C

2018 Annual

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Introduction

In 2018, North American and European M&A saw:

•\$3.6 trillion total deal value across 19,501 deals (6.3% increase and 15.6% decrease YoY, respectively)

• A median EV/EBITDA multiple of 9.6x, rising from 9.4x in 2017

•\$655.6 billion total cross-border deal value across 2,192 deals (18.7% decrease YoY for both figures)

M&A activity within North America and Europe recorded its fifth consecutive year with total deal value exceeding \$3 trillion. Results were driven by a continuous flow of mega-deals, especially in the technology and media sectors. The materials & resources sector—driven by Bayer's acquisition of Monsanto and subsequent asset divestitures—registered standout results as well. This took place despite a pullback in public equity indices on both sides of the Atlantic. Additionally, interest rates were on the rise for much of the year in North America, making acquisition financing more expensive. While interest rates remained relatively steady in Europe, it was for all the wrong reasons. Economic growth in the region is slowing substantially, and several economies—including Germany and France—are nearing a recession. Healthy dealmaking kept purchase-price multiples elevated, inching up to 9.6x. Interestingly, these multiples rose in Europe—hitting their highest level on record—and fell in North America, even though the latter appears to be performing better economically. Part of the upward push in European multiples was likely driven by the jump in median deal value, rising 34.2% YoY to \$34.2 million, because larger deals tend to transact at higher multiples.

Cross-border M&A was hit by a wave of protectionism, much of it likely due to the US's more isolationist rhetoric, dissuading foreign—especially Chinese—entities from purchasing US-based assets. Other countries and regions are pushing back on globalization as well. Global growth looks to be stalling, which tends to dampen M&A activity, especially cross-border.

Finally, M&A is becoming more institutionalized. With the count of PE and VC-backed companies surging throughout the year, a higher percentage of M&A targets (20.0%) are either backed by professional investors or publicly traded than ever before. Swelling asset bases for PE and VC make it increasingly likely this trend will continue for years to come.

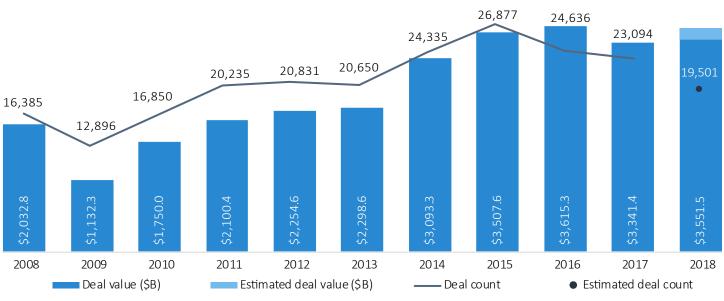


Wylie Fernyhough Analyst, PE

Overview

2018 records second-highest value on record despite fewer deals

North American & European M&A activity



Source: PitchBook

Voracious dealmaking on both sides of the pond pushed 2018 M&A deal value to the second-highest value on record. The year ended with 19,501 deals closing worth a combined \$3.6 trillion—a 15.6% decrease and a 6.3% increase from 2017, respectively. Overall deal value came in just 1.8% below the 2016 peak even as total deal count was down over 20% compared with the same timeframe. Low interest rates though higher than in recent years—and a demand for yield fueled easy access to debt financing in both regions. Additionally, a rising interest rate environment may have pushed many buyers to lock-in prices today, rather than waiting for financing costs to rise, which could lead to marginal deals no longer making economic sense.

