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Key takeaways from the analysts

2Q 2018 saw 4,735 deals completed totaling \$987.8 billion across North America and Europe—a 2% decrease and 24% increase, respectively, over the 4,823 deals worth \$799.7 billion reported in 1Q 2018. The 31 mega-deals (\$5 billion+) completed in 1H lifted total deal value while the number of transactions remained steady. M&A activity has been steady across Europe in 1H 2018, with 3,424 transactions completed totaling \$569.7 billion. North American activity was stable as well with 5,213 completed deals worth \$1.0 trillion. The number of announced mega-deals across both regions ought to ensure M&A activity continues to boom. The financial services sector experienced an uptick in activity while value fell as fewer large deals closed. In 1H, the sector saw 790 deals with a total value of \$161.5 billion close, compared to the 960 transactions worth \$227.6 billion in 1H 2017. The industry is undergoing a substantial shift that has led M&A to be viewed as a tool to position firms for the future.

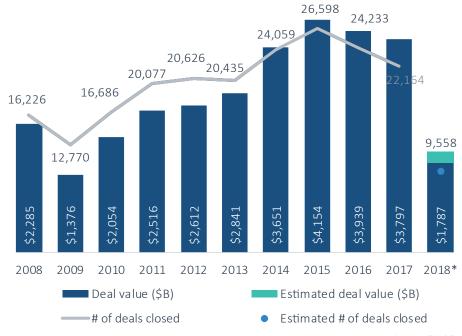
31 mega-deals completed in 1H 2018 **3,424** deals completed in Europe in 1H 2018 \$161.5B in financial services

deals completed in 1H 2018

Overview

M&A investment experienced an uptick in the second quarter due to several completed mega-deals. 4,735 deals were completed totaling \$987.8 billion across North America and Europe-a 2% decrease and 24% increase over 1Q, respectively. Five deals above \$10 billion closed in the quarter-including Bayer's \$63 billion acquisition of Monsanto and Vodafone's \$21.8 billion (€18.4 billion) acquisition of UPC Czech-leading to the sizable rise in deal value on roughly flat transaction volume. Deals of this nature are likely to persist in the coming quarters, with a number of gargantuan transactions also being announced, including the \$67 billion acquisition of Express Scripts by Cigna as well as The Walt Disney Company's \$71.3 billion bid for 21st Century Fox assets. The M&A market is inexorably linked with business sentiment, corporate fundamentals and macroeconomic forces that can impact factors like access to financing. With all these indicators continuing to trend

Transaction value on pace to match recent figures North American & European M&A activity



Source: PitchBook *As of June 30, 2018

OVERVIEW

positively, the global M&A boom shows no signs of stopping. Altogether, 2018 is unlikely to eclipse the record-setting numbers achieved in 2015, but it is on pace for another \$3 trillion+ year.

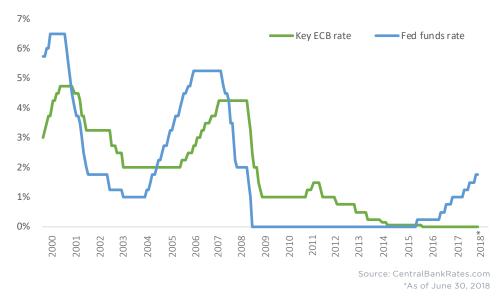
The subtle shifts and divergences in interest rates may also be influencing the dealmaking atmosphere. Today markets are awash in cash, providing cheap and easy access to acquisition financing; however, interest rates are rising in North America while Europe looks to hold rates at historically low levels for at least another year. Looking forward to the medium-tolong term, interest rates across the globe will almost certainly be higher, meaning companies-especially ones hoping to finance an acquisition with tens of billions of dollars in debt-are incentivized to act now on planned deals to save on the financing costs.

