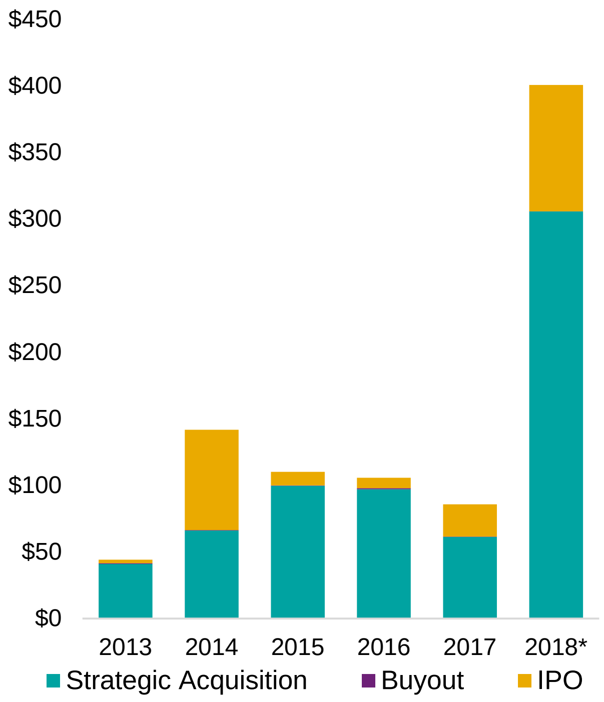
Venture-backed exit activity (#) by type in Asia

2013–2018*



Venture-backed exit activity ($B) by type in Asia

2013–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

"Recent global market volatility has had some impact on the trading price of some recently listed companies in Hong Kong. This simply reflects the market sentiment, not actual company fundamentals, as individually, there are many strong players. Performance over the next few quarters will be a better indicator of post IPO performance."

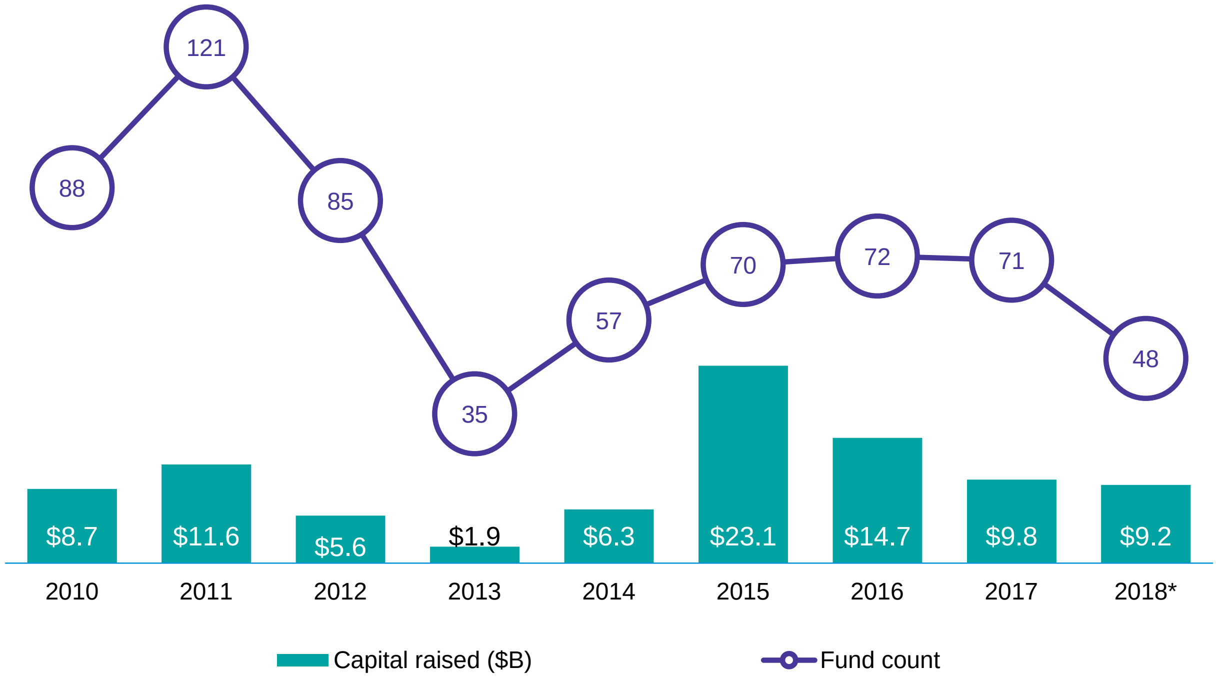
Irene Chu
Partner, Head of New Economy, Hong Kong Region, **KPMG China**

