

The background of the cover features a complex arrangement of glowing red neon tubes. Some tubes are arranged in circular patterns, while others form rectangular loops. The tubes are set against a light blue background that transitions into a darker red at the bottom. A semi-transparent, light purple circular shape is overlaid on the left side of the image, partially obscuring the neon tubes.

M&A Report

2Q 2019

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Introduction

After a banner 2018, North American M&A activity has remained fervent through 1H 2019. Stellar first-half performances by major public indices fueled animal spirits while a recovery in lending markets has kept M&A financing costs at bay. Although 2019 figures are so far coming in at a more tepid pace than in 2018, a plethora of enormous deals have been announced with many looking to close by year end. To that point, the median deal size continues to skyrocket and the median EV/EBITDA multiple currently stands at a high of 10.2x, bolstered by these larger deals and a booming stock market.

PE continues to drive the prolonged M&A spell. Thanks to historical outperformance in private markets and successful fundraising efforts, PE firms now sit on a war chest of capital approaching \$1 trillion. These firms have targeted loftier EVs, with several buyouts cresting the \$10 billion mark, and we expect this trend to continue. The perception of private ownership appears more positive with executives extolling PE ownership. There are even some public executives pursuing take-privates to achieve a richer valuation during a period of transition or to execute on longer-term strategies without the hassle of public disclosures.

With an unprecedented flood of capital pouring into VC, many startups are amassing war chests beyond what they require for operations and using the cash to fund outward expansion through acquisitions and VC activity. While this phenomenon is not new, it has exploded in popularity as of late. However, too much M&A activity can have negative effects on performance. Concurrently, capital is also chasing SaaS firms. These companies are highly desirable to PE firms due to their lofty growth characteristics and minimal capital requirements. Additionally, strategics are competing for the same companies, seeking to capitalize on successful technological innovation and fold it into current product offerings.



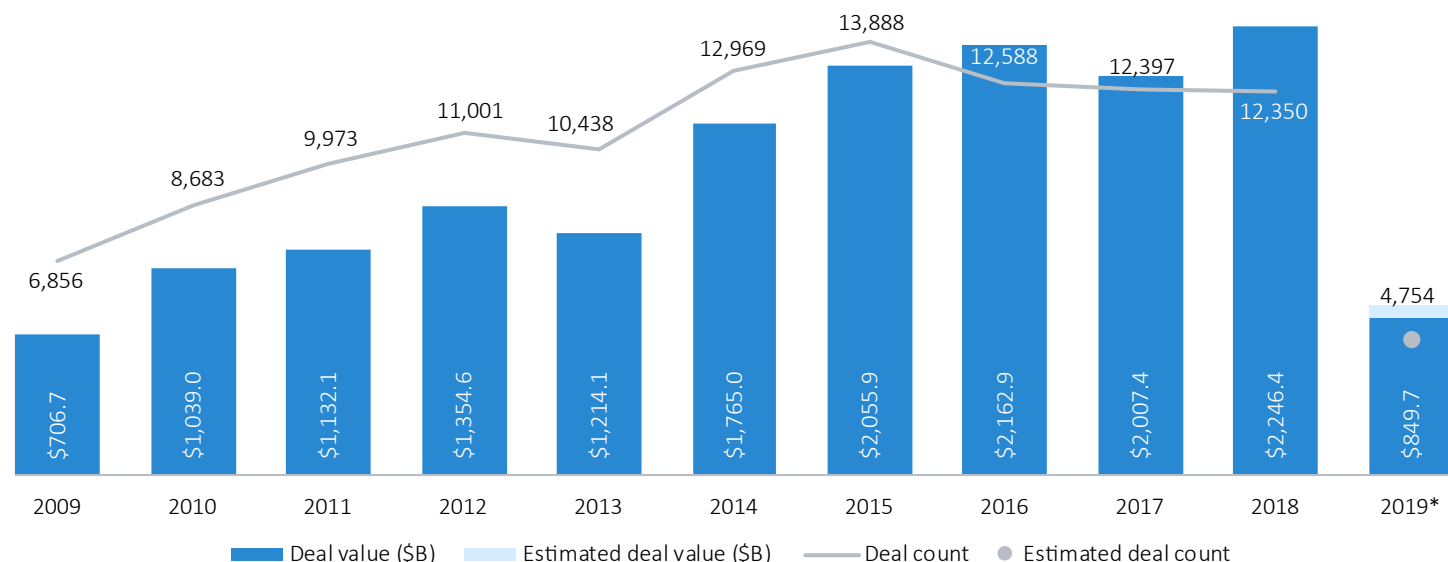
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Overview

M&A activity



Source: PitchBook | Geography: North America
*As of June 30, 2019

North American M&A activity has continued apace in 2019, with 4,754 deals worth \$849.7 billion closing in 1H. Dozens of mega-deals have also been announced, potentially setting up a healthy back half of the year as well. In fact, the 10 largest announced deals have a combined value of \$486.7 billion—nearly equivalent to 1Q’s total. Should these deals close, 2019 would likely mark the fifth consecutive year in which North American M&A deal value tops \$2.0 trillion.

This protracted period of heightened M&A activity is likely persisting in response to slowing global growth and a roaring US stock market. Many corporate executives are worried about a coming economic downturn and are positioning their companies to weather the storm, turning to M&A to shore up profit margins and compete more effectively. Since 2017, advanced economies have seen GDP growth rates slide from 2.4% to 1.8%.¹ China, realizing impacts from its trade war with the US, has seen a dramatic slowdown, recording the lowest growth rate since 1992.² Additionally, futures markets believe pressures on the US economy will cause the Fed to cut rates before year end from their already historically low base.

Despite this backdrop, the S&P 500 logged its best first-half performance since 1997. Animal spirits are in full force, and corporate executives are capitalizing

on this surge in enthusiasm by pursuing mammoth deals. The largest deal announced in 2Q was the \$121.0 billion acquisition of Raytheon (NYSE: RTN) by United Technologies (NYSE: UTX); the combined company will be renamed Raytheon Technologies. This transaction caps off a dramatic corporate restructuring in which United Technologies went from a collection of disparate businesses to focusing on aerospace and defense, seeking to unseat Boeing (NYSE: BA) as the largest company in the industry. United Technologies has already purchased avionics company Rockwell Collins for \$30.6 billion and plans to jettison its Otis (elevator and escalator manufacturer) and Carrier (heating, ventilating and air conditioning company) businesses.

Several other industries are combining to scale as well, perhaps evidenced most clearly in the US shale industry. As Chevron chairman and CEO Michael Wirth put it, “the shale game has become the scale game.” In 2Q, Occidental Petroleum (NYSE: OXY) outbid Chevron (NYSE: CVX) to acquire Anadarko Petroleum (NYSE: APC) for \$57.0 billion.³ This deal will help boost Anadarko’s presence in the Permian Basin where scale is of paramount importance.

1: “Real GDP Growth: Annual Percent Change,” International Monetary Fund, 2019
2: “China’s Economic Growth Hits 27-Year Low as Trade War Stings,” The New York Times, Keith Bradsher, July 14, 2019
3: Only closed deals are included in deal count and value, announced deals are not.

