PitchBook

European Venture Report

2Q 2018

Contents

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Key takeaways from the analysts

- 2Q 2018 saw 660 completed deals representing €4.8 billion of capital invested into European companies. This marks another quarter of declining deal count but higher capital investment. Late-stage deal counts have been the most resilient to the drop, which has helped skew the median deal size higher.
- The VC-backed initial public offering (IPO) market in the second quarter displayed a great deal of promise, having seen 19 public debuts—the most in a quarter since 4Q 2015—that raised €1.6 billion from public market investors.
- European VCs raised €2.1 billion across 13 funds in 2Q 2018. The proliferation of larger funds has pushed median fund size to €100 million, up from €83 million in 2017. Fund count continues to slide, with the 2Q total marking a 43% decline year-over-year.

€4.8B
of capital invested in 2Q 2018

19
IPOs in 2Q 2018

€2.1B
raised across 13 funds

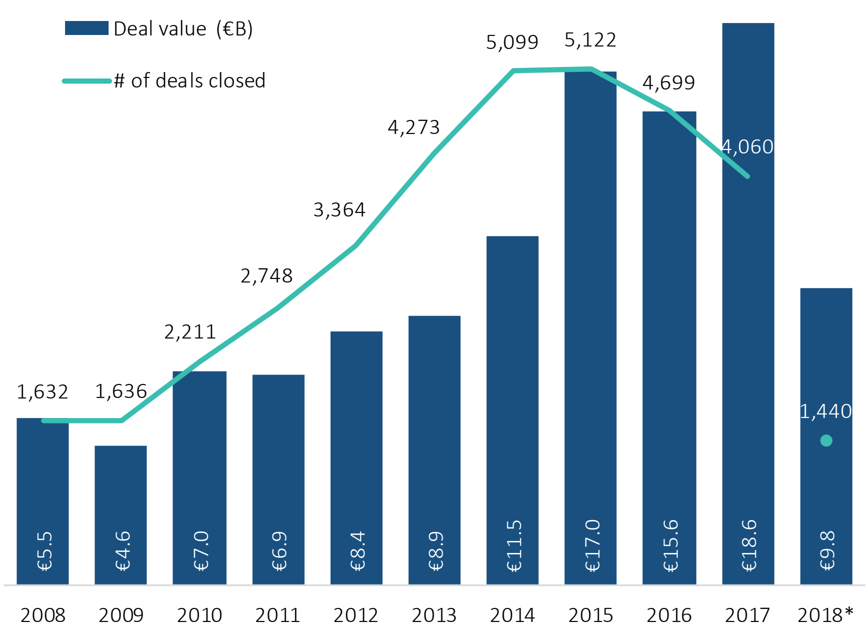
Overview

In the second quarter of the year, VC investors showed willingness to fund larger deals while spreading capital across fewer companies. With only 660 completed deals representing €4.8 billion of capital invested, 2Q saw the lowest deal count since 3Q 2011 but four times more total deal value. During this sustained trend of high capital investment totals and declining deal counts, late-stage counts have been the most resilient from the drop and, as a result, represented a larger proportion of total VC deals in 2018 than in the previous five years. This phenomenon has helped to skew the median deal size higher and contribute to the elevated capital investment totals.

Demand and capital availability for large venture deals resulted in three new European unicorns in 2Q 2018. The three companies—Revolut, Taxify and Celonis—are all software companies, but they fill a diverse

Robust capital investment continues despite slide in deal count

European VC deal activity



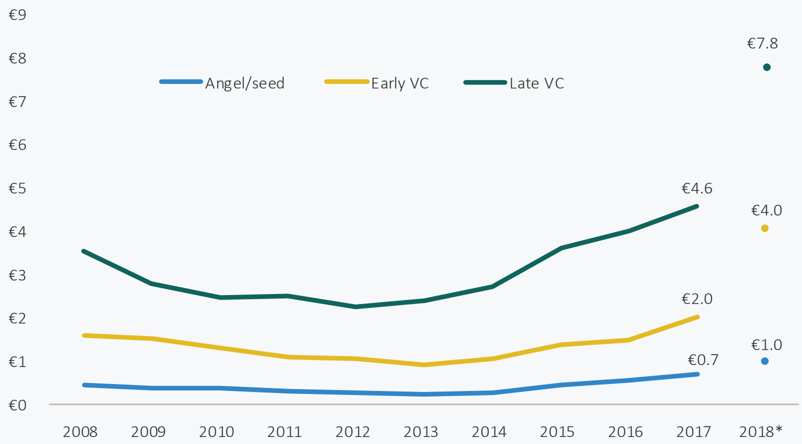
Source: PitchBook
*As of June 30, 2018

set of roles in the marketplace. Taxify, as its name suggests, is a mobile taxi booking service which secured funding from Daimler Mobility Services and Didi Chuxing. Celonis is the only enterprise-facing business of the group, analyzing and optimizing business processes using Big Data, while Revolut, a global money transfer service, also serves Europe's consumer market. While fintech companies continue to find easy access to funding, it is increasingly clear that a more diverse set of fintech business models are thriving and scaling in the European VC ecosystem. As governments and private initiatives do more to foster entrepreneurial centers, capital invested in Europe should continue to expand.

Increased capital availability in the venture ecosystem is an overarching trend that we see driving many of the changes experienced over the past decade. Not only are traditional VCs raising more capital than they have previously, but nontraditional investors have allocated more capital to European startups. The funding options for European startups have expanded considerably as many corporations augment their corporate VC (CVC) arms or balance sheet investing practices, as investors outside of Europe gravitate to the region, and as large capital pools, such as the Vision Fund, proliferate. Investors from the United States have been especially active in 2018, participating in 24% of all deals by count, representing nearly 50% of all deal value.