KPMG Enterprise

Traditional VC fundraising has a slower year as the ecosystem continues to evolve

Venture fundraising in Asia

2011–2018*



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

After a steady period of fundraising for 3 straight years, it appears that 2018 is set to record a slump even if lagging data catches up tallies somewhat, although VC raised still remains historically healthy. This is more likely due to the nascency of the Asian venture model that is emerging with much more active government program participation — the framework for private-sector capital markets is still evolving to some degree.

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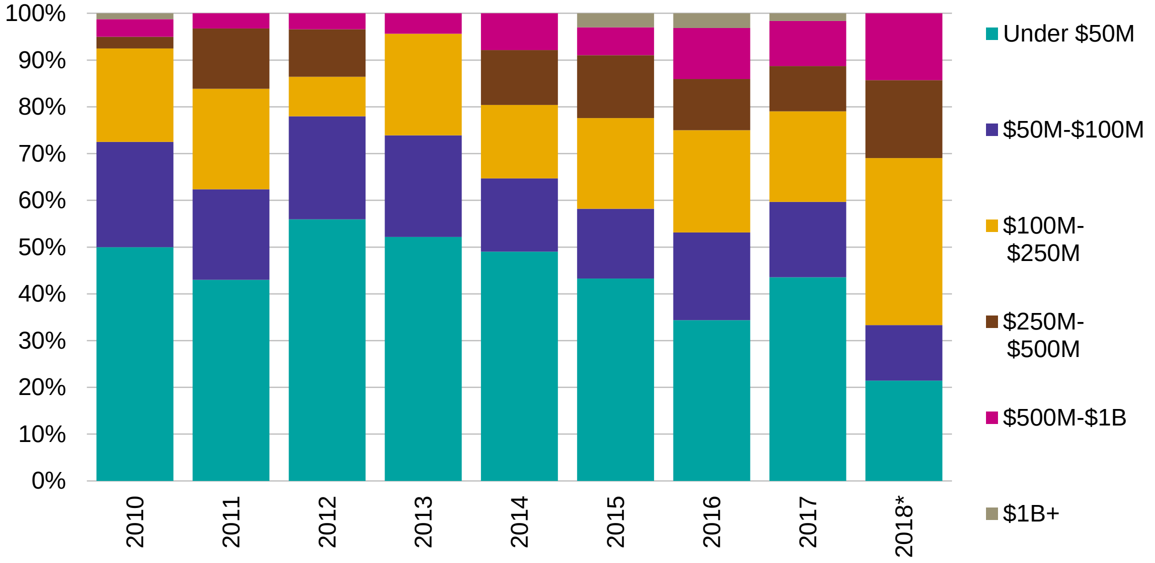
First-time fundraising still bodes well for the ecosystem going forward