Overview

In such a hyper-competitive landscape, the low-cost producers are those with more favorable shale formations, production advantages, and/or lower fixed costs (achieved through scale). Production in the Permian continues to soar with new pipelines coming online, continual technological improvements and the improving ability of export facilities to handle the load. Production in the region is expected to double to 8 million barrels per day by 2023, and we foresee further M&A activity as firms seek to lower the marginal cost of production.^{4,5} After Chevron lost the bidding war to Occidental Petroleum, we expect the company to seek out other M&A opportunities to broaden its presence in the Permian Basin. Exxon Mobil (NYSE: XOM) may pursue a deal as well, having inked several multibillion-dollar acquisitions in the region over the past 10 years, and Shell (LSE: RDSB) is also reportedly interested in an acquisition. Potential targets based on current production in the Permian Basin and valuation multiples include Noble Energy (NYSE: NBL), Concho Resources (NYSE: CXO), Pioneer Natural Resources (NYSE: PXD) and Devon Energy (NYSE: DVN).

With a surfeit of massive deals occurring across most sectors and a decade-long economic expansion, the median deal size continues to balloon, sitting at \$93.5 million through 1H 2019. Dealmakers, from PE firms to strategic acquirers, are pursuing ever-larger deals while borrowing costs remain historically low and PE firms are sitting on nearly \$1 trillion in cash ready to deploy.

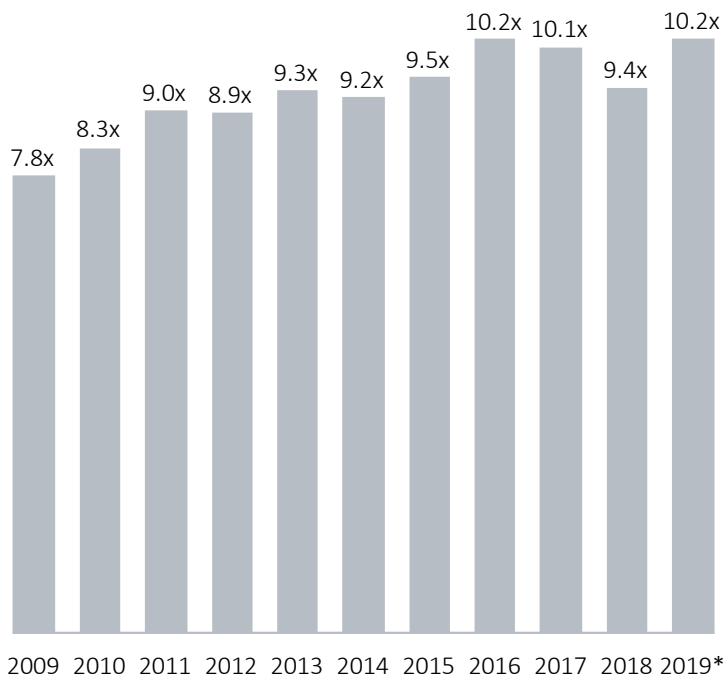
As the median M&A deal size has risen, so too have acquisition multiples. After two successive years in which the median multiple declined, 2019 is pushing higher. As of 1H 2019, the median EV/EBITDA multiple for M&A transactions sits at 10.2x, matching the highest value in over a decade. These elevated multiples are the result of a confluence of factors including low financing costs and larger deals. In fact, not only are borrowing costs historically low—with the Fed likely to slash rates by 25 basis points in 2019—high-yield bonds are trading at negative interest rates in some parts of the world.^{6,7} We expect interest rates to remain low and augment persistently high acquisition multiples as central banks around the world become increasingly dovish and longer-term rates remain depressed. Furthermore, double-digit returns for Canadian and US stock indices through 1H ought to buoy multiples as the public comparables used in pricing transactions continue to rise.

Median M&A deal size (\$M)



Source: PitchBook | Geography: North America
*As of June 30, 2019

M&A EV/EBITDA multiples



Source: PitchBook | Geography: North America
*As of June 30, 2019

4: "This Texas Area is Expected to Double Oil Output to 8 Million Barrels in Just Four Years, Boosting US Exports," CNBC News, Patti Domm, March 8, 2019

5: Ibid.

6: "Fed Primed to Cut Rates, But Still Debating Depth: Economy Week," Bloomberg, Simon Kennedy, July 13, 2019

7: "Oxymoron Alert: Some 'High Yield' Bonds Go Negative," The Wall Street Journal, Paul J. Davis, July 14, 2019

Overview

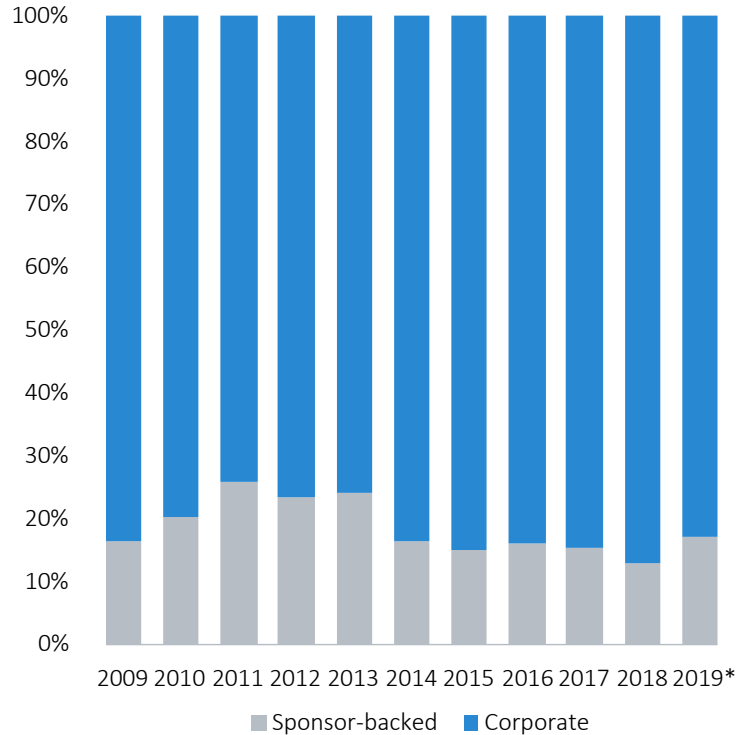
Another primary driver of higher transaction multiples has been the proliferation of M&A within the technology space. This high-growth sector tends to trade at above-average multiples in M&A and on public indices.⁸ True to form, 2Q saw several richly priced tech deals announced, including Alphabet's (NASDAQ: GOOGL) \$2.6 billion acquisition of Looker and Apollo Global Management's (NYSE: APO) \$2.7 billion buyout of Shutterfly (NASDAQ: SFLY). The largest tech deal announced in the quarter, however, was also Salesforce's (NYSE: CRM) largest acquisition to date with the purchase of Tableau (NYSE: DATA) for \$15.7 billion. Much of Salesforce's persistent growth is thanks to a decades-long bout of acquisitions; the company has made over 60 deals since its inception.