In this increasingly competitive global environment, CEOs are becoming more active, disposing of noncore assets and bolstering current operations through M&A. According to a recent Ernst & Young report, "Nearly a third of executives have increased the frequency of portfolio reviews in the past three years."1 Even though the rate of closed deals has slowed, the outlook remains bright for European M&A in the coming guarters. Similarly, the positive outlook for North American M&A persists with US GDP growth in 1Q coming in above 4%, adding to business executives' sanguine view of the economic future.

Since falling to their respective nadirs in 2009, deal sizes have rebounded to unprecedented levels. The growth has been most pronounced for platform buyouts, where the median deal size has grown at a compound annual growth rate (CAGR) of 16.3%, outpacing both add-on buyouts (11.7%) and corporate acquisitions (12.7%).

Rates finally on the rise in US; Europe to hold steady

ECB and Fed funds rates (%)



Frequency and price diverge as average carveout size comes off decade high

Carveout frequency and average size



Source: PitchBook *As of June 30, 2018

OVERVIEW

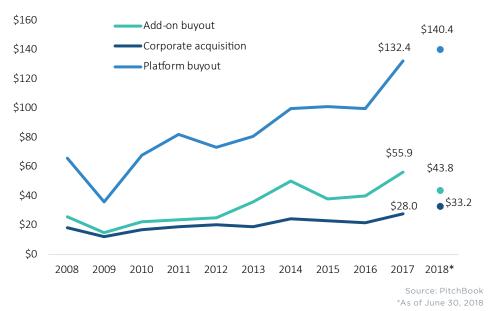
Institutional investors continue increasing allocation targets to PE as the industry continues to mature and escalate its prominence; the PE industry manages \$2.3 trillion in North America and Europe (as of June 30, 2018). PE firms have been raising increasingly large funds-such as the \$20 billion buyout fund Blackstone announced in 2Q-and are buying larger companies to properly allocate that capital. This trend should continue to push median buyout sizes higher. Corporations, flush with cash from a near decade-long recovery and a penchant for acquisitions, should pursue larger targets as well.

While every deal that closed above \$10 billion in 2Q involved a publicly traded acquirer, corporates are prolific buyers on the low-end as well. Small businesses account for an outsized portion of acquirers compared to the more substantially sized PE-backed companies, causing corporate acquisition deal size medians to come in well under PEbacked platform buyout medians.

Deal sizes in North America and Europe have steadily marched higher since 2009, when the median transaction value was \$15.0 million in North America and \$14.1 million in Europe. Since that time, median North American deals have expanded by a CAGR of 14.9% to \$52.5 million, whereas European medians have experienced a CAGR of 8.3% to reach the current \$30.7 million median value. M&A activity in North America, especially add-on buyouts, is gaining popularity as a way to augment topline expansion in this lower-growth environment. Over the past five years, S&P 500 companies have advanced their top-line at just 3.6% on average. And, with access to financing so cheap-although rates are beginning to creep up-buying growth can appear more attractive than doing it organically through R&D.