Median deal size pushing higher in 2018

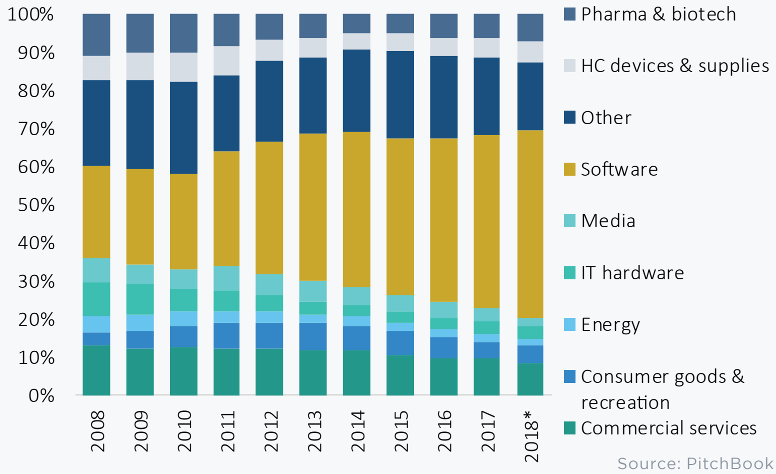
Median deal size (€M) by stage



Source: PitchBook
*As of June 30, 2018

Deal counts remain dominated by software

European deals by sector (#)



Source: PitchBook
*As of June 30, 2018

Spotlight: GDPR

Though neither a deal nor fundraising, the enactment of the EU's General Data Protection Regulation (GDPR) that went into effect on May 25, 2018 will have a significant effect on the venture ecosystem. The overarching regulation protecting personal data for all individuals within the EU and European Economic Area has already had far-reaching effects and is likely to materially alter the way many businesses operate. Data has become an integral part of the current business landscape—many companies' entire business models rely on collecting, analyzing or selling user data. Consumer-facing firms are one group immediately affected by these changes. For companies that handle and store individual data, initial costs to bring the company into compliance and ongoing monitoring alone will directly hit the income statement. Fintech, banking, social media and marketing industries are subject to some of the largest potential changes and scrutiny, due to their intimate relationship with consumer data. The severity of non-compliance has forced data management to the forefront of many of these businesses.

Selected 2018 artificial intelligence & machine learning deals

Company name	Amount raised (€M)	Round date	Business description
Culture Trip	65.1	April 24	Personalized media & content
Dreem	31.0	June 26	Sleep tracking
BewellConnect	24.3	March 15	Connected healthcare
Beamery	24.0	June 20	ML recruiting tool
ContinUse Biometrics	16.2	March 8	Connected healthcare
Tinyclues	14.6	February 22	Intelligent marketing

Source: PitchBook
*As of June 30, 2018

Narrowing in on one slice of emerging technology, we see data science as a clear-cut industry contending with the sweeping changes from GDPR. Since big data and machine learning applications thrive off large datasets, many of the aspects of GDPR around profiling users and collecting data will have an outsized effect on how these companies go about their business. First, to collect data on users, companies must communicate to users how the data will be used in a clear manner and obtain informed consent. Consent must be given for every data use, so if a company chooses to use the data in another manner, it must reach out again. This will likely decrease the available pool of data for many companies, making some positive feedback loops more difficult to create. Some of these issues can be solved through anonymization of the data, which could likely keep the size of datasets the same by sacrificing the personalization.

Profiling and making inferences about users—another main goal of many data science applications—is also disrupted by the GDPR regulations. GDPR defines this process as any automated data processing that analyzes or predicts certain aspects of an individual's health, behavior, economic situation, movements, personal preferences, etc. If profiling is taking place, the company must notify the individual and provide an opportunity to opt out. GDPR can also be violated via biases in profiling applications, especially where automated decision making is used, to prevent race, religion, politics or other factors from influencing the decisions. Machine learning tends to increase biases from the data or the team building the model as the program learns and starts making decisions outside its training data, and even perceived bias may result in a breach of GDPR.

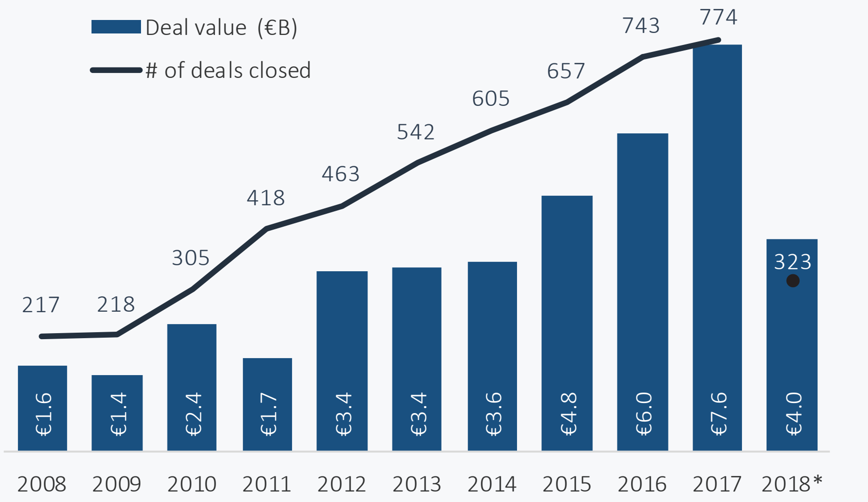
Transparency and the ability to explain the outputs of algorithms and other automated processes is another key area covered under GDPR. This poses an issue for machine learning algorithms as they aren't rule-based systems and are often considered a sort of "black box." AI researchers are working on improving auditability of machine learning decision-making, but it is hardly standard and still in the early stages of development. Essentially, under GDPR, if a company is running a machine learning algorithm or other automated profiling application on personal data, it must be possible to remove, alter or limit use of the data, in addition to explaining how the decisions are made. This policy presents a high bar with which many data-science-focused firms must now contend for the foreseeable future. This regulation has the potential to slow the pace of growth of some consumer-facing applications of machine learning, and companies will need to demonstrate their plans to deal with GDPR when seeking new capital. GDPR is not a death knell for artificial intelligence or machine learning, but it will cause more attention to shift to data management than was previously allocated.

Corporate VC

Corporate venture arms participated in 323 deals totaling €4.0 billion in 1H 2018. These metrics represent a minor 2.0% decline in capital invested and 22.4% YoY decline in closed rounds from 1H 2017. Though capital invested by corporates is at a healthy level, participation in smaller early-stage deals has steadily declined in recent quarters, with angel & seed and early-stage deal count in 2Q declining 48.6% and 20.7% YoY, respectively. At the same time, rounds with corporate participation have trended larger, with median late-stage deal size reaching €11.9 million—a record high. Given the targeted goals of corporate venture arms, this trend may reflect a shift toward focusing more on further developed companies directly related to the corporate mission or investment focuses.