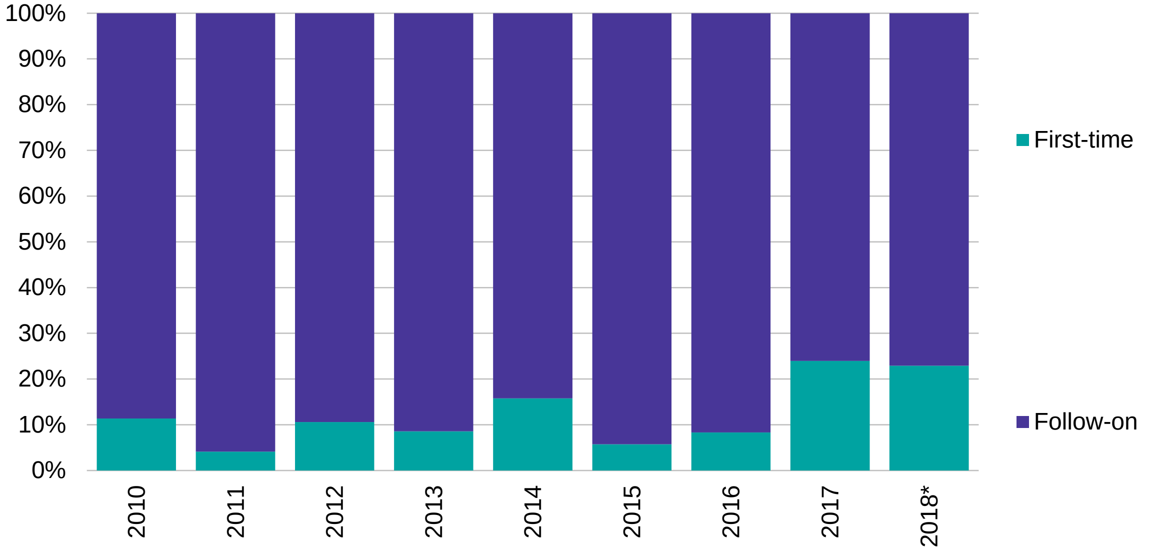
Venture fundraising (#) by size in Asia

2010–2018*



First-time vs. follow-on venture funds (#) in Asia

2010–2018*

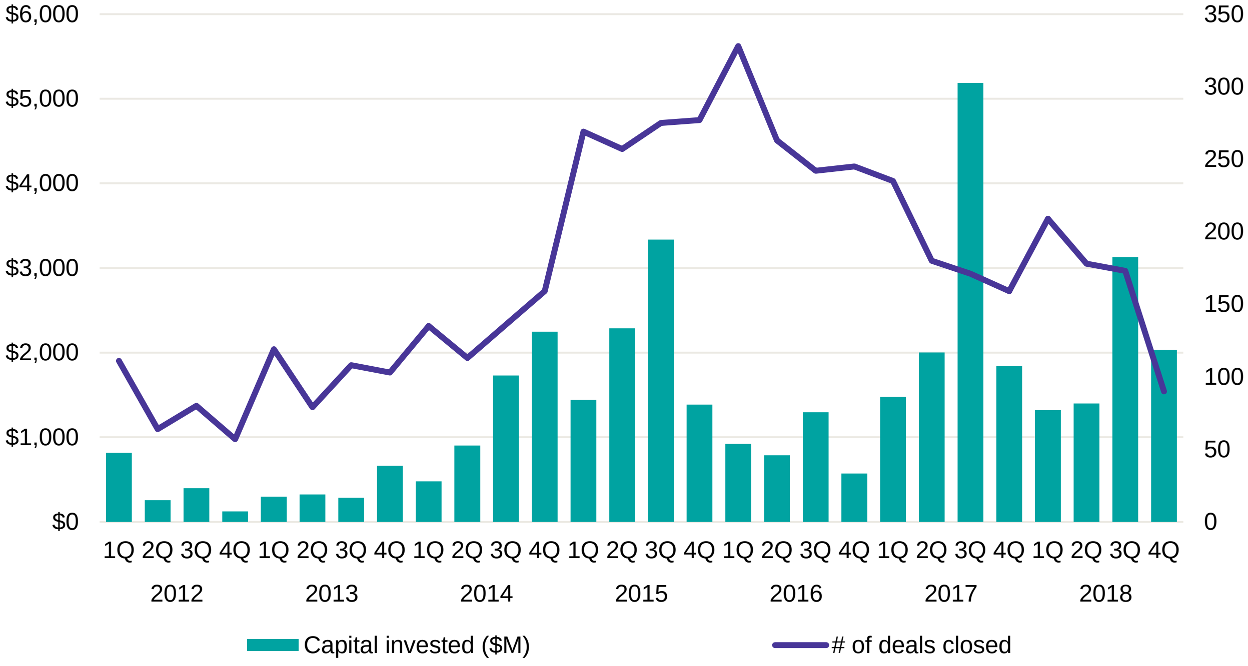


Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. *As of 12/31/18. Data provided by PitchBook, January 15, 2019.