The year had myriad notable deals, including six priced above \$50 billion. Telecom giant AT&T (NYSE:T) purchased WarnerMedia—owner of media properties including HBO and CNN—for \$85.0 billion in the year's largest transaction. The vertical consolidation move creates a company that loosely resembles Comcast (NASDAQ:CMCSA)—which purchased NBC Universal in two transactions over a two-year period for a combined \$23.2 billion. The deal also shows how content distributors are vying for content creators, though not always with success. Telecom rival Verizon (NYSE:VZ) took another path, acquiring AOL for \$4.4 billion in 2015 and Yahoo! for \$4.5 billion in 2017—the combined company was named Oath. In December 2018, Verizon took a \$4.6 billion writedown on its Oath investment. 2018 also saw the materials & resources sector hit a decadehigh deal value. One mega-deal—Bayer's (FRA:BAYN) \$63.0 billion acquisition of Monsanto—sparked a massive spike in the sector. To win approval from regulators, Bayer divested two business units to Germany-based chemicals conglomerate BASF (FRA:BAS). Both of these transactions became megadeals, with BASF purchasing the Bayer seed and herbicide business for \$9.4 billion (€7.6 billion) and the Bayer vegetable seeds business for \$8.8 billion (€7.6 billion).¹ The sole megadeal in the sector that did not stem from the Monsanto acquisition was The Carlyle Group's (NASDAQ:CG) \$11.8 billion (€10.1 billion) leveraged buyout (LBO) of AkzoNobel Specialty Chemicals—later renamed Nouryon. Carlyle used a hefty €6.4 billion loan package to finance the deal.

Going forward, the M&A landscape appears to be changing. Incessant talk of a coming economic slowdown is propelling many businesses to taper spending and expansion plans, which itself could lead to an economic slowdown. Furthermore, the US saw part of the yield curve—the 3-year/5-year spread, not the more watched 2-year/10year—briefly invert for the first time since the financial crisis, typically an omen for a recession. Leading economic indicators will need to be closely watched in the coming year.

1: The reason for the differing dollar amounts is due to currency fluctuations between the time that each deal closed.

Overview

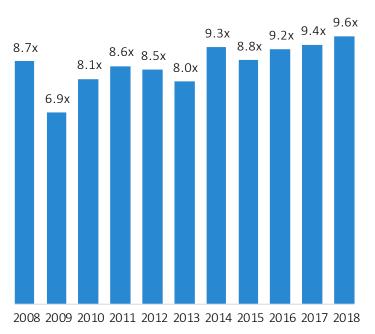
Multiples and stock performance

The median EV/EBITDA multiple across North America and Europe rose to 9.6x in 2018 thanks to easy financing and heightened competition. Many large, publicly traded companies have preferred to grow via acquisition as opposed to investing in organic growth in recent years, boosting competition for choice assets. Capital expenditure spending has remained suppressed while a larger share of profits was directed toward share repurchases and acquisitions. Simultaneously, private capital vehicles namely PE and family offices—have seen asset bases swell into the trillions of dollars. These cash-rich buyers are competing against the larger corporations and increasingly winning deals, further driving competition.

Multiples in the M&A market rose slightly even though public market indices—namely the S&P 500, FTSE 100, and DAX—were roiled by volatility during the year. While the overall volatility figures are not outliers on a historical basis, the decade-long recovery in public equities has been remarkably stable, making the volatility witnessed in 2018 feel more profound. It is often said that the stock market is not a reflection of the economy. As true as this is, many companies tend to be more acquisitive when their stock is performing well. The recent downturn in public markets has yet to be mirrored in M&A pricing, and going into 2019, dealmakers are increasingly cautious. The somber outlook may pressure pricing and force multiples down across North America and Europe.

Multiples push higher

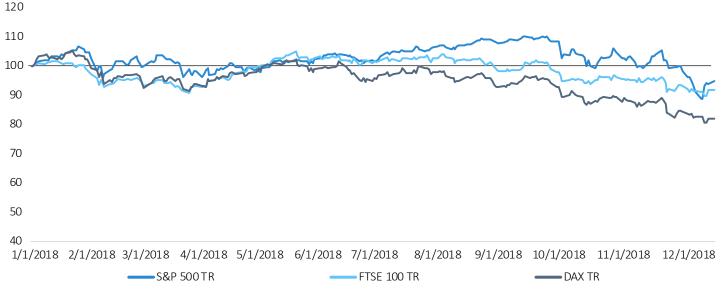
Median North American and European M&A EV/EBITDA multiples



Source: PitchBook

Major stock indices see down year

Performance of major North American and European stock indices (rebased to 100)



Overview

North American M&A

Activity in North America drove much of the combined results, with four of the six deals above \$50.0 billion targeting US-based companies. 2018 was the fourth consecutive year in which the region's overall M&A value exceeded \$2.0 trillion. Fueled by tax savings, US corporations exhibited a penchant for acquisitions during the year, yet multiples contracted marginally, though remained elevated by historical standards.