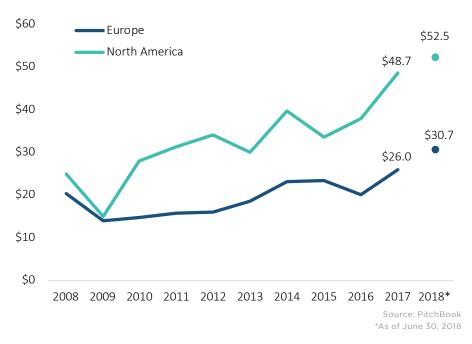
Deal sizes remain elevated

Median deal size (\$M) by type



Median North American and European deal sizes grow to decade high

Median deal size (\$M) by region



OVERVIEW

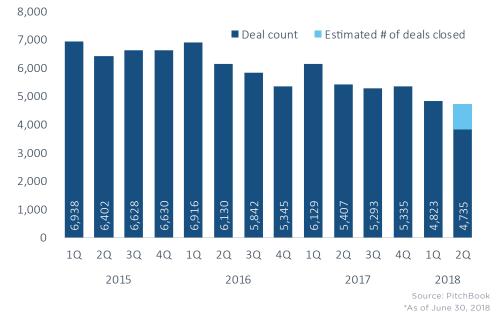
Across the board, M&A deal count has been plateauing since its climax in 2015 as corporations remain confident about the global economy—postglobal financial crisis—to put significant capital to work. At the same time, many PE-backed companies acquired pre-crisis had weathered the storm and were ready to be sold. By virtually any historical measure, our current M&A environment is healthy; while the trend in deal count is slightly down, total deal value is faring better because average deal size is larger.

This is in a similar vein to what we are seeing across public markets. The number of public companies has continued to dwindle since the tech-bubble peak in 2000, when companies were listing daily. In today's market, large, cash-rich incumbents are gaining scale and now represent unprecedented levels of value. The rate of new business creation has slowed at a time when the rate of business closures is up. This trend will pressure deal count, as there are fewer potential target companies in the M&A market.

Over the longer term, certain sectors, especially healthcare and IT, have grown deal count at an above-average rate. These sectors have also grown at faster rates than the global economy, but most other sectors are falling behind in terms of M&A activity. Overall, a few sectors may grow deal count, but the longer-term structural changes happening in North America and Europe ensure deal count will remain flat-to-down going forward.

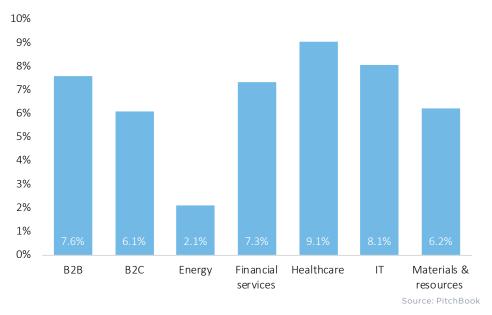
Deal count slowly trends lower

M&A deals (#)



IT and healthcare increase M&A activity at the fastest rates

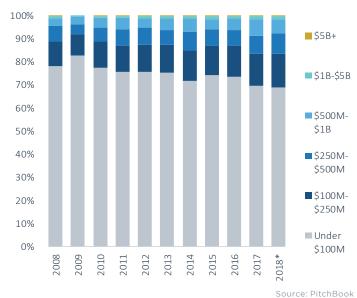
CAGR in deals (#) by sector 2009-2017



Deals by size & sector

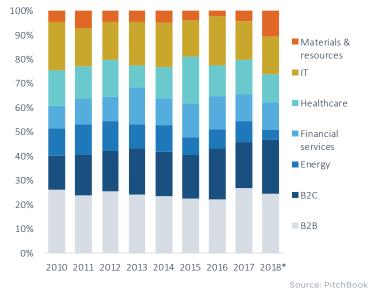
As overall activity falls, larger deals continue to gain share

North American and European M&A (#) by size



*As of June 30, 2018

Energy sees lowest proportion of deal value in a decade



North American M&A (\$) by sector

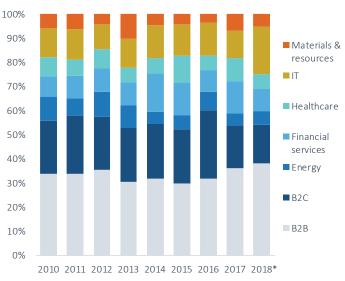
Core middle market (\$100M-\$500M) and mega-deals increase portion of deal value North American and European M&A (\$) by size

100% ■\$5B+ 90% 80% ■\$1B-\$5B 70% 60% ■\$500M-\$1B 50% 40% ■\$250M-\$500M 30% \$100M-20% \$250M 10% Under 0% \$100M 2012 2013 0008 000 2010 2014 2015 2016 2017 2018* 2011