While the acquisition of Tableau was the largest tech deal announced in 2Q, the \$11.0 billion take-private of Ultimate Software Group was the largest tech deal to close. The buyout, which was executed by a consortium of PE firms, CPPIB and Singapore's GIC, exemplifies the mounting importance of private capital in today's M&A landscape. In fact, the two largest deals to close in the quarter—Ultimate Software and Brookfield's (TSE: BAM.A) \$13.2 billion buyout of Clarios—were completed by PE firms. The Ultimate Software deal is unique because the company's executives were quite vocal in lauding their transition to private ownership. They felt private markets would be more conducive to the company's long-term strategy while valuing the company fairly as it transitioned to a slower-growing, more mature firm. Similarly, short-line railroad operator Genesee & Wyoming (NYSE: GWR) put itself up for sale, claiming the public markets were not properly valuing the company; Brookfield and Singapore's GIC ultimately acquired the firm for \$8.4 billion.

Going forward, we expect public company executives to become more receptive toward private ownership and to seek out strategic options if they feel as though public markets are not fairly valuing their businesses. In 1H 2019, PE firms have targeted public companies at the highest rate since 2013, accounting for over 17% of public company acquisitions. Our research shows that PE firms buying out public companies tend to disproportionately target technology companies, followed by healthcare, with those two sectors alone now accounting for more than half of take-private value. While PE ownership is increasing in favor, double-digit increases in stock prices may push many targets out of reach for PE firms. However, some of the companies too small to be included in popular indices are lagging the broader market and will likely underpin a source of public M&A targets.⁹ More broadly, PE has continued to raise its share in the M&A market, now accounting for nearly 40% of all transactions.

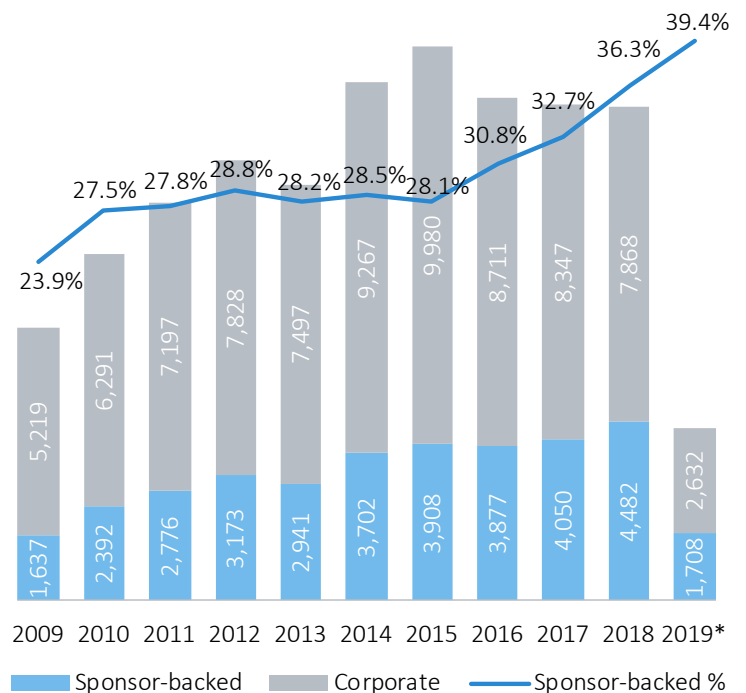
8: "S&P 500 EV/EBITDA (Enterprise Multiple) by Sector/Industry," Sibilis Research
 9: Stocks that are not in the popular indices miss out on popular ETF and institutional ownership and the subsequent share price performance benefits.

Public company acquisitions (#) by acquirer type



Source: PitchBook | Geography: North America
 *As of June 30, 2019

M&A (#) by acquirer type



Source: PitchBook | Geography: North America
 *As of June 30, 2019

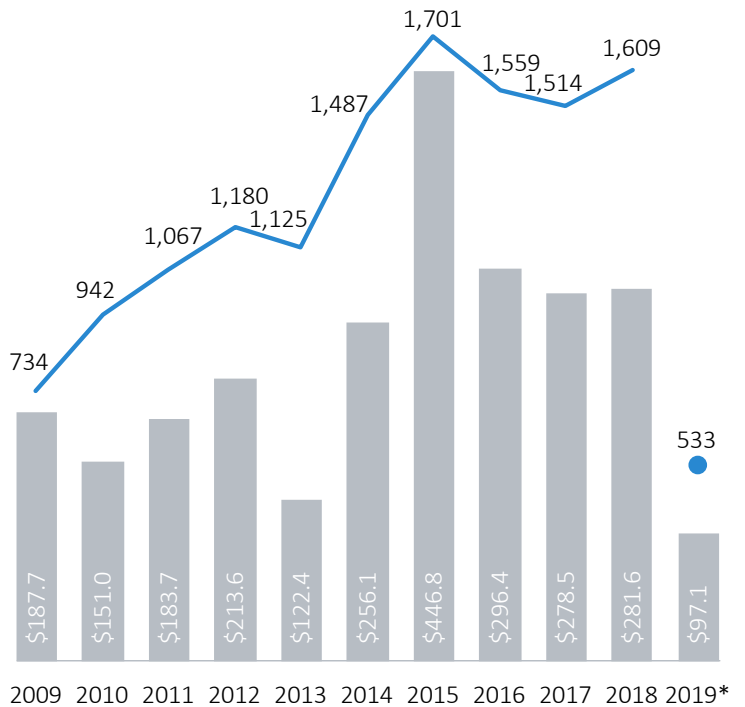
Overview

In our [1Q 2019 M&A Report](#), we highlighted the healthcare and payments sectors as bright spots in global M&A activity. Since then, both sectors have maintained their prolific dealmaking sprees. In 2Q, Pfizer (NYSE: PFE) agreed to buy Array BioPharma (NASDAQ: ARRY) for \$11.4 billion, and 3M (NYSE: MMM) inked a deal to buy KCI Holdings for \$6.7 billion. Additionally, AbbVie (NYSE: ABBV) agreed to acquire Allergan (NYSE: AGN) for \$63.0 billion during 2Q 2019. While this deal will not count toward North American M&A figures since Allergan is based in Ireland after completing a corporate inversion with Actavis in 2015, it nonetheless emphasizes the growing importance of M&A in the North American healthcare industry. Several factors have pushed large drug makers to lift spending on M&A and reduce spending on R&D, including a decline in the return profile of R&D investments for pharmaceuticals and the rising average cost of bringing a drug to market. The cost has more than doubled from 2010 to over \$2.6 billion.¹⁰

As many of the major names in pharmaceuticals utilize M&A to fight off a potential drop in drug prices and grow market share, we expect others to follow, fearing that prime assets will be snatched up. On the price front, lawmakers in Washington, DC have been focusing on steps to curtail drug prices, which would have an immediate effect on the bottom line of myriad drug makers. Changes to the current system may enable Medicare to negotiate lower drug prices or base drug prices off an international index. No matter the result, the industry is preparing for drug prices to fall in the US.