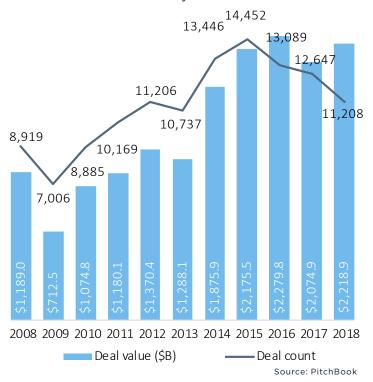
Consolidation and vertical integration for insurance and pharmacy benefit managers (PBMs) drove some of the largest deals in the year. A PBM sits as the middle man between the insurance companies and the drug makers. The US market has three major PBMs: Optum, Express Scripts, and CVS Caremark. (UnitedHealth (NYSE:UNH)—an insurance company-owns Optum.) Since the creation of Optum in 2011, UnitedHealth's stock price has far outpaced its peers, and many believe some of this can be attributed to its ownership of Optum. Some years later, CVS (NYSE:CVS), which closed on the \$69.0 billion acquisition of Aetna during 2018, purchased Caremark. Additionally, Cigna (NYSE:CI)—another insurance company-decided to purchase the only remaining major PBM and bought Express Scripts for \$54.0 billion in 2018. Both acquisitions promise to transform the healthcare and insurance landscapes for years to come.

The technology sector experienced a slew of mega-deals in recent years, and 2018 was no exception. IBM (NYSE:IBM) acquired Red Hat for \$34.0 billion in the third-largest technology acquisition ever in the US. In the second-largest technology deal of the year, Broadcom (NASDAQ:AVGO) the semiconductor company famous for roll-up acquisitions purchased CA Technologies for \$19.0 billion in an acquisition that expands Broadcom outside its core chip business.

As many companies have been bulking up and pursuing vertical and/or horizontal consolidation, some have decided to slim down, hoping to minimize the conglomerate discount. One of the largest examples in 2018 was United Technologies (NYSE:UTX), which announced it will split into three companies—aerospace, elevator, and air-conditioning—as well as sell off its Chubb Fire & Security business. This comes just months after the company completed its \$23.0 billion acquisition of Rockwell Collins, a producer of communications and aviation systems. Dan Loeb's Third Point hedge fund had been agitating for a split-up of the conglomerate. We expect to see more companies split up and/or divest businesses going forward to try and boost valuations and simplify business strategy after years of fervent consolidation.

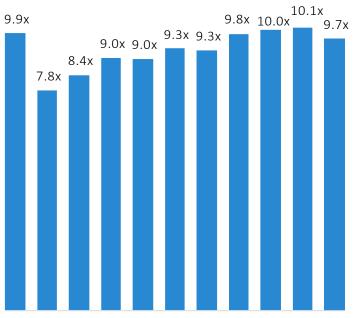
2018 is fourth consecutive year with M&A value above \$2T