Source: PitchBook *As of June 30, 2018

IT sees banner year as B2C continues to slump





Source: PitchBook *As of June 30, 2018

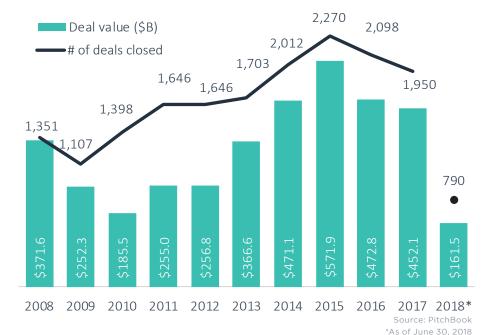
*As of June 30, 2018

PitchBook Spotlight: Financial services

Through 1H 2018, 790 deals were completed in the financial services sector with a total value of \$161.5 billion. Although dealmaking is slightly off pace compared to last year, 1H 2017's total deal value was \$227.6 billion—a full 41% higher on the back of eight mega-deals closing. Lately, the sector has been devoid of megadeals-without any closing in the past three quarters, compared to 11 in the preceding three guarters. Prior to 4Q 2017, the last quarter to pass without a financial services mega-deal closing was 3Q 2013. Though no megadeals closed in the sector in 1H, the sector saw a few sizable transactions close, such as Pure Industrial's \$3.0 billion (C\$3.8 billion) acquisition by Blackstone and Ivanhoé Cambridge.

Changes in the sector are afoot; from banks to lenders and asset managers, the old guard of companies is being upended by changing consumer preferences, a new breed of competitors and increasingly onerous regulations. Basel III and Dodd-Frankresponses to the excessive risk banks took that exacerbated the global financial crisis-have hampered the lending abilities of banks across North America and Europe. In North America, the lending restrictions included an implicit limitation on bank lending on deals with debt/EBITDA ratios over 6x. The regulators later walked this figure back, allowing banks to lend on higherlevered deals; by this point, however, the lending market had erupted with alternative lenders, such as direct

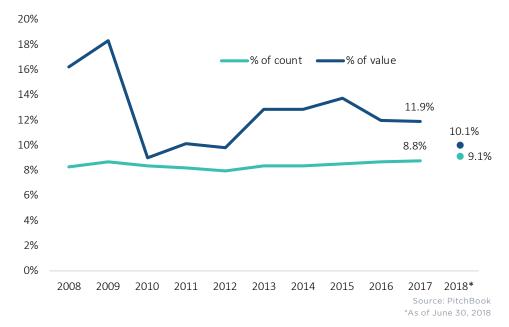
Activity slows through the first half of the year



Financial services M&A activity

Financial services shrinking proportion of M&A value

Financial services as % of total M&A activity



SPOTLIGHT: FINANCIAL SERVICES

lending funds, that were eager to finance deals levered well beyond 6x and expanded their lending capacity accordingly. Alternative lenders like Ares, FS Investment Corporation and others have kept capital flowing in North America and Europe, allowing the M&A market to continue booming.

All financial services subsectors are in flux; however, the rate of change may be the most pronounced in asset management. Over the last 15 years, two shifts have permanently altered the investment landscapethe move from active to passive management and the maturation of the private markets. To illustrate the first point, Morningstar reports that in 2017, passive US mutual funds and ETFs saw net inflows of \$692 billion while active funds suffered net outflows of \$7 billion.² Indeed. large active managers have had a more difficult time increasing assets under management than Vanguard or BlackRock, the two largest passive managers. Asset managers on both sides are not standing still. Invesco, for example, in 2Q 2018, completed a \$1.2 billion acquisition of Guggenheim Investment's ETF business in an effort to strengthen its passive investment options. Passive managers are using M&A to add to their strengths as well, with WisdomTree spending \$1.4 billion on ETF Securities along with their exchange-traded commodity, currency and short-and-leveraged business in April 2018.