Capital invested by CVCs remains at elevated levels

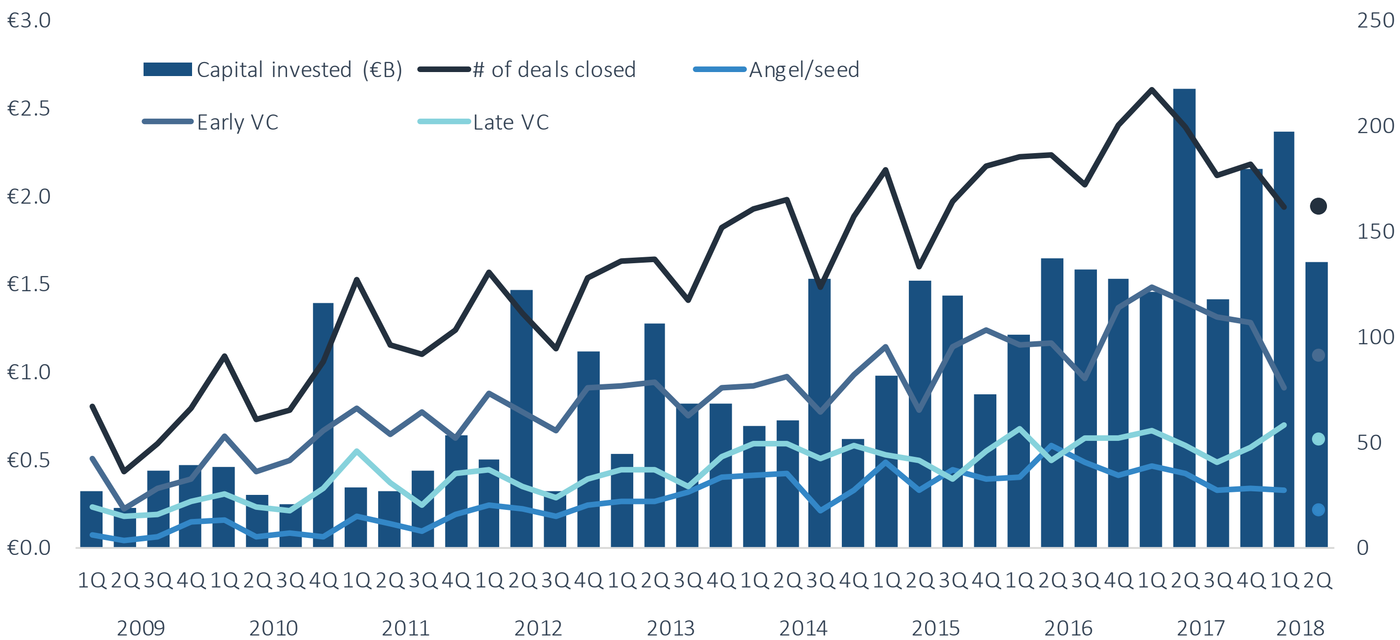
European VC activity with CVC participation



Source: PitchBook
*As of June 30, 2018

Late-stage investment by CVCs remains steady despite slide in angel & seed activity

European VC activity with CVC participation by stage



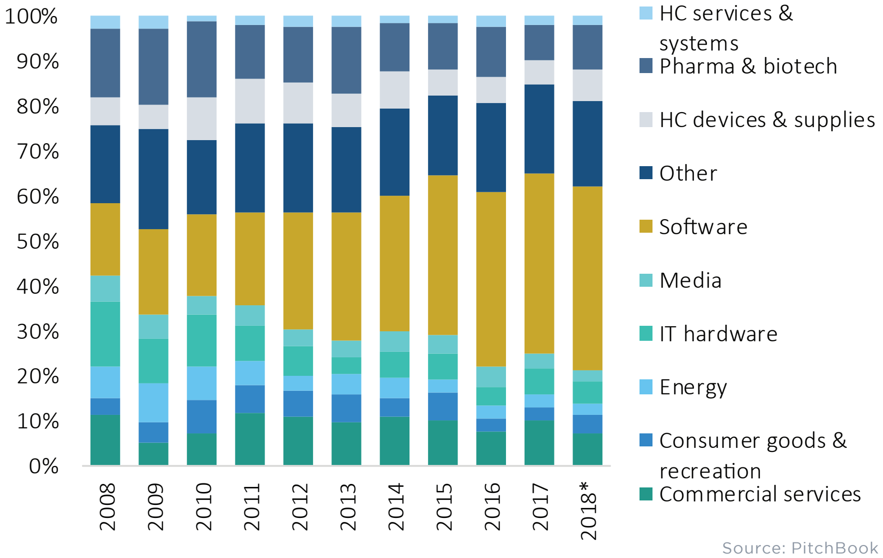
Source: PitchBook

CVCs opting to place resources in larger late-stage deals partly reflects differences between corporate and regular venture strategies. Although corporate venture investments can provide financial returns, they also play a key role in R&D and business development efforts. While funneling resources toward more developed companies helps mitigate investment risk, it also provides us insights into financial support of emerging technologies that are interesting or relevant to large corporations.

Glasgow-based energy provider Aggreko's investment in Origami Energy is one such example. Following two years of development since Origami's Series A financing, the tech company's smart solutions for cost-cutting and revenue-maximization of energy assets attracted an investment from Aggreko for its £18.6 million Series B. As energy providers shift toward decentralized and distributed energy sources, analytics software has become key to managing supply and demand of energy. Aggreko notes its investment serves as a strategic partnership in light of a changing energy market. Whereas corporate entry into cleantech solutions was rooted in capital-intensive hardware investments in the recent past, software intelligence can contribute to cost-efficiency in the highly competitive energy market.