North American M&A activity



Multiples remain aloft

Median North American M&A EV/EBITDA multiples



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Overview

European M&A

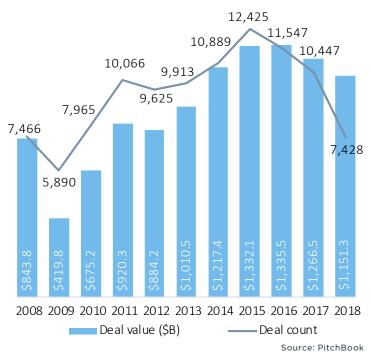
European M&A logged its sixth straight year completing more than \$1.0 trillion in total deal value. However, deal value appears to have peaked, after cresting \$1.3 trillion in 2015 and 2016. GDP growth in the EU has lagged for over a decade and many companies are turning to M&A to expand within, and outside, the bloc. Low interest rates have persisted—allowing for cheap acquisition financing—even as rates have begun rising in North America. Furthermore, large multinationals have used the uncertainty caused by Brexit, and the ensuing depreciation of the GBP and UK-based companies as an opportunity to find relatively affordable acquisitions. Multiples across the continent reflected the competition for assets and leapt to 9.6x, the highest level on record.

Several notable deals for UK-based companies closed in 2018. Dealmakers across the globe are showing their belief in the longer-term importance and stability of the UK by snatching up assets at a perceived discount that have been cheapened by a depreciation in the pound. As a result, the median multiple in the region rose to 10.8x. The largest deal was Comcast's \$38.8 billion (£29.8 billion) acquisition of Sky UK. The deal came after several rounds of bidding with Fox (NYSE:FOX), which already owned 39% of Sky UK. All the while, Fox's entertainment assets had agreed to be acquired by Disney (NYSE:DIS) for \$71.3 billion, meaning Fox was bidding on the cable TV asset on behalf of Disney. Another example of an American company scooping up a discounted UK-based firm was Vantiv's (NYSE: WP) \$12.1 billion (£9.3 billion) acquisition of WorldPay. Going forward, we will have to watch the Brexit process closely and see if this wave of protectionism sweeps across Europe and isolates countries, making for a more tepid M&A environment in 2019 and beyond.

Though the year saw many large UK-based deals close, the largest European M&A deal targeted an Italian company. Essilor (PA:ESLX), a French optics company that designs and manufactures lenses, purchased Luxottica—the largest optics frame manufacturer—for \$55.9 billion (€48.0 billion), the combined company was renamed EssilorLuxottica. The acquisition combined the world's largest lens manufacturer with the top frame manufacturer. The vertically integrated company will now wield more control over the supply chain and distribution channels. As interest rates remain just above zero and GDP growth in Europe continues to lag North America, many companies will continue turning to M&A to augment top-line growth which ought to buoy M&A activity in the years ahead, so long as protectionism is kept in check.

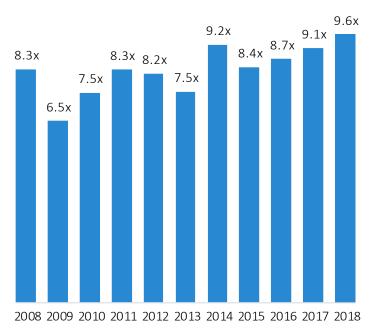
M&A in Europe softens further

European M&A activity



Multiples rise to post-recession high

Median European M&A EV/EBITDA multiples



Source: PitchBook

Overview

Median deal size and PE as a proportion of M&A

The median M&A deal size across both regions rose to a record high of \$48.2 million in 2018, a 34.3% YoY increase. North America saw the median hit \$60.0 million (a 22.4% YoY increase), while Europe recorded a median of \$34.2 million (a 34.2% YoY increase). In just the past eight years, the median M&A transaction size has more than doubled in both regions. Much of the growth can be attributed to the past two years as median deal value climbed slowly through 2016. Deals have been persistently larger in North America than Europe over the long term, a trend we have witnessed across VC, PE, and strategic M&A.

Part of the reason for swelling deal sizes is the growth in PE as a proportion of overall M&A. Since 2015, PE has jumped from accounting for 25.4% of M&A deals to 34.2% in 2018. By year-end, the median LBO size rose to \$140.0 million, nearly triple the median M&A deal size. PE firms have been raising larger funds in recent years which ought to lead to marked increases in PE deal size for years to come.