Private markets—from PE to VC—are increasingly viewed as an integral piece of a well-diversified portfolio, which has led institutional investors to increase their target allocations. The growing importance of private markets is evidenced by ODDO BHF's \$2.1 billion (€1.8 billion) acquisition of ACG Capital, a PE firm, which closed in

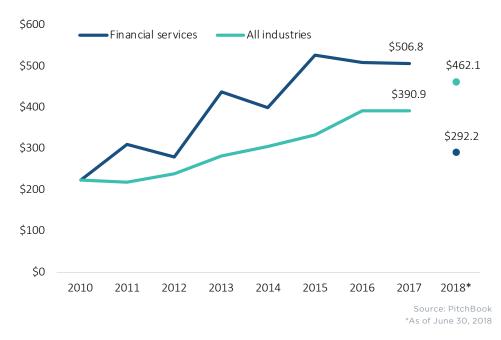
Top 5 financial services deals closed in 1H 2018

Acquired company	Date	Deal size (\$B)	Subsector
Liberty Life Assurance Company of Boston	May 1, 2018	\$3.3	Insurance
Pure Industrial	May 24, 2018	\$3.0	Real estate investment trusts (REITs)
ACG Capital	April 6, 2018	\$2.2	Capital markets/ institutions
Talcott Resolution	May 31, 2018	\$2.1	Insurance
Promsvy azbank	March 21, 2018	\$2.0	Commercial banks
			Source: DitchRook

Source: PitchBook *As of June 30, 2018

Financial services transaction size falls below the overall M&A average

Average transaction size (\$M)



2Q. CVC and other PE firms have been increasing assets and the number of companies owned while the number of publicly listed companies diminishes. The amount of capital in the industry, as well as the number of PE-backed companies, has more than doubled since 2000. During this tectonic shift, many of the traditional asset managers have needed to bulk up by merging or acquiring similar and/or complementary businesses to avoid fee compression from slowly destroying what used to be a highermargin business.

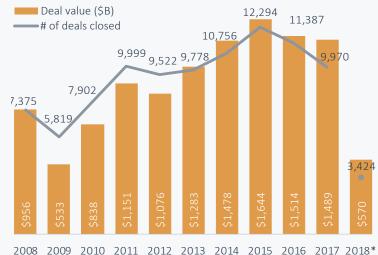
2: "Morningstar Direct Asset Flows Commentary: United States," Alina Lamy, January 18, 2018

PitchBook Spotlight: European M&A

Aggregate transaction volume and value is off to a slow pace in 2018 relative to recent years. 3,424 transactions were completed totaling \$569.7 billion, a clear abatement from the 5.336 deals valued at \$797.8 billion achieved in 1H 2017. While European M&A activity is putting up lofty numbers, 2018 marks the largest decline in M&A share since 2014. North America has been riding an M&A boom of epic proportion, consistently outpacing the activity in European M&A. Even though European M&A has been shrinking in proportion to North American M&A, many of the larger acquisitions of North American companies are by Europe-based companies. Interestingly, two of the four largest acquisitions of North American companies to close in 1H 2018 had European buyers, including Bayer's \$63 billion acquisition of Monsanto and Sanofi's \$11.6 billion acquisition of **Bioverativ Therapeutics. European M&A** activity continues to be robust, with European firms being active on both sides of the equation. One reason for the decline is currency-related; our M&A figures are priced in USD, and since the dollar has been strengthening recently, the USD-denominated M&A value in Europe has declined in comparison.

The pipeline of announced mega-deals has swollen as the largest companies have become especially acquisitive—a divergence from count and value of closed deals. The proliferation spans industries—from infrastructure, such as Atlantia's \$21.3 billion (€18.2 billion) bid for Spanish toll-road owner Abertis, to traditional retail, with Sainsbury agreeing to buy Asda for \$10 billion (£7.3 billion).