A robust year for Indian VC

Venture financing in India

2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

The downturn in the final quarter of 2018 belies the fact the Indian venture ecosystem, although not seeing the highs experienced earlier the decade, is still going strong, especially relative to historical tallies. The year closed at $7.9 billion overall, the third-highest tally of the decade, in aggregate VC invested.

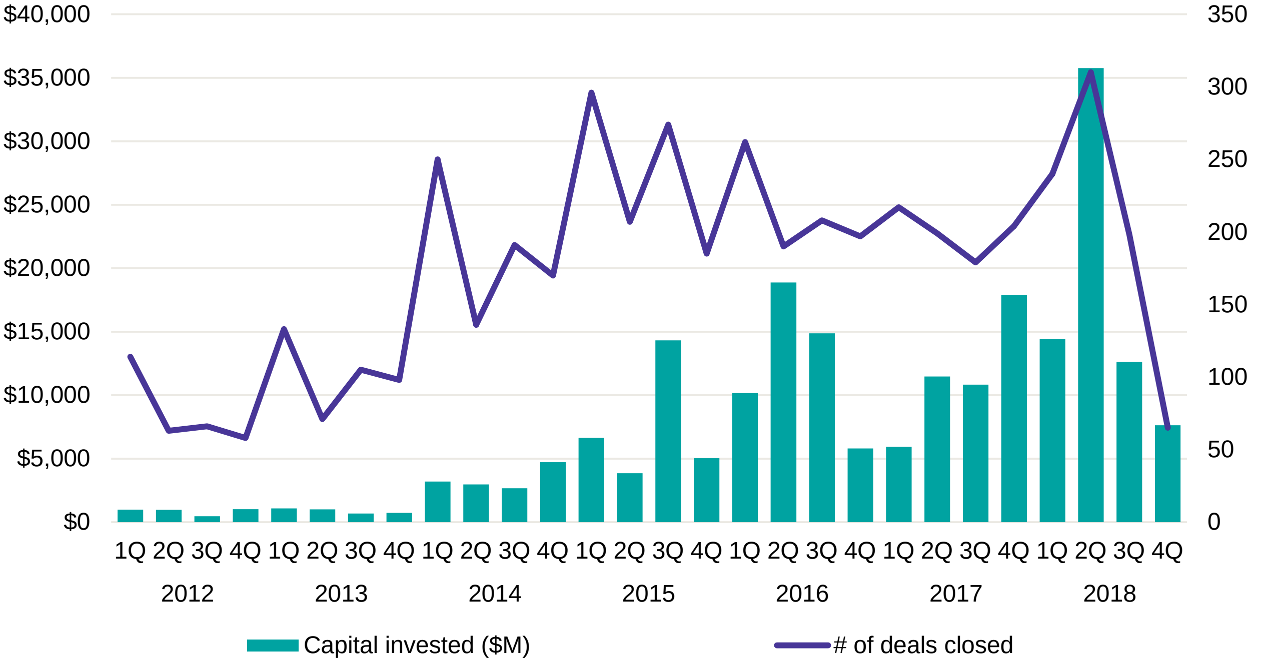
"India is one of the fastest growing large economies in the world, so anything with a consumer story is very attractive to customers today. We're seeing a lot of action in consumer solutions — in addition to industrial, automotive and healthcare. The outlook is very positive heading into 2019."

Nitish Poddar
Partner and National Leader, Private Equity
KPMG in India

A historic year ends on a muted note

Venture financing in China

2012–Q4'18



Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

Regardless of the slide in volume, which is likely to persist even as data comes in, the Chinese venture ecosystem experienced a remarkable 2018, seeing one of the largest rounds in the emerging arena of late-stage venture and growth investment ever in the first half. The pace of investing may slow amid an influx of capital, and the only potential headwinds would be if Chinese companies saw reduced economic growth.

"In China, corporate VC is growing rapidly. More companies have VC arms and they are actively looking for disruptive technologies that can enhance their core business. AI for manufacturing defects detection, IoT sensors to monitor environmental factors, robots for customer interaction — corporate investors are interested in anything that will enhance the user experience or help them innovate on products and services."