2018 saw PE record myriad high-profile transactions, including several above the \$10 billion mark. Moreover, the interplay between public and private markets is occurring more frequently. In North America, PE firms were responsible for the \$21.0 billion acquisition of Dr Pepper Snapple and the \$17.0 billion buyout of 55% of The Financial & Risk Business of Thomson Reuters, renamed Refinitiv. PE firms also closed on several large real estate investors in 2018. To note, Brookfield Asset Management (TSE:BAM.A) closed on its \$15.3 billion acquisition of General Growth Properties, a retail-focused real estate investment trust (REIT), and also purchased Forest City Realty Trust for \$11.4 billion. Moreover, Blackstone (NYSE:BX)-currently fundraising for the largest real estate PE fund ever at \$20.0 billion-purchased Gramercy Property Trust for \$7.6 billion.

Europe also saw several mega-deals closed by PE firms. In addition to Carlyle's aforementioned buyout of AkzoNobel Specialty Chemicals (Nouryon), KKR closed on the \$6.7 billion buyout of Unilever's spreads business. On top of that, Hellman & Friedman closed on another crown-jewel payments processing firm, Denmark-based Nets, for \$5.3 billion (DKK 33.1 billion). Europe also recorded a PE-fueled real estate mega-deal, with Lone Star funds purchasing 80% of CaixaBank's (XMAD:CABK) real estate business for \$6.5 billion (€5.6 billion). We expect PE to continue taking share in North American and European M&A markets as PE's AUM growth sustains its unabated rise.

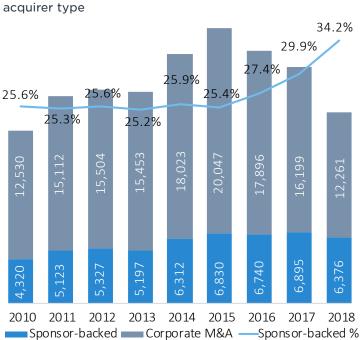
Deal size surges across regions

Median North American and European M&A deal sizes (\$M)



PE firms grow proportion of deal activity

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



Deals by size and sector

Materials

■IT

& resources

Healthcare

Financial

services

Energy

B2C

B2B

■\$5B+

■\$1B-\$5B

■\$500M-\$1B

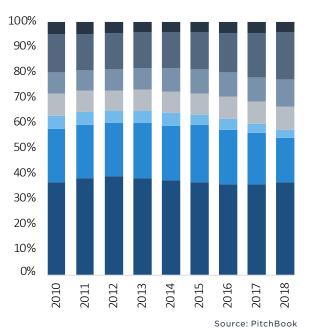
\$250M-\$500M

\$100M-\$250M

Under \$100M

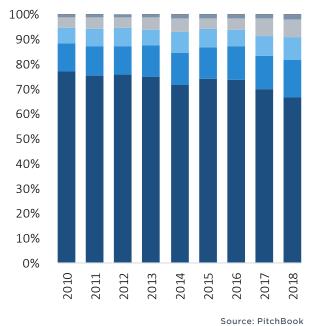
More deals completed in IT than B2C for first time

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

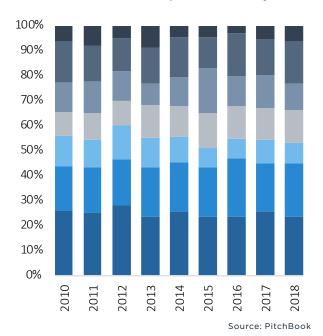


\$100M+ deals account for highest proportion of deals on record

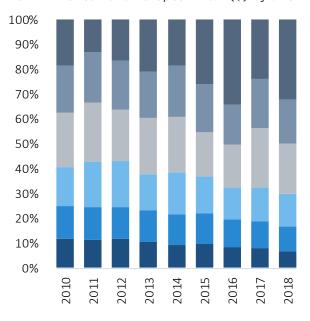
North American and European M&A (#) by size



B2C and B2B remain preeminent sectors in terms of deal value North American and European M&A (\$) by sector