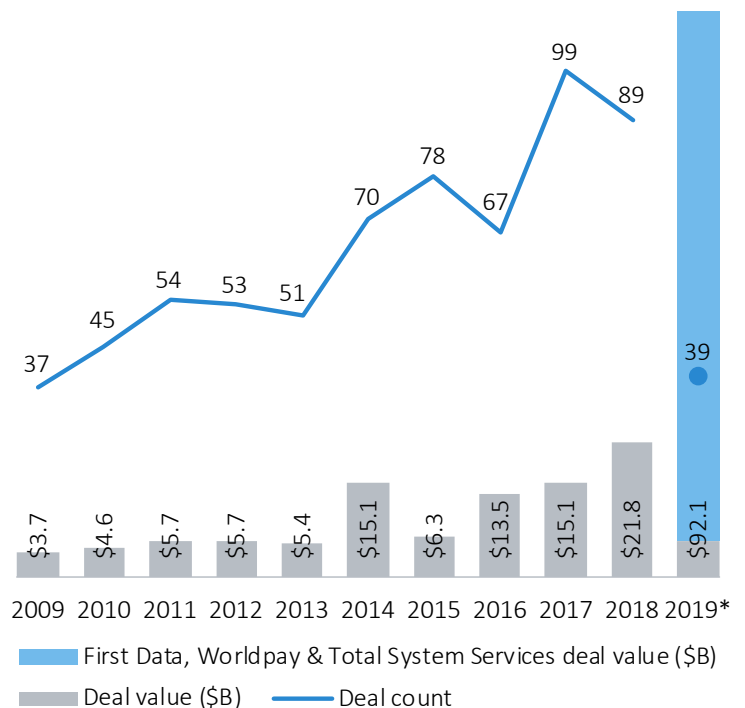
Just as healthcare witnessed sustained dealmaking, so too has the [payments sector](#). With technology-enabled newcomers such as PayPal (NASDAQ: PYPL) and Square (NYSE: SQ) offering services the incumbents cannot match, the commodification of the payment processing services has pushed legacy companies further down the value chain and dampened growth prospects. Two such payment processors announced a pair of gigantic deals in 1Q 2019, with Fiserv (NASDAQ: FISV) agreeing to acquire First Data (NYSE: FDC) for \$22.0 billion and Fidelity National Information Services (FIS; NYSE: FIS) deciding to acquire Worldpay (NYSE: WP) for \$43.0 billion. Anticipating pressure on its margins, Global Payments (NYSE: GPN) reached an agreement to acquire Total System Services (NYSE: TSS) for \$21.5 billion in May. These three incumbents hope scale is the answer to their problems. As further disruption appears to be approaching, we expect to see some of the few remaining players couple up to better contend in this rapidly evolving competitive landscape.

Healthcare M&A activity



Source: PitchBook | Geography: North America
*As of June 30, 2019

Payments M&A activity

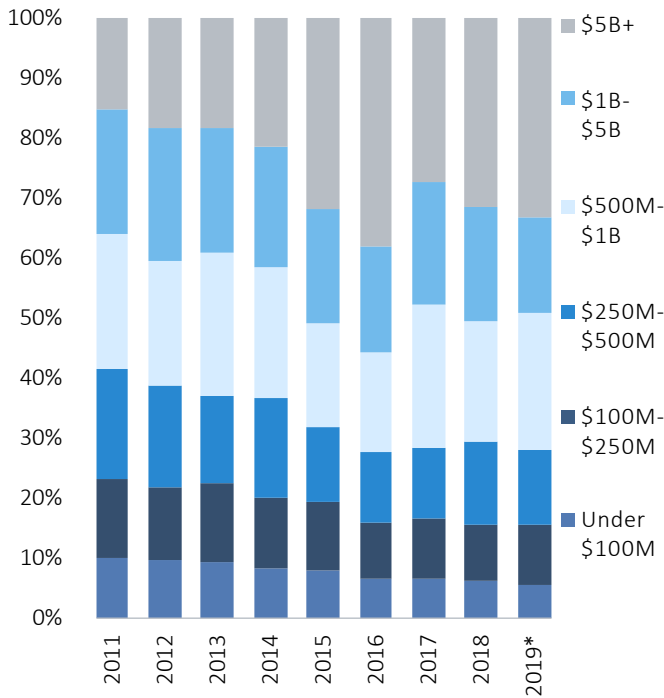


Source: PitchBook | Geography: North America
*As of June 30, 2019

10: "Implications of Consolidation in the Pharma & Biotech Sector," Sustain Analytics, Anna Bonomi & Oana Pop, December 12, 2018

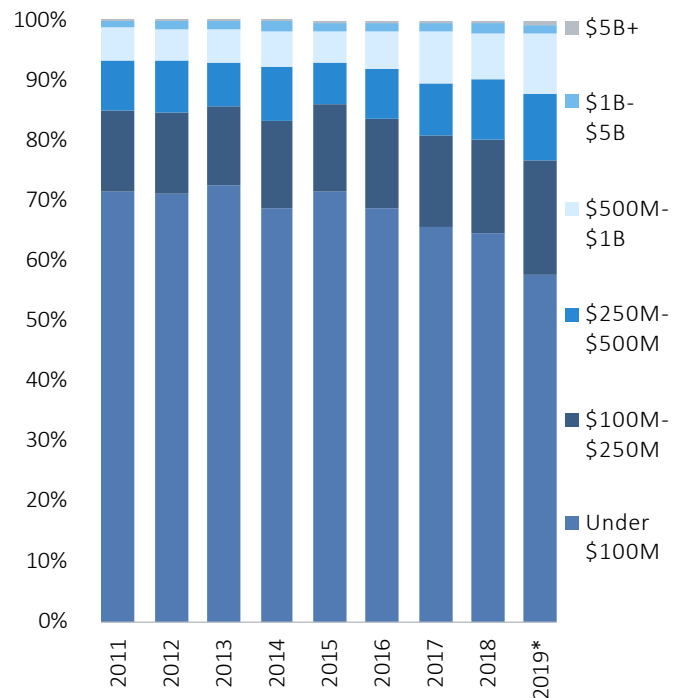
Deals by size and sector

M&A (\$) by size



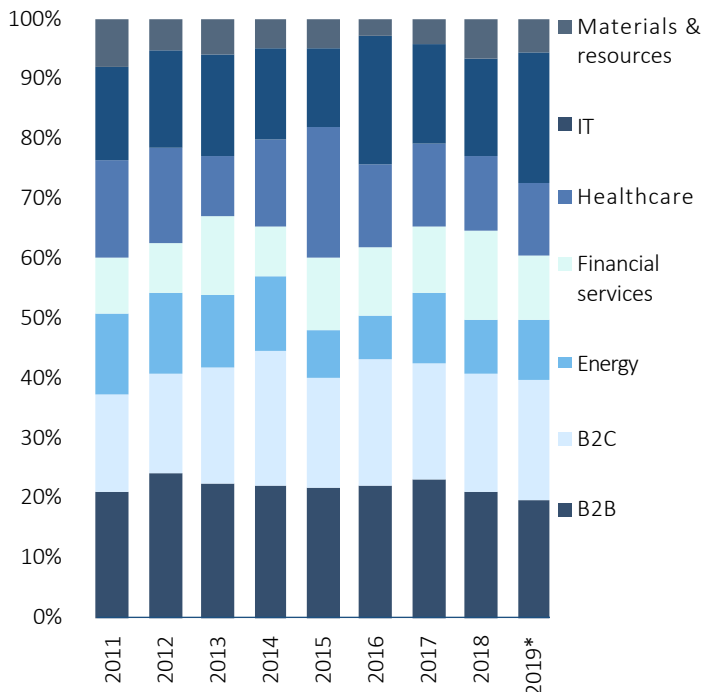
Source: PitchBook | Geography: North America
*As of June 30, 2019