Software continues to lead CVC deals

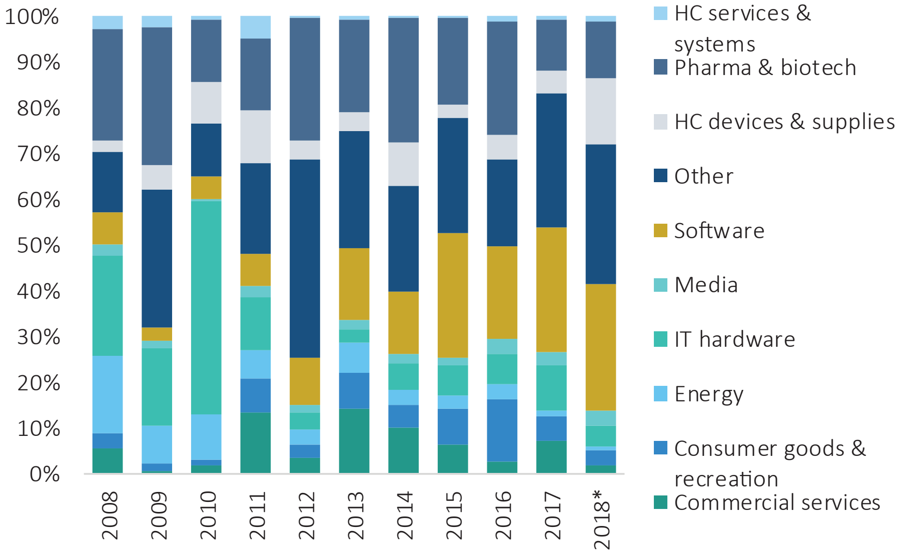
European VC activity (#) with CVC participation by sector



Source: PitchBook
*As of June 30, 2018

Life sciences companies capture more capital investment in the first half of 2018

European VC activity (€) with CVC participation by sector



Source: PitchBook
*As of June 30, 2018

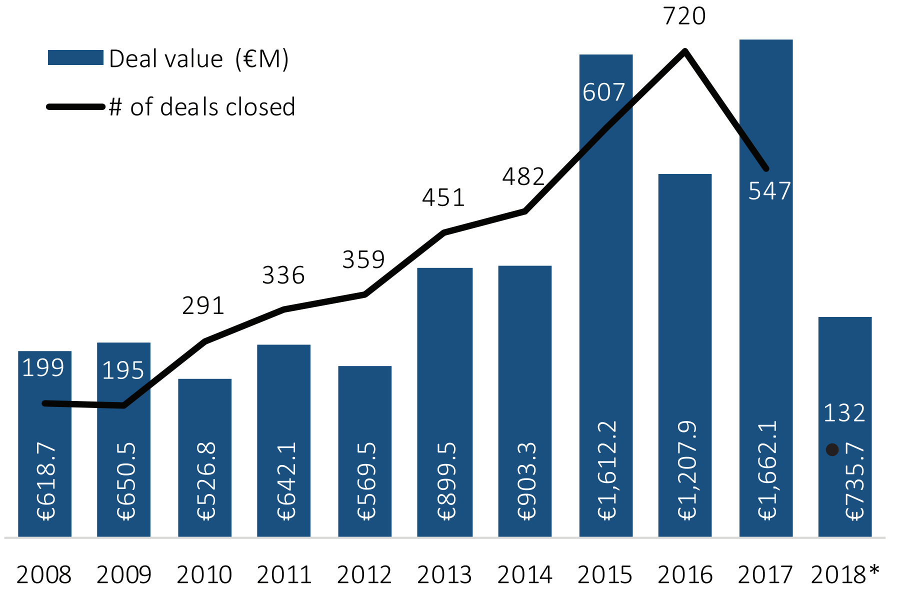
Spotlight: Nordics

With several multibillion euro exits since 2013 (Supercell, Spotify and iZettle to name a few), startups in the Nordic region have produced sufficient returns and capital to nurture a fruitful ecosystem for years to come. This has fueled strong investment in recent years, facilitating the development and maturation of a robust venture ecosystem in the Nordics. Echoing trends seen in the greater European venture market, however, investment activity has cooled in the last year.

With €735.7 million invested across 132 deals in the first half of 2018, capital invested and deal count are down 24.0% and 58.2% from 1H 2017, respectively. The decline in capital invested can be attributed in part to fewer mega-deals year to date. While previous years were buoyed by outsized financings, such as Spotify's €469.1 Series G round in 2015 and iZettle's €165 million Series D financing in 2017, 2018 has yet to see a round of the same magnitude. Despite slowed activity, the Nordic region's strong foundation in private and government investment, top-tier education system and tech-savvy population keeps it positioned as a thriving venture ecosystem in Europe.

Despite slide in capital investment and deal flow, Nordics still on track for a healthy year