Philip Ng
Partner, Head of Technology, **KPMG China**

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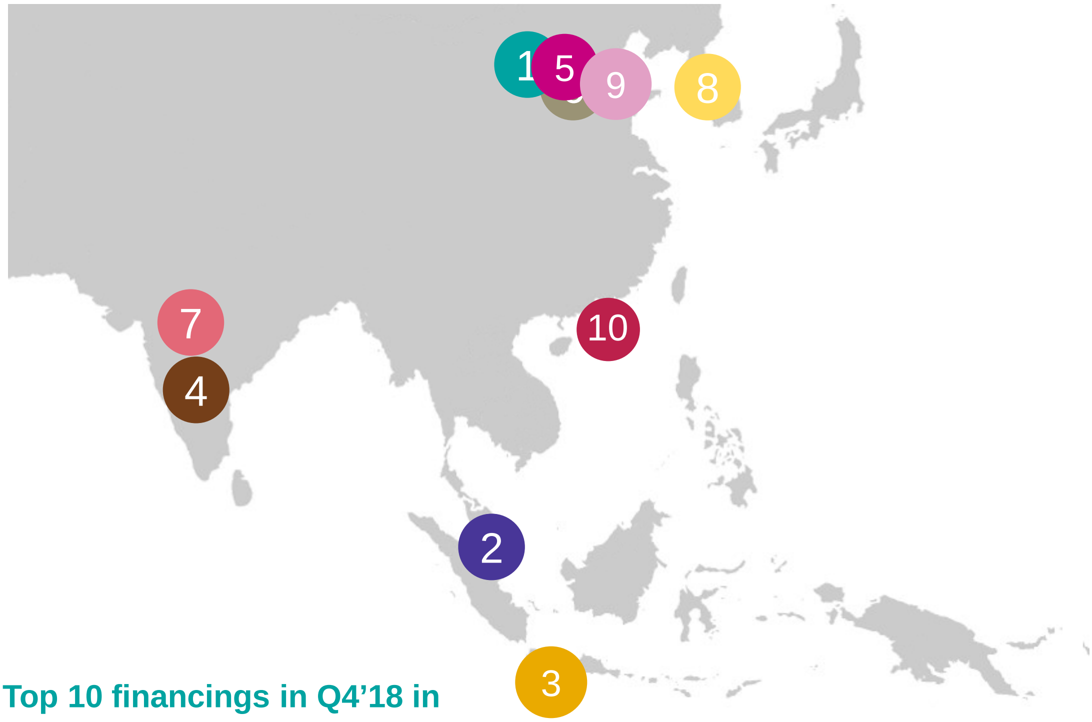
The region sees geographic diversity in top deals



Top 10 financings in Q4'18 in Asia-Pacific

1. **ByteDance** — $3,000M, Beijing
Information services (B2C)
Series D

2. **Grab** — $2,850M, Singapore
Transportation
Series H

3. **Tokopedia** — $1,100M, South Jakarta
Platform software
Series G

4. **Swiggy** — $1,000M, Bangalore
Platform software
Series H

5. **Chehaoduo** — $980M, Beijing
Platform software
Late-stage VC

6. **Meicai** — $800M, Beijing
Platform software
Late-stage VC

7. **Zomato** — $360M, Gurgaon
Social content
Late-stage VC

8. **Woowa Brothers** — $320M, Seoul
Food delivery
Late-stage VC

9. **Xiaozhu** — $300M, Beijing
Hotels & resorts
Series F

10. **Linklogis** — $220M, Shenzhen
Specialized finance
Series C

Source: Venture Pulse, Q4'18, Global Analysis of Venture Funding, KPMG Enterprise. Data provided by PitchBook, January 15, 2019.

KPMG Enterprise

KPMG Enterprise Innovative startup network. From seed to speed, we're here throughout your journey

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About KPMG Enterprise

About KPMG Enterprise

You know KPMG, you might not know KPMG Enterprise.

KPMG Enterprise advisers in member firms around the world are dedicated to working with businesses like yours. Whether you're an entrepreneur looking to get started, an innovative, fast growing company, or an established company looking to an exit, KPMG Enterprise advisers understand what is important to you and can help you navigate your challenges — no matter the size or stage of your business. You gain access to KPMG's global resources through a single point of contact — a trusted adviser to your company. It is a local touch with a global reach.