M&A (#) by size



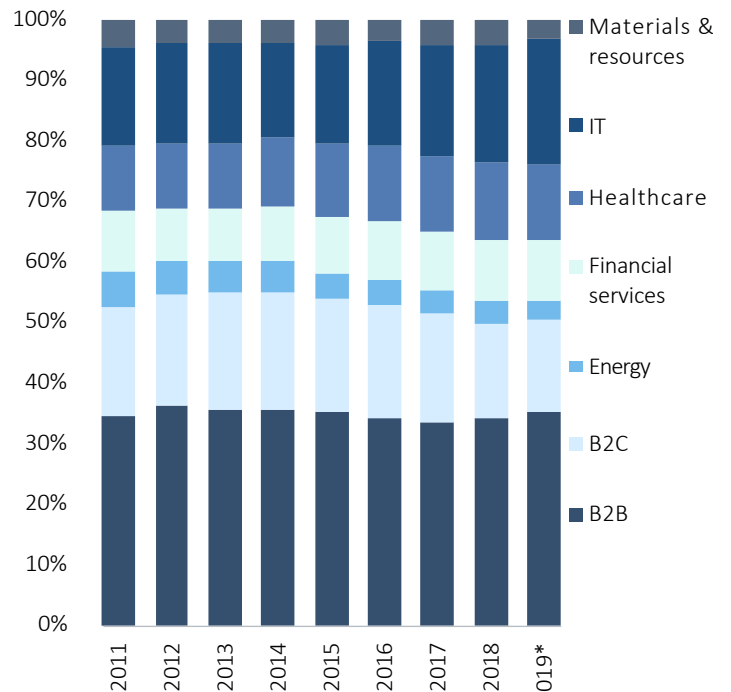
Source: PitchBook | Geography: North America
*As of June 30, 2019

M&A (\$) by sector



Source: PitchBook | Geography: North America
*As of June 30, 2019

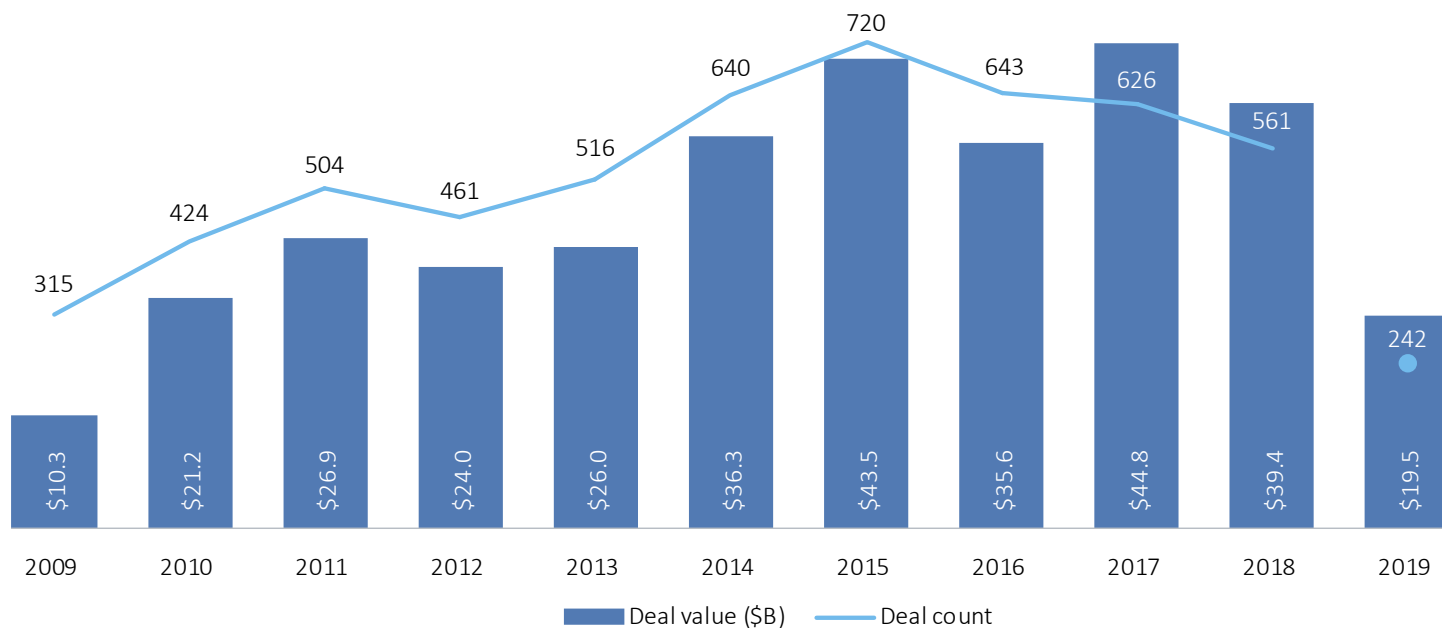
M&A (#) by sector



Source: PitchBook | Geography: North America
*As of June 30, 2019

Spotlight: VC M&A

M&A activity by US VC-backed companies



Source: PitchBook | Geography: North America
*As of June 4, 2019

Introduction

Note: This section appeared originally in [PitchBook Analyst Note: Pursuit of Growth Turns Outward](#), written by Analyst II Cameron Stanfill and published June 18, 2019.

The last decade has constituted a fundamental shift in what it means to be a VC-backed company. A surge of capital from both existing VCs and nontraditional participants has enabled companies to reach unprecedented sizes. Many of these companies have remained private for more than a decade. With investors clamoring to back rapidly growing startups, some VC-backed companies are now opportunistically raising rounds even when their balance sheet is strong, amassing war chests of cash rather than using the capital to fund operations. While most startups are still spending VC financing to grow organically, some companies are using their stockpiles to supplement their growth with external investments.

External investments by VC-backed companies come in a variety of structures, with startups dramatically increasing both acquisition activity and their own dealmaking into other startups. This elevated focus on external growth is further evidence of the broader

changes in VC, principally at the late stage where companies are beginning to operate in a manner more typical of public companies. This evolution has ramifications for how investors approach the space.

From an investor’s perspective, owning equity in a VC-backed company that is an active dealmaker can add complexity, requiring the consideration of minority positions and the risks of properly integrating acquired businesses. The strategy considerations are particularly important, as the buy-and-build approach is not part of the traditional VC playbook and will have implications for the risk/ return profile of the investment.