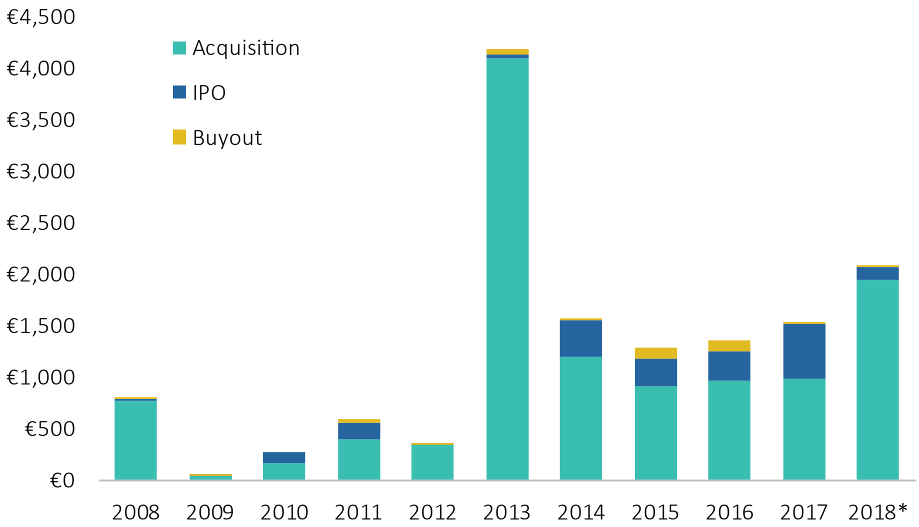
Nordic VC activity



Source: PitchBook
*As of June 30, 2018

Nordic region provides attractive targets to acquirers

Nordic exit activity (€M) by type



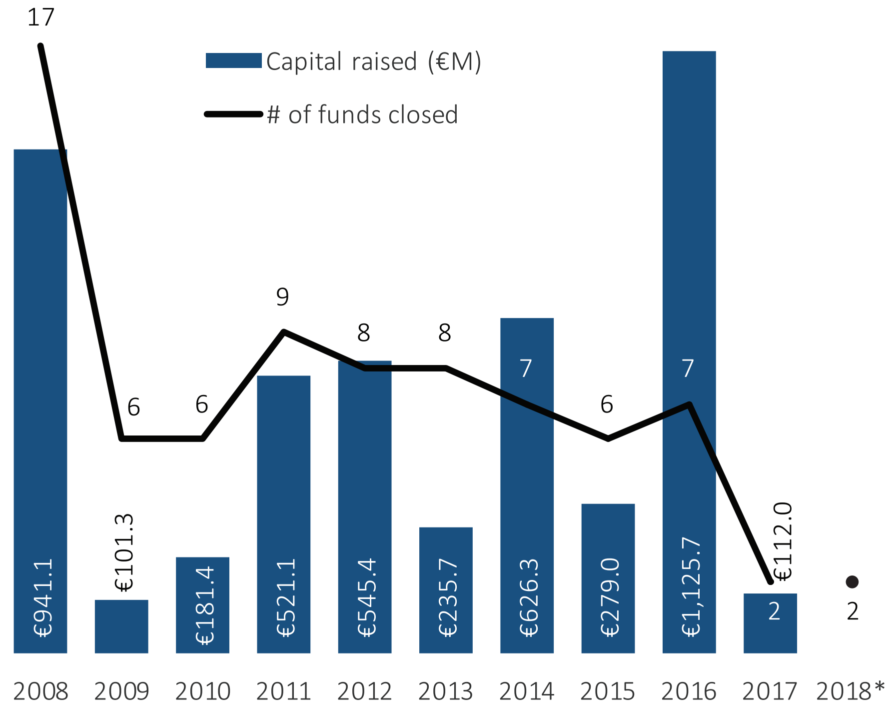
Source: PitchBook
*As of June 30, 2018

Sweden has consistently seen the greatest concentration of both deal flow and capital investment in the Nordic region. From 2014 to 2017, the country received 50%-63% of annual Nordic venture capital and 40%–50% of all deal flow. Sweden's tech-savvy consumer market has aided domestic startups that can access early adopters, helping emerging technologies to gain traction and to stoke consumer demand. While Sweden' small domestic market is a challenge, startups have found success in scaling internationally. PayPal's €1.86 billion acquisition of Stockholm-based iZettle, a small business payments provider, is a success story for the ecosystem in this regard. In PayPal's effort to expand global market share, iZettle's command of multiple markets across Europe and Central America offered an attractive competitive advantage against similar service provider Square.

Despite slowing activity in recent quarters, we believe successful exits in recent years from software and biotech startups have positioned ecosystems in Nordic countries for growth. With capital exited so far in 2018 already surpassing final numbers from last year, distributions to entrepreneurs and VCs in the region will provide resources for reinvestment and reinvigorated entrepreneurialism in years to come.

Fundraising slows for Nordic VCs with only four funds raised in two years

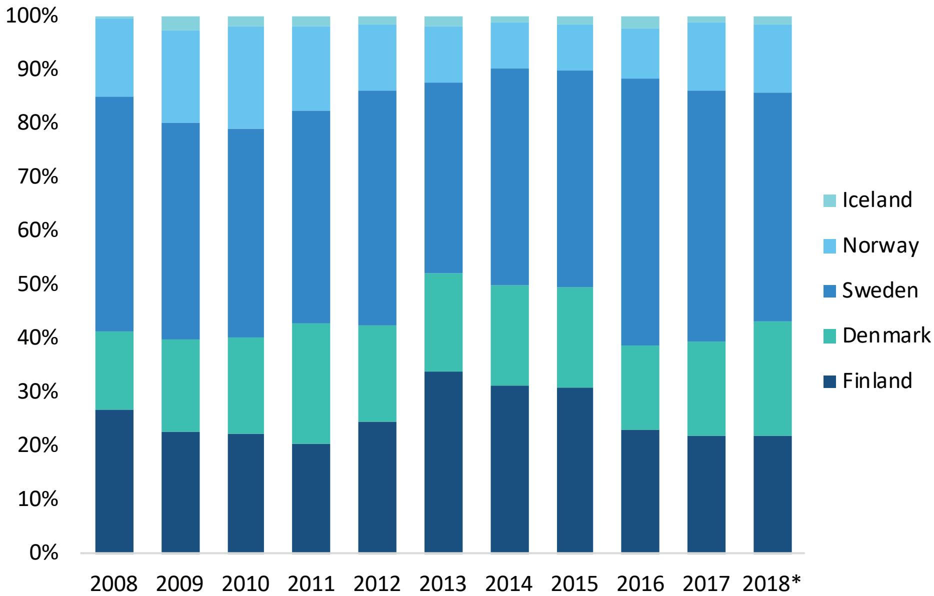
Nordic VC fundraising activity



Source: PitchBook
*As of June 30, 2018
Note: Due to a lack of reporting on fund sizes, capital raised across the two vehicles closed in 2018 is unknown.

