Pathway Research

Private Market Environment

4TH QUARTER 2019

CONTENTS

2019 Year in Review

The final quarter of 2019 provided a fitting capstone to what was a standout year for public equity markets. Early in the quarter, stocks trended lower, driven by mixed economic data from the U.S., slowing growth in China, and fears of an escalating trade war between the countries—the same concerns that dogged investors throughout the year. However, equity markets once again proved resilient, embarking on a steady ascent from late October through the end of the year, helped by a still-strong U.S. jobs market, a decisive election result in the UK, and a preliminary trade deal reached by the U.S. and China. The MSCI All Country World Index returned 9.1% in the fourth quarter, which brought its full-year return to 27.3%—its highest calendar-year return since 2009. Perhaps the most important factor driving the year's rally in public equities, however, was the accommodative stance taken by global central banks to counteract signs of a global economic slowdown. The U.S. Federal Reserve cut its benchmark interest rate three times in 2019—reversing course less than one year after its last rate increase—to help extend the longest economic cycle in U.S. history. While overall sentiment is decidedly more positive now than at the start of 2019, there remains significant uncertainty in both the macroeconomic and geopolitical outlook, and the episodic bouts of volatility and dislocation seen in recent years are likely to remain a feature in 2020.

M&A Exit Activity Declined from Record-Setting 2018 but Remains Strong Overall

Private equity markets also performed well in 2019 (based on the latest data through the first three quarters of the year), underpinned by another strong year of M&A exit activity for private equity–backed companies. Global M&A exit activity for PE-backed companies totaled $346 billion in 2019, down from the record-setting $415 billion in exit value in 2018 but still a healthy showing overall, according to data from Mergermarket. Despite the dampening effects of market volatility and uncertainty during the year, M&A exit activity continued to be buoyed overall by strong demand for high-quality assets from both strategic and financial acquirers, healthy corporate balance sheets, and accommodative credit markets. Additionally, during the year, many general partners sought to take advantage of high valuations to monetize gains and return capital to their investors, particularly as concerns about late-cycle dynamics and the global macroeconomic outlook persisted. Notable PE-backed M&A exits in the fourth quarter include the sale of South Korean food delivery company Woowa Brothers to Delivery Hero for $4.0 billion and the sale of upstream energy company Felix Energy to WPX Energy for $2.5 billion.

Table 1. Largest PE-backed M&A Exits Announced in 4Q19

At December 31, 2019

Seller	Portfolio Company	Industry	Region	Value (MM)
Sequoia, Hillhouse Capital	Woowa Brothers	Software	South Korea	$4,000
Anthos Capital, Zuma Partners, Wonder Ventures	Honey Science	Consumer Discretionary	U.S.	$4,000
Stone Point, KKR	Privilege Underwriters	Financial Services	U.S.	$3,100
GTCR	Cision	Technology	U.S.	$2,740
GTCR, Clearlake	Lytx	Technology	U.S.	$2,550

Global Buyout Investment Activity Falls for the First Time since 2016

General partners remained cautious overall in 2019 due to concerns about the macroeconomic outlook, high level of valuations in the marketplace, and strong competition from strategic and financial buyers. Global buyout investment activity totaled $355 billion in 2019, a drop of 19% from the prior year and the industry's first annual decline since 2016. Each major geographic region saw a decline in transaction activity during the year. In Asia, the total value of buyouts in 2019 was $37.7 billion, a decline of 19.3% from the prior year. Investment activity in Asia has been adversely impacted by the trade war between China and the U.S., as well as by lower growth expectations for the region's major economies. Valuations remained elevated during the year, further hampering investment activity. In the U.S., the average purchase-price multiple for buyout transactions (all sizes) in 2019 was 11.5x, up nearly a full turn from the prior year and the highest annual average on record, according to S&P LCD. The increase in average purchase-price multiples in recent years has been driven in part by the high level of technology-related buyouts in the marketplace, particularly software-related buyouts. Software-related buyouts often feature companies with high growth rates, recurring revenues, and strong cash-flow conversion rates and typically command high valuation multiples. In 2019, software companies represented 17.3% of U.S. buyout transaction value, up from 13.1% in 2018, according to PitchBook Data, Inc.