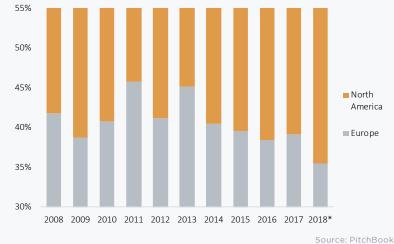
Weaker 1H, but robust back half is expected European M&A activity



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018* Source: PitchBook *As of June 30, 2018

European M&A value cedes ground to North America

European & North American M&A as a proportion of total M&A (\$)



*As of June 30, 2018

This has led to many pundits proclaiming "the return on the mega-deal," with the largest public companies around the world flexing their financial muscles and buying up prominent European companies.³

3: "Return of mega-deals helps European M&A double," Reuters, Ben Martin, June 28, 2018

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SPOTLIGHT: EUROPEAN M&A

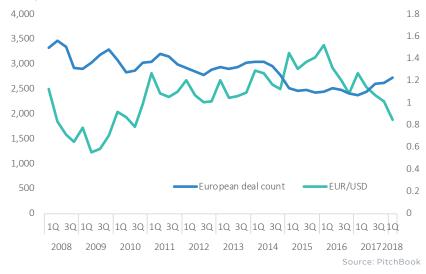
On the dealmaking front, the forecasted negative effects of Brexit are not appearing in corporate acquisition data. In fact, we have seen an acceleration of mega-deals in recent guarters. The current Fox and Comcast bidding war for Sky has recently hit the \$34 billion (£26 billion) mark and Takeda's soon-to-close bid for Shire is worth \$62 billion (£45.3 billion). Companies around the world understand that the UK offers deep capital markets and talent pool, and those competitive advantages will not disappear overnight. This strategic M&A activity lies in contrast to our findings in PE data-lower deal count and fundraising figures and higher exit activity-which seemed to suggest that dealmakers are becoming more cautious about doing business in the UK with Brexit approaching. It will be worth watching both sets of data to see whether this divergence continues.

To be sure, some areas are already feeling the effect. The negative currency impact and surrounding stigma from Brexit suppressing UK asset values caused many investors to now see them as undervalued. Of the 13 mega-deals closed in 2018, five were UK-based companies, an increase over 2017 where six of the 23 closed mega-deals were UK-based companies. Those two aforementioned mega-deals are in sectors-media and pharmaceuticals-that ought to be able to thrive no matter their headquarters' location, because multinational conglomerates in these sectors will need to navigate a variety of jurisdictions regardless of the parent's HQ.

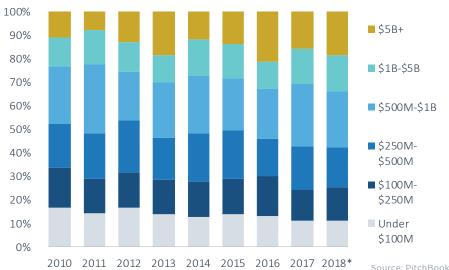
Brexit's negative impact on the GBP may be incentivizing global companies to bid on these "crown-jewel" type assets when there may be only a few such opportunities globally, due to their high quality and value but lower price in local currency. While this data is on the shorterterm and variability is prone to happen, this seems like a solid indication that post-Brexit UK may not be as bad as the original headlines led many to believe.

European M&A trending downward as USD rises

European M&A deal count and EUR/USD



Proportion of \$500M+ deals reaches a decade high European M&A (\$) by size



*As of June 30, 2018

Top five European deals closed in 1H 2018

Acquired company	Date	Deal size (\$B)	Industry
UPC Czech	May 9, 2018	\$21.8	IT
WorldPay	January 16,2018	\$12.9	IT
GKN Group	May 21, 2018	\$10.9	B2B
Zodiac Aerospace	February 13, 2018	\$8.2	B2B
Bayer seed and herbicide business	March 31, 2018	\$7.3	Materials & resources

Source: PitchBook *As of June 30, 2018

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