Sweden sees greatest concentration of deal flow in Nordic region

Nordic VC activity (#) by country



Source: PitchBook
*As of June 30, 2018

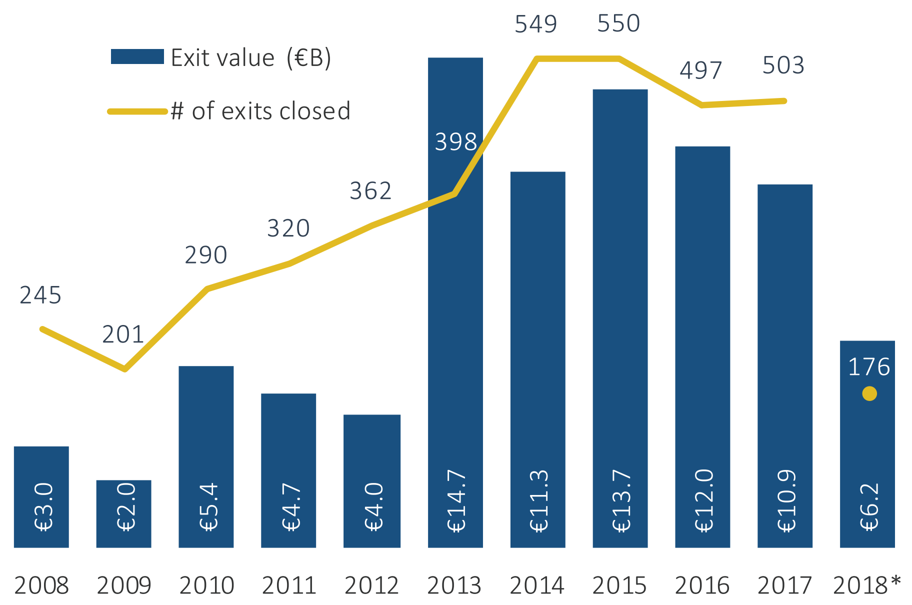
Exits

The exit market was an especially bright spot in the second quarter, with VCs recording €4.6 billion of exit value across 93 transactions. This deluge of exited capital puts 2018 on pace for a YoY increase and to best €10 billion in exit value for the sixth straight year. This is an encouraging sign as the economic cycle extends and pressure grows to exit mature portfolio companies. As valuations steadily move higher, achieving a "good exit" is more important than ever as valuation cuts at exit can cause huge ripple effects in returns due to preferred investor rights and protections. Thus far, there are no immediate signs that valuations have overextended; if anything, it seems buyers are still willing to pay a premium over private market valuations.

The two largest exits of 2Q—iZettle and Adyen—illustrate this trend, as both were exited at large premiums to their last private valuations. The iZettle acquisition by PayPal was most notable because it came just weeks after the company had planned to go forward with an IPO, and at an acquisition price of €1.9 billion—a value nearly double the projected post-money valuation expected in the IPO. PayPal's last-minute decision helped the company avoid paying a premium over the potentially higher public valuation in the future, a strategy we have seen in a couple high-profile cases over the past two years, including Cisco's purchase of AppDynamics. As the IPO market improves, we may see more acquirers do the same.

2018 exit value boosted by unicorn exits

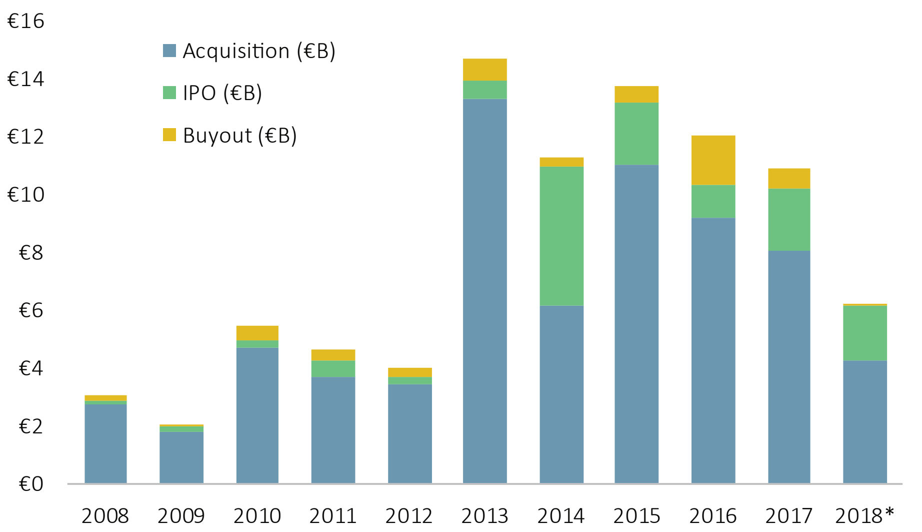
European VC-backed exit activity



Source: PitchBook
*As of June 30, 2018

IPOs continue strong volume in 2018

European VC-backed exits by type



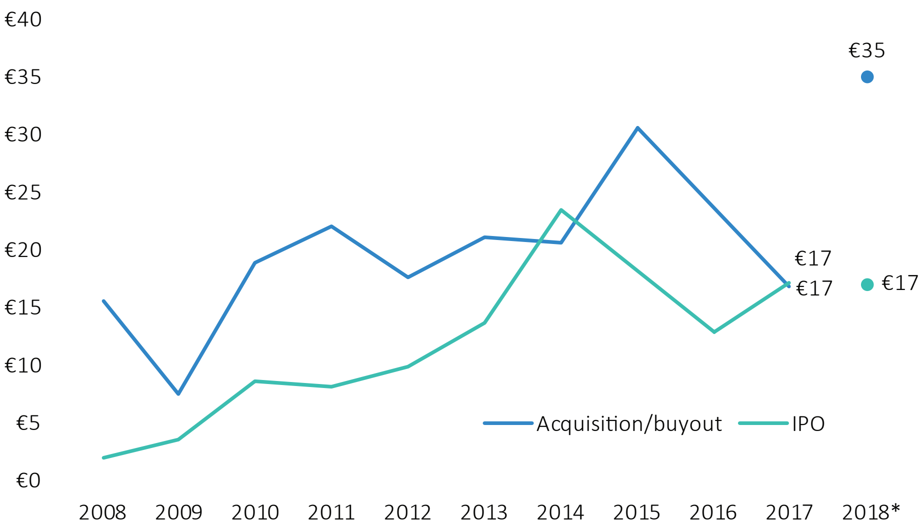
Source: PitchBook
*As of June 30, 2018

Adyen, on the other hand, went forward with its IPO and raised its price range multiple times throughout the roadshow before debuting at €7 billion, approximately 250% higher than its last private valuation in 2015. The momentum didn't stop at the IPO either, as Adyen's value has increased 47.5% from the IPO as of the time of writing (July 13, 2018). Besides their successful exits during the quarter, both companies operate in the fintech ecommerce subsector. While the companies serve different pieces of the industry's value chain, we expect these exits to be utilized as impressive comps in the market and to drive increased investment into the ecommerce space and the fintech vertical as a whole.