The prevalence of unprofitability in VC-backed companies also adds another layer to the analysis, with many of these external investments funded purely by VC raised by the acquirer, as opposed to internally generated funds, meaning the cost of capital is relatively high. In a sense, this is akin to the GPs sponsoring the acquisition or minority investment, similar to how a buyout firm would support an add-on for one of its portfolio companies. The difference is that while VC backers have some input in strategic decisions via board seats or general advisory relationships, they traditionally have less sway in specific strategic decisions

Spotlight: VC M&A

than a PE backer or majority owners. Furthermore, the popularization of the “founder-friendly” approach weakens this link more by giving the founders broader latitude with respect to strategic decision making.

Venture-backed acquisitions

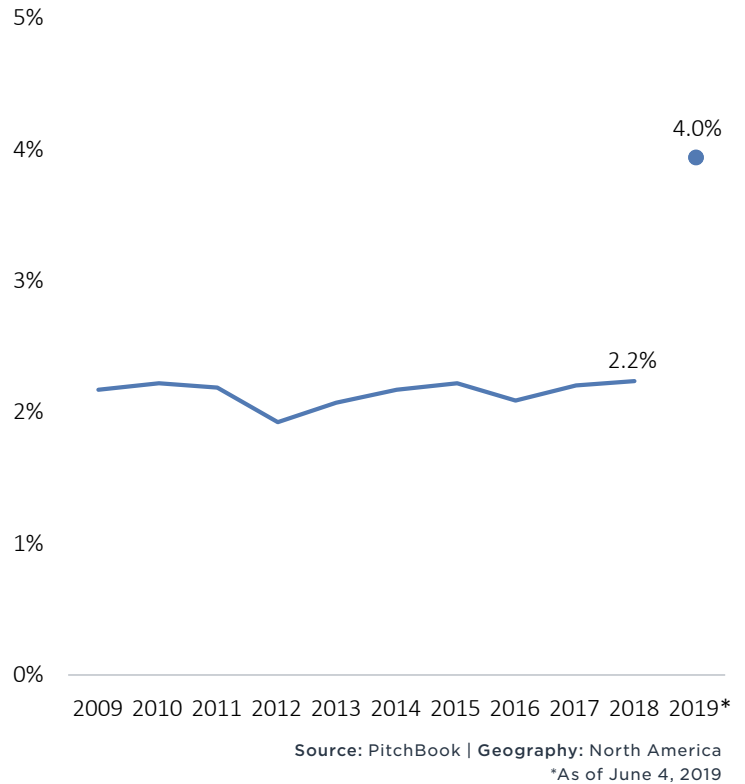
Although typically associated with more mature businesses, acquisitions are by no means a new strategy for relatively young companies. However, the explosion of capital in the venture space has made it easier for startups to begin acquiring. While not pacing for a sequential increase in M&A volume, VC-backed companies’ share of total M&A activity by count has seen an uptick so far in 2019.

M&A activity by VC-backed companies accelerated quickly in the several years leading up to 2015, coinciding with a surge in VC investment. Investors seeking growth opportunities were driven to VC during the last decade as returns from traditional asset classes floundered. With this emphasis on growth from investors, valuation expansion for startups is primarily driven by the growth prospects, and companies sometimes must look externally to continue fueling expansion.

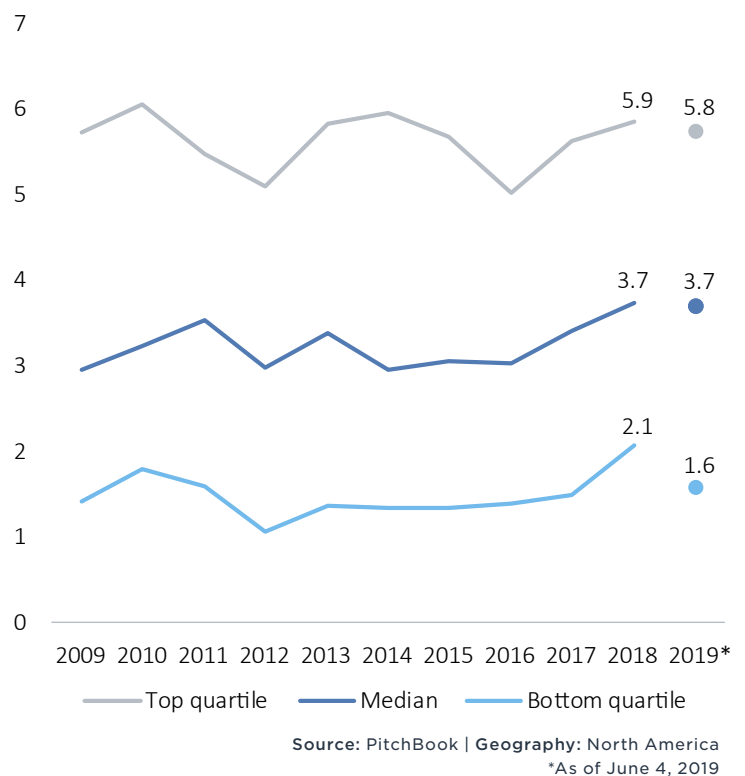
As a vehicle to achieve this rapid growth, acquisitions can represent an immediate boost to company scale by augmenting teams such as the salesforce or operations such as manufacturing capabilities, as well as achieving synergies to accelerate growth. These deals likely need to clear a high hurdle of potential value creation given the risk of this approach for a growing company, but in the case of a stagnating company, the deal may be critical to the future of the business and easier to rationalize. Furthermore, VC, which is relatively expensive on a cost of capital basis, is the principal source of financing for these transactions, which adds difficulty to reconciling the economics of the deals.

Acquisitions are without a doubt an avenue for growth, but they also invite plenty of complexity in valuing the combined business. To examine if acquisitive startups are treated differently, we looked at valuation step-ups bucketed by number of acquisitions between rounds. Completing one or two acquisitions corresponded to slightly higher median and average valuation step-ups compared to the non-acquisitive startups, suggesting some boost in scale or growth prospects from the dealmaking. However, moving toward the more active side of the spectrum, we start to see some deterioration in multiples. As a company makes more acquisitions, the risks to integration and financial success of these

Proportion of M&A activity with US VC-backed investor participation



Range of time (years) since VC funding to first acquisition



Spotlight: VC M&A

deals increase drastically, which can put pressure on the subsequent valuations. Questions also arise around why high-growth startups would choose to enact M&A at this pace. Typically, these companies should be growing quickly enough to keep the focus on organic growth and improving the business model. To be sure, many of the possible reasons that a startup may feel compelled to engage in M&A—such as jumpstarting stalled growth, pivoting business models, or operating in an extremely competitive market—also double as factors that would drive valuation step-ups lower.