Mega-deals account for over 30% of deal value for third time on record North American and European M&A (\$) by size



Source: PitchBook

Spotlight: Cross-border

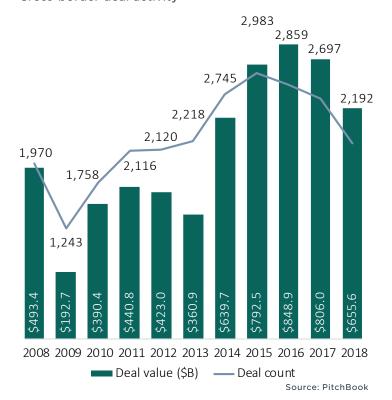
Cross-border deal activity receded in 2018, accelerating the slowdown first observed in 2017. Overall, North America and Europe saw 2,192 deals involving acquirers outside their respective regions worth \$655.6 billion—an 18.7% decline YoY in both count and value. Cross-border's proportion of overall deal value dropped as well with these deals accounting for 19.5% of overall M&A deal value, the first year below 20% since 2013. As a wave of protectionism and trade tensions has been building over the recent years, we are finally beginning to see the results in the underlying data.

Cross-border M&A activity fell in both regions in 2018, though deals were more abundant in Europe. Assets cheapened throughout the year with the STOXX Europe 600 posting an annual loss and the US dollar—as well as many other global currencies—gaining on the Euro and pound. However, foreign companies have been keen to acquire corporate assets at a discount and US-based PE firms have stepped up their purchases of European businesses after years of robust fundraising.

As Brexit negotiations go awry, the future of the powerhouse economy and Europe in general looks anything but certain. A no-deal Brexit would be bad for Europe too. The EU has a \$90 billion annual trade surplus with the UK, meaning a hard Brexit could lead to some very displeased German automotive manufacturers and French vintners, among others, further pressuring European GDP growth.² Select economic indicators point to Germany and France nearing a recession. This negative outlook is likely to make European companies less likely to spend on acquisitions, especially on North American companies. However, a recession and dip in asset prices may spark family offices, PE firms, and corporations to snatch up attractively priced companies.

Acquisitions of North America-headquartered companies by outside buyers dipped in 2018 with deal value and count declining 19.7% and 22.0% YoY, respectively. Although Europe accounts for the vast majority of M&A deal activity targeting North American companies in recent years, China had been gaining share rapidly. In 2010, China accounted for under 1.0% of North American cross-border deals. By 2016, however, that figure had ballooned to 9.4%.³ The current trade dispute and a more hardline approach taken on China is likely deterring would-be buyers. Additionally, the stronger dollar made acquisitions more expensive. As a result, in 2018 Chinese buyers accounted for just 5.6% of cross-border deals targeting North American companies.

Activity hits lowest level in four years Cross-border deal activity



Deal activity diverges

Cross-border activity (#) as proportion of total M&A



2: "Deal or no deal," Marketplace, Kai Ryssdal, January 15, 2019

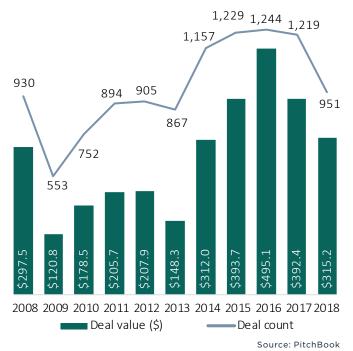
3: In transactions with multiple acquirers, a single acquirer from another region would qualify as "cross-border."