Outside of Adyen, the VC-backed IPO market in the second quarter displayed a great deal of promise, with 19 public debuts—the most in a quarter since 4Q 2015—raising €1.6 billion from public investors. Willingness from public market investors to participate in VC-backed public offerings, especially for technology companies, is key when evaluating businesses that are likely to exit in the next five years.

Late-stage acquisitions help push median valuation to decade-high

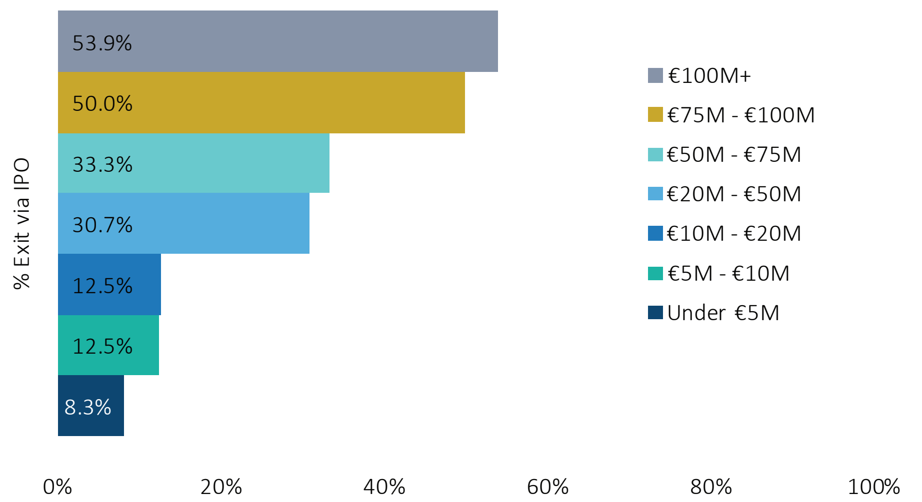
European median exit size and valuation (€M) by type



Source: PitchBook
*As of June 30, 2018

More than half of companies valued over €75 million exit via IPO

European IPOs as % of exits (from 2006 to 2Q 2018)



Source: PitchBook

Fundraising

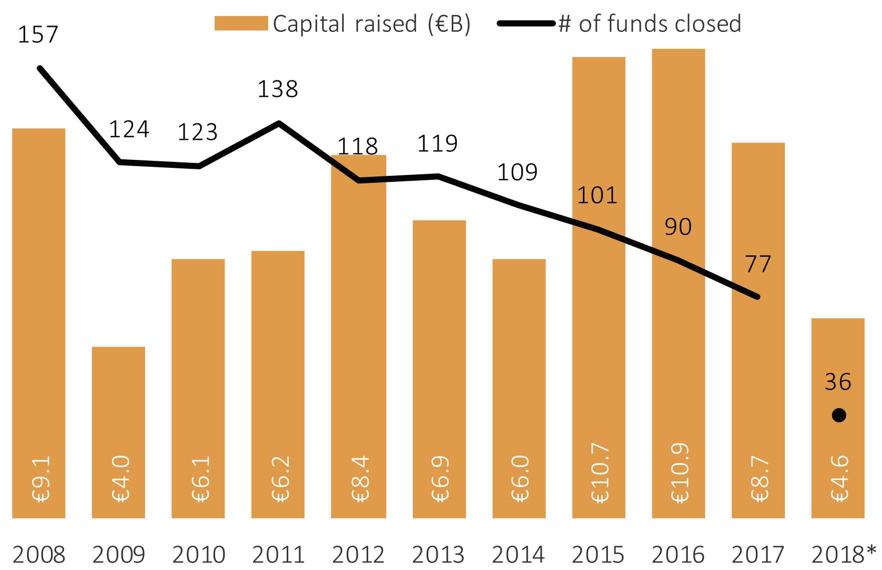
With €4.6 billion raised by European venture funds in the first half of 2018 and a strong pipeline of larger funds expected to close in the coming quarters, capital raised looks to be on track to outpace 2017. Fund count, however, has mirrored 2017 activity with just 36 funds closed so far this year. Though elevated levels of capital raised indicate that limited partners (LPs) are still comfortable allocating to the venture asset class, the slide in fund count further cements the trend of LPs making commitments to fewer but larger funds.

For example, the number of funds closed in the €250 million to €500 million size range has already outpaced fundraising from last year, with seven vehicles raised in 1H 2018 compared to just six in all of 2017. At the same time, fundraising among vehicles smaller than €91 million has slowed, with particularly sluggish activity among micro-funds (vehicles smaller than €50 million). Additionally, median fund size hit €100 million, just shy of the decade-high and up from €83 million in 2017.

A growing proportion of venture investors have taken to raising larger funds to keep up with market dynamics of larger deals. Highland Europe, for instance, notes that the raising of its third tech-focused fund, a €463 million vehicle, will provide it the "extra firepower" needed to help startups scale internationally. The combination of more mature startups and ample, available venture capital has enabled startups to raise larger sums at all stages. Subsequently, it appears this is exerting inflationary