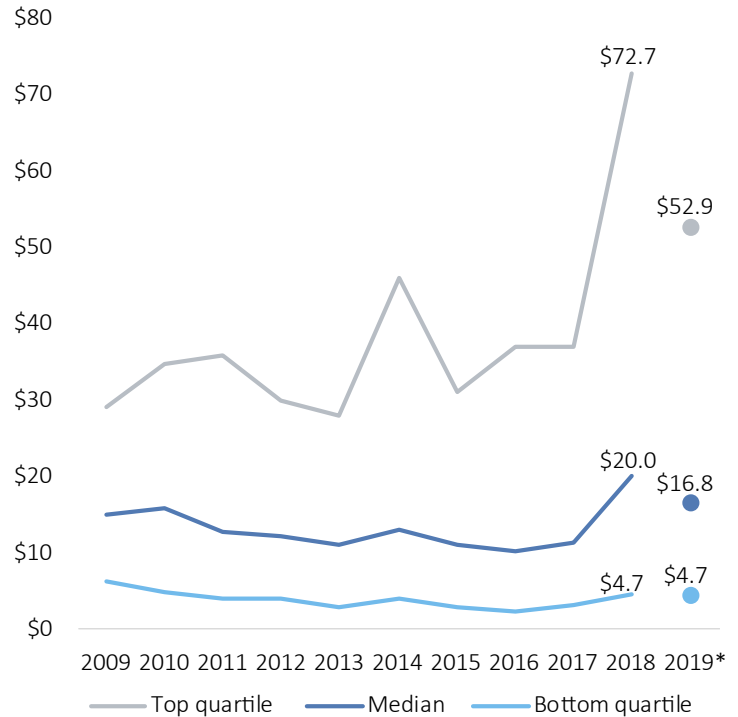
Conclusion

With no immediate catalysts to disrupt the VC funding environment, we believe the focus for VC-backed companies will continue to be heavily weighted toward growth. Given the availability of capital, companies can invest beyond internal sales & marketing or R&D to achieve scale, exploring strategic investments outside of the company. With much of the low-hanging fruit secured, finding new innovations, niches and geographies through M&A or VC investment becomes more attractive.

With the top-quartile VC-backed company in 2018 raising \$72.7 million before making an acquisition and with a median of \$78.2 million in capital raised before making a VC investment, companies that complete a \$100 million deal are likely candidates to start making these external investments. Deals of this size used to mainly fall in the domain of the public markets. However, now that these transactions are becoming more common within VC, it's logical that we've recorded elevated dealmaking activity by VC-backed companies. These companies have achieved a level of maturity and scale where it makes sense for them to search externally when striving toward continued growth. Due to the confluence of these factors, we expect external dealmaking activity by VC-backed companies to increase in volume over the short term as these companies fully realize the opportunities.

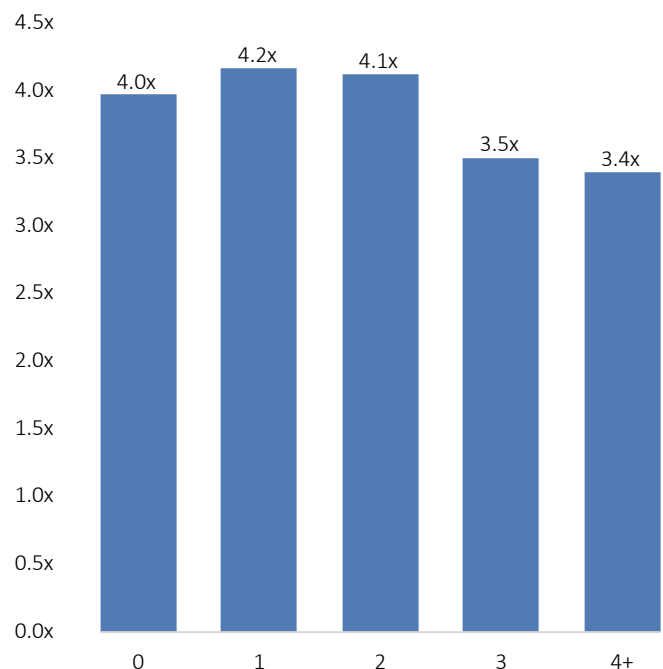
The full [note](#) also includes analysis of VC deal activity with VC-backed investor participation.

Range of VC raised (\$M) at time of first acquisition



Source: Morningstar | Geography: North America
*As of June 4, 2019

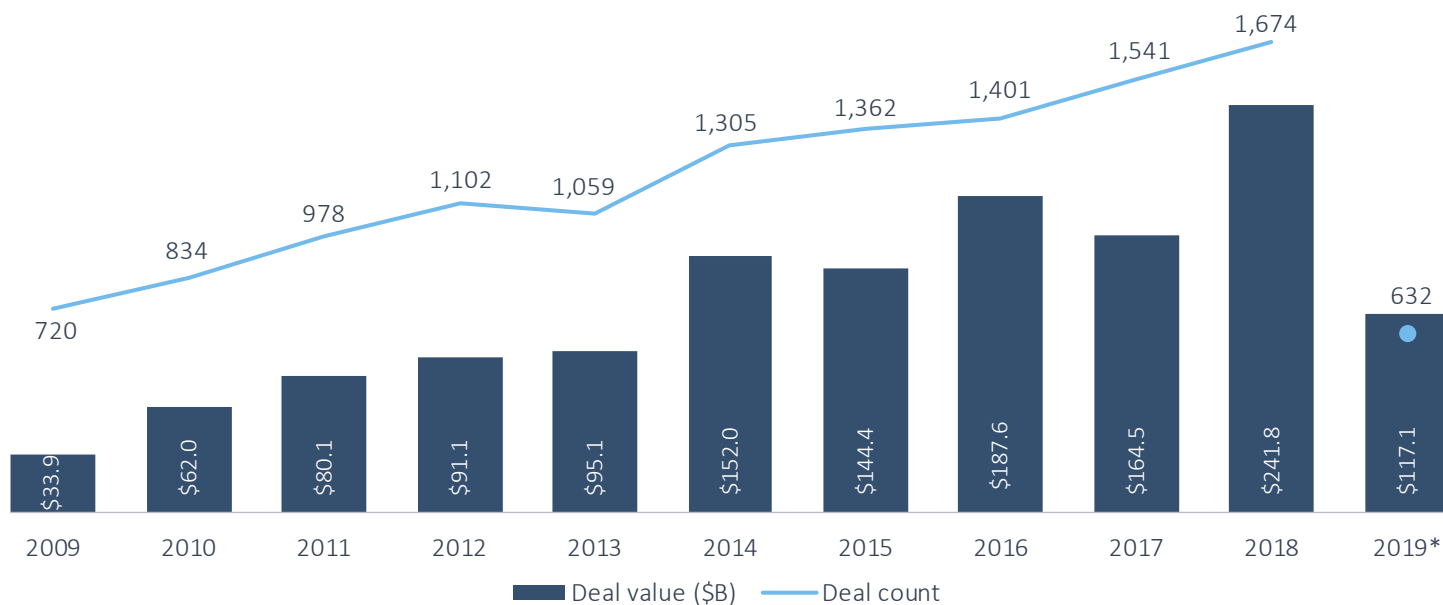
Average valuation step-up multiple by acquisitions (#) since previous VC round (annualized)