Spotlight: Cross-border

Cross-border deals by location

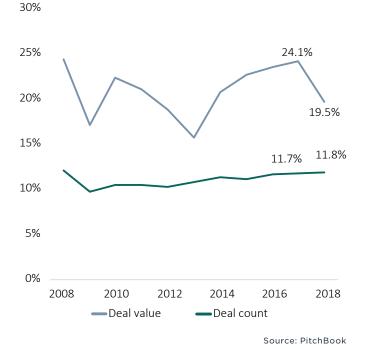
M&A targeting North American companies takes another substantial step lower

North American cross-border M&A activity



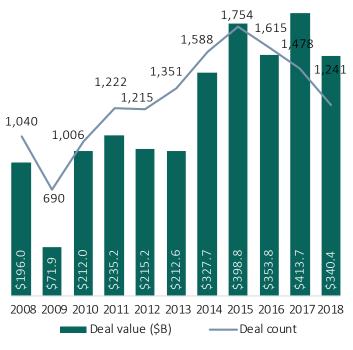
Proportion of value falls while count stays level

Proportion of North American and European M&A with cross-border investors



Overall deal value recedes on lower transaction volume

European cross-border M&A activity



Source: PitchBook

Chinese dealmakers pull back after 2016

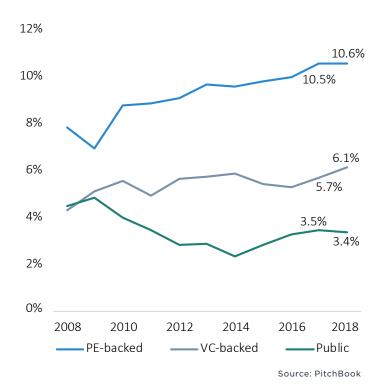
Proportion of cross-border deals (#) with Chinese investor participation



Spotlight: Institutionalization

PE and VC-backed companies make up rising percentage of M&A targets

North American and European M&A targets (#) by backing status

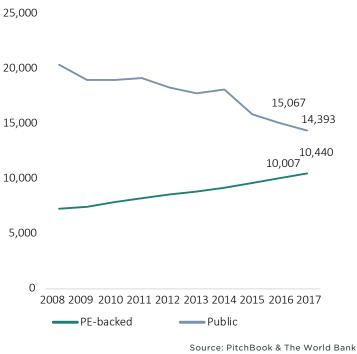


An ever-rising proportion of M&A targets have institutional backing (defined as being backed by PE or VC or being publicly traded). In 2018, 20.0% of M&A targets were institutionally backed, the highest figure on record. One of the driving forces behind this longer-term shift is the swelling count of companies backed by PE and VC. These companies are likely to continue making up a growing share of M&A targets in the years to come with VC becoming a go-to funding source for nascent companies hoping to scale and one day go public or, more likely, be acquired.

Perhaps the largest contributor to the rise in institutionally backed M&A targets is the ballooning number of companies backed by PE. In 2018 alone, PE firms in the US inked over 5,000 acquisitions and the count of US PE-backed companies stood at just under 8,000, up from around 1,500 in 2000. Another element further boosting PE-backed M&A has been the practice of PE firms selling portfolio companies to other PE firms, called a secondary buyout (SBO). These transactions accounted for over half of all PE-backed exits in 2018. The spread of companies with financial sponsorship will lead to more instances of acquirers negotiating with savvy sellers and

Convergence between public and PEbacked companies continues

North American and European companies (#) by backing status



increased price discipline, possibly leading to more aggressive price negotiation from sellers and fewer cheap deals.

Note: Due to a lag in the reported data, this data is presented through full-year 2017.

The proportion of publicly traded target companies rose in recent years-though not in 2018-despite the steadily declining count of public companies. Stock markets were down across most of Europe and North America on the year, lessening the cost of acquiring a public company. As the count of public companies dwindles further, we expect a lower proportion of publicly traded M&A targets, though this may be several years away. Periods with inflated stock prices-causing acquirers to use equity for acquisitions, such as Fiserv's proposed all-stock acquisition of rival First Datamay cause shorter-term spikes of public companies targeting other publics. Although a recession or severe pullback in the stock market would make companies far less expensive, the economic uncertainty typically prevents many companies from making acquisitions unless they already have funds set aside for said acquisition. Overall, the trend of a rising proportion of M&A targets having institutional backing appears here to stay.

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