Capital raised sees continued strength while fund count stagnates

European VC fundraising activity



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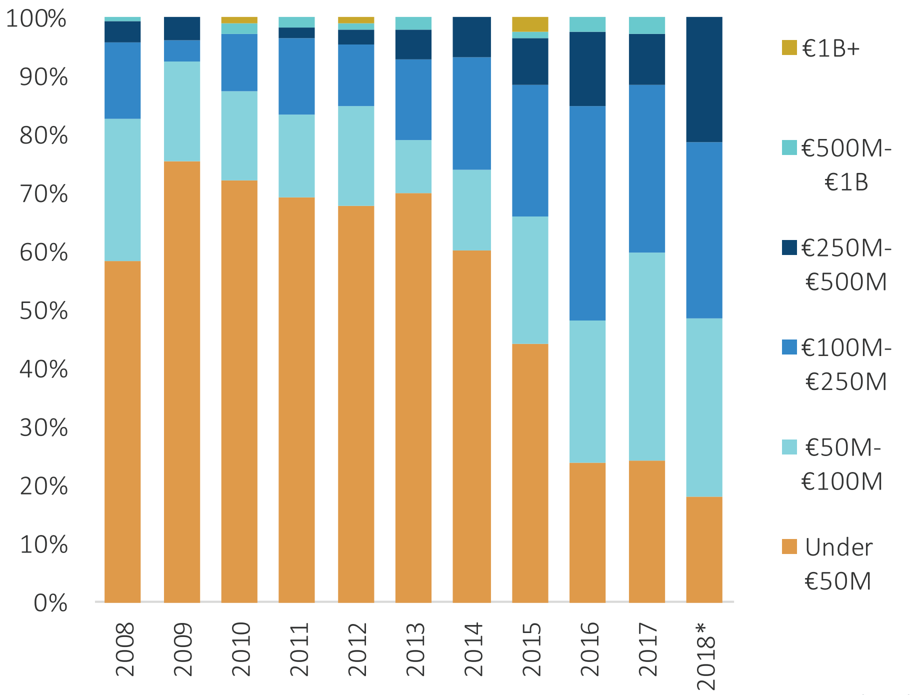
*As of June 30, 2018

European VCs continue to raise large funds, as micro-fund count declines

European VC fundraising (#) by size



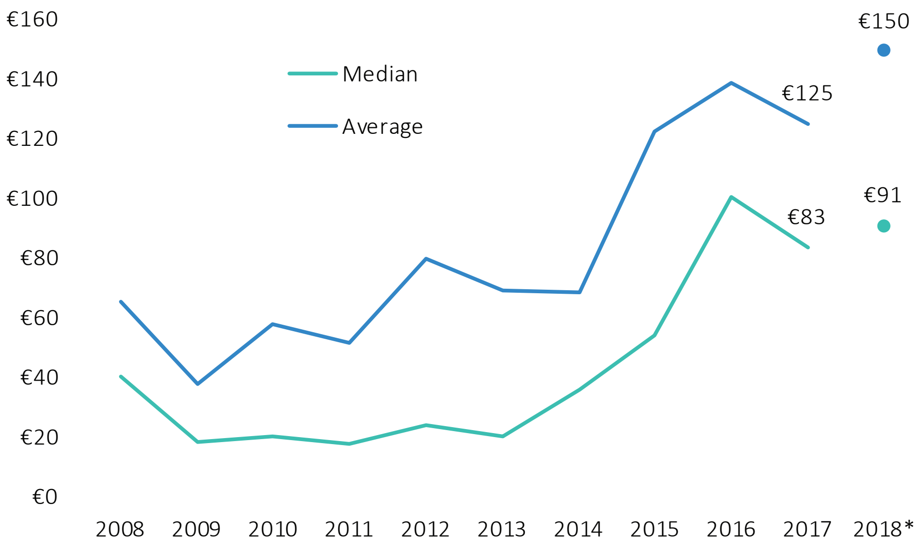
Source: PitchBook
*As of June 30, 2018

pressure on venture ecosystems, reflected in venture fund size. While larger funds allow investors to maintain a competitive position and avoid dilution, critics assert that it is more difficult to create venture-like returns and may result in overspending.

Additionally, capital continues to aggregate in regions with well-developed venture ecosystems. Despite recent political turmoil, the UK & Ireland region maintains top fundraising numbers in terms of both capital raised and fund count. Fundraising in Germany and Israel also appears to be gaining momentum thanks to strong local talent and promising emerging technology ecosystems.

Median fund size hits near €100 million for the second time in a decade

Median and average European VC fund size (€M)



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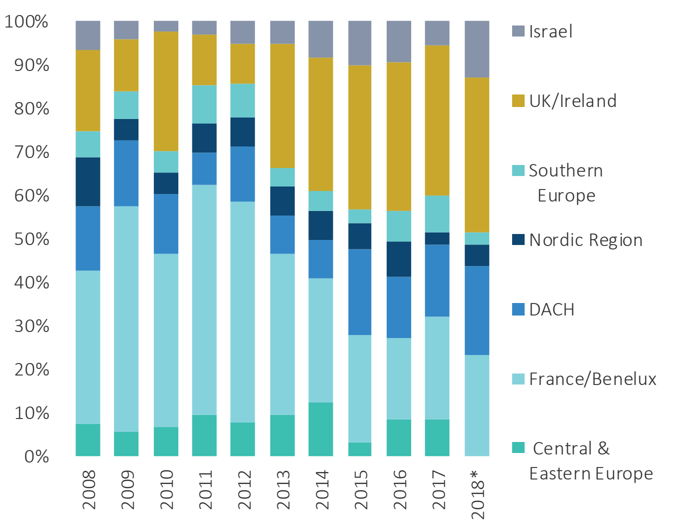
*As of June 30, 2018

UK & Ireland continue to lead fund count and capital raised

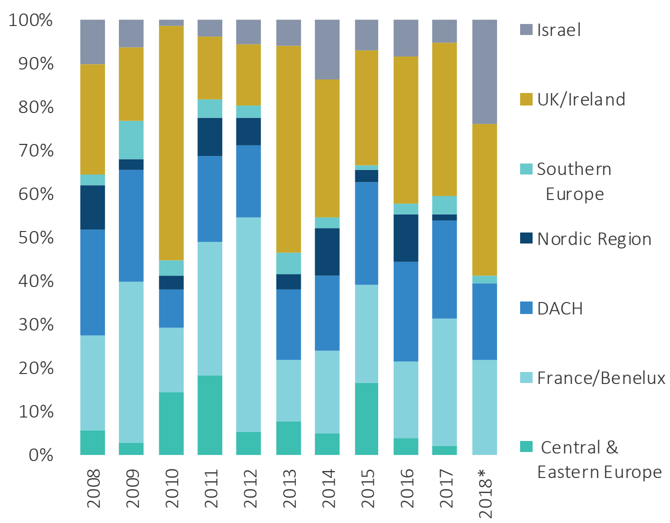
European VC fundraising (#) by region



Source: PitchBook
*As of June 30, 2018

Fundraising concentrated in regions with developed VC ecosystems

European VC fundraising (€) by region



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