Source: PitchBook | Geography: North America
*As of June 4, 2019

Spotlight: Software M&A

Software M&A activity



Source: PitchBook | Geography: North America
*As of June 30, 2019

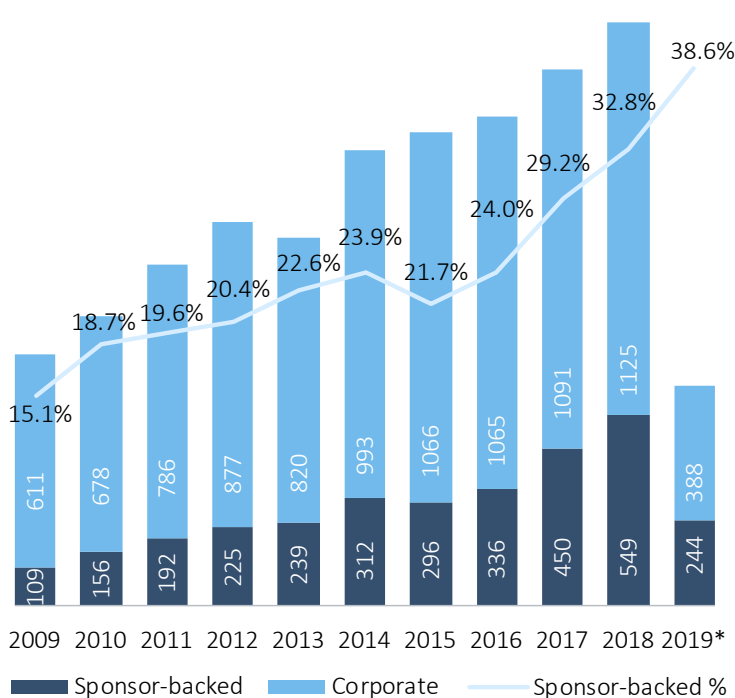
In 2Q 2019, IT has continued to gain a prominent share of M&A. In the quarter IT accounted for 21.3% of deal count and 25.7% of deal value, illustrating investors' increasing interest in the sector. This trend is driven by the software subsector and, more specifically, SaaS companies. As mentioned previously, a consortium of firms led by buyout shop Hellman & Friedman took SaaS company Ultimate Software Group private in the largest deal of the quarter.

PE's interest in SaaS-oriented companies stems from a couple distinct trends. Years of strong dealmaking in PE's traditional, low-growth industries have resulted in heightened competition and fewer viable investment opportunities. Pricing has been pushed even higher due to the decade-long economic expansion and abundant cheap debt. With valuations high across the board, GPs have gravitated to high-growth industries, such as software. One key difference in software investments today is the innovation around debt structure. Previously, PE firms liked to leverage companies using hard assets as collateral for the debt, making many asset-light software firms ineligible buyout targets. In recent years, however, it has become apparent that the recurring revenues of many software companies are stable enough to leverage, thus opening a new avenue for investment within the high-growth industry. PE firms have also realized that due to the flexible nature of several SaaS companies, these companies are particularly adaptable to integration, boding

well for add-on strategies. While PE made up around 43% of all software M&A deals in 2Q (which is in line with its proportional volume across all sectors), PE firms have completed more \$1 billion+ deals than corporates as of late, illustrating their predominance at the top end of the market. Software-focused GPs have also expanded into private credit, part of a broader trend of managers diversifying their strategy offerings. For example, Vista Equity Partners, a forerunner of PE investment in software, has a credit offering (Vista Credit Opportunities) that focuses on investments into PE-backed, middle-market software companies.

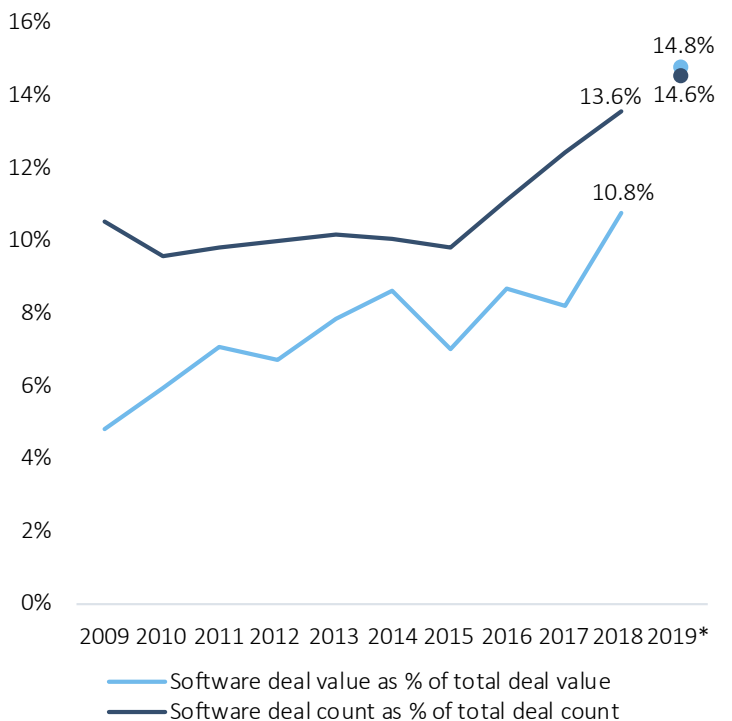
Corporates have also been steadfast in their acquisitions of software companies, often pursuing these deals to expand product scope rather than scale. One example of this is H&R Block's (NYSE:HRB) acquisition of Wave Financial in 2Q 2019. Wave, which provides accounting and other payments software for small businesses, is a bid to help H&R compete with the QuickBooks offering from rival Intuit (NASDAQ:INTU), which also owns TurboTax. In addition, Wave will bring an online focus to a company which produces the majority of its revenue from its brick and mortar locations. In a time when companies are being pressured to enter the digital age, acquisitions of software companies have become key to achieving this goal.

Software M&A (#) by acquirer type



Source: PitchBook | Geography: North America
*As of June 30, 2019

Software deals as proportion of total M&A



Source: PitchBook | Geography: North America
*As of June 30, 2019

Several large software deals have been announced in 2019 and are expected to close in the coming quarters. Prominent deals include the aforementioned \$2.6 billion acquisition of Looker by Alphabet and the \$15.7 billion all-stock acquisition of data analytics company Tableau (NYSE: DATA) by

Salesforce (NYSE: CRM). Based on these and other mega-deals sure to be announced in the back half of the year, and notwithstanding any potential anti-trust action against larger tech companies, there is a strong possibility that IT deal flow in 2019 will surpass the already elevated levels seen last year.

Top 10 M&A software deals closed in 1H 2019*

Company name	Close date	Deal size (\$B)	Deal type	HQ location
Ultimate Software Group	May 3, 2019	\$11.0	Buyout/LBO	Weston, FL
Qualtrics	January 23, 2019	\$8.0	M&A	Provo, UT
Dun & Bradstreet	February 8, 2019	\$6.9	Buyout/LBO	Short Hills, NJ
Hortonworks	January 3, 2019	\$5.2	M&A	Santa Clara, CA
Ellie Mae	April 17, 2019	\$3.7	Buyout/LBO	Pleasanton, CA
SendGrid	February 1, 2019	\$3.0	M&A	Denver, CO
Apptio	January 10, 2019	\$1.9	Buyout/LBO	Bellevue, WA
Mindbody	February 15, 2019	\$1.9	Buyout/LBO	San Luis Obispo, CA
International Business Machines	June 30, 2019	\$1.8	M&A	Armonk, NY
Cylance	February 21, 2019	\$1.5	M&A	Irvine, CA

Source: PitchBook | Geography: North America
*As of June 30, 2019

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