The KPMG Enterprise Global Network for Innovative Startups has extensive knowledge and experience working with the startup ecosystem. Whether you are looking to establish your operations, raise capital, expand abroad, or simply comply with regulatory requirements — we can help. From seed to speed, we're here throughout your journey.

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Methodology

KPMG uses PitchBook as the provider of venture data for the Venture Pulse report.

Please note that the MESA and Africa regions are NOT broken out in this report. Accordingly, if you add up the Americas, Asia-Pacific and Europe regional totals, they will not match the global total, as the global total takes into account those other regions. Those specific regions were not highlighted in this report due to a paucity of datasets and verifiable trends.

Fundraising

PitchBook defines venture capital funds as pools of capital raised for the purpose of investing in the equity of startup companies. In addition to funds raised by traditional venture capital firms, PitchBook also includes funds raised by any institution with the primary intent stated above. Funds identified as growth-stage vehicles are classified as PE funds and are not included in this report. A fund's location is determined by the country in which the fund is domiciled, if that information is not explicitly known, the HQ country of the fund's general partner is used. Only funds based in the US that have held their final close are included in the fundraising numbers. The entirety of a fund's committed capital is attributed to the year of the final close of the fund. Interim close amounts are not recorded in the year of the interim close.

Deals

PitchBook includes equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, venture capital firms, corporate venture firms and corporate investors. Investments received as part of an accelerator program are not included, however, if the accelerator continues to invest in follow-on rounds, those further financings are included. All financings are of companies headquartered in the US. The impact of initial coin offerings on early-stage venture financing as of yet remains indefinite. Furthermore, as classification and characterization of ICOs, particularly given their security concerns, remains crucial to render accurately, we have not detailed such activity in this publication until a sufficiently robust methodology and underlying store of datasets have been reached.

Angel/seed: PitchBook defines financings as angel rounds if there are no PE or VC firms involved in the company to date and it cannot determine if any PE or VC firms are participating. In addition, if there is a press release that states the round is an angel round, it is classified as such. If angels are the only investors, then a round is only marked as seed if it is explicitly stated.

Early-stage: Rounds are generally classified as Series A or B (which PitchBook typically aggregates together as early-stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors and more.

Late-stage: Rounds are generally classified as Series C or D or later (which PitchBook typically aggregates together as late-stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors, and more.

Corporate: Corporate rounds of funding for currently venture-backed startups that meet the criteria for other PitchBook venture financings are included in the Venture Pulse as of March 2018.

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Methodology, cont'd

Growth equity: Rounds must include at least one investor tagged as growth/expansion, while deal size must either be $15 million or more (although rounds of undisclosed size that meet all other criteria are included). In addition, the deal must be classified as growth/expansion or later-stage VC in the PitchBook Platform. If the financing is tagged as late-stage VC it is included regardless of industry.

Also, if a company is tagged with any PitchBook vertical, excepting manufacturing and infrastructure, it is kept. Otherwise, the following industries are excluded from growth equity financing calculations: buildings and property, thrifts and mortgage finance, real estate investment trusts, and oil & gas equipment, utilities, exploration, production and refining. Lastly, the company in question must not have had an M&A event, buyout, or IPO completed prior to the round in question.

Corporate venture capital: Financings classified as corporate venture capital include rounds that saw both firms investing via established CVC arms or corporations making equity investments off balance sheets or whatever other non-CVC method actually employed.

Exits

PitchBook includes the first majority liquidity event for holders of equity securities of venture-backed companies. This includes events where there is a public market for the shares (IPO) or the acquisition of the majority of the equity by another entity (corporate or financial acquisition). This does not include secondary sales, further sales after the initial liquidity event, or bankruptcies. M&A value is based on reported or disclosed figures, with no estimation used to assess the value of transactions for which the actual deal size is unknown.

In this edition of the KPMG Venture Pulse, covering Q4 2018, PitchBook's methodology regarding aggregate exit values changed. Instead of utilizing the size of an IPO as the exit value, instead the prevaluation of an IPO, based upon ordinary shares outstanding, was utilized. This has led to a significant change in aggregate exit values, yet is more reflective of how the industry views the true size of an exit via public markets.

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