Record Fundraising Year for Private Equity Driven by U.S.-Based Funds

Global private equity fundraising activity totaled $560 billion in 2019, an increase of 16% from the prior year and the highest annual total on record. The year-over-year increase was driven by U.S.-based funds, which raised $384 billion in 2019, up from $284 billion in 2018. The three-largest U.S.-based funds alone raised a combined $58.4 billion, or more than 10% of the worldwide total for the year. Fundraising activity has increased steadily since reaching a post-credit crisis low of $129 billion in 2009, driven by the industry's strong overall performance, a high level of distributions to limited partners, and the continued expansion of the asset class within institutional investors' portfolios. The brisk pace of fundraising activity in recent years has raised questions about the potential impact of rising dry powder levels on the competitive environment. Global buyout dry powder increased to $608 billion as of the third quarter of 2019, from $526 billion at the end of 2018, based on Pathway's calculations. However, the years-to-deploy ratio (dry powder/estimated annual equity investment) was 3.8 years, just moderately higher than the average of 3.3 years from 2010 to 2018. Additionally, the increase in dry powder has been driven in part by private equity firms' measured pace of investment over the past several years, which remains well below prior-cycle peak levels. Looking ahead, we expect the industry to remain disciplined overall and focused on identifying or creating attractive opportunities to deploy capital.

Table 2. Largest PE Investments Announced in 4Q19

At December 31, 2019

Buyer	Target	Industry	Region	Value (MM)
Apollo	Tech Data	Technology	U.S.	$6,000
Francisco Partners	LogMeIn	Software	U.S.	$4,300
PAI Partners	Nestle U.S. Ice Cream Business	Consumer	U.S.	$4,000
Thoma Bravo	Sophos	Software	UK	$3,900
Hellman & Friedman	AutoScout24	Communications	Germany	$3,210

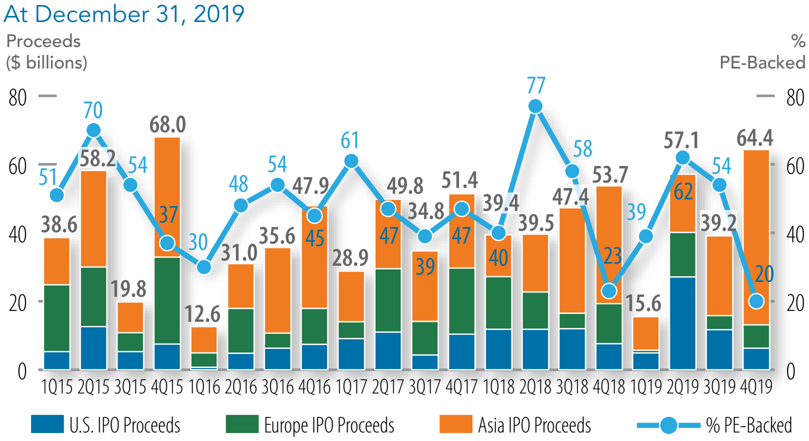
Global IPO and M&A Exit Markets

Global exit market activity continued at a healthy pace during 2019, despite marking the first annual decline in the value of buyout-backed M&A exits since 2016, according to Mergermarket. During the year, M&A exit value for buyout-backed companies totaled $346 billion from 1,620 transactions—a decline of 17% in value and of 10% in volume from the record-setting pace of 2018. Perhaps influenced by geopolitical uncertainty, M&A exit value during the year varied meaningfully by region: annual declines of 30% in Europe and of 55% in Asia were partially offset by an increase of 5% in the U.S. M&A exit value in the U.S. reached $200 billion for just the second time on record, falling 2% below the record-setting $204 billion in 2014. The annual figure was driven by several large transactions announced during the year, including Fiserv's $22.0 billion acquisition of KKR-backed First Data and 3M's $6.7 billion acquisition of Apax Partners–backed Acelity. Wary of late-market-cycle dynamics, general partners have additionally been active in evaluating other opportunities to return capital to limited partners while preserving some upside in strong-performing investments, including partial recapitalizations and general partner–led secondaries. Notable GP-led secondaries during the year include the $1.4 billion sale of assets by Insight Venture Partners and the single-asset sale of a minority stake in Phoenix Tower International by The Blackstone Group.

IPO markets experienced a similarly active year, driven by a number of high-profile technology listings and a second-half resurgence in activity in Asia. In the U.S., there were 160 IPOs that raised $50.1 billion during 2019—an increase of 16% in value from the prior year but a decrease of 16% in the number of listings. Buyout- and venture capital–backed listings collectively accounted for 83% of proceeds raised in the U.S., the largest annual share on record. IPO market performance, however, ended the year on a mixed note: although new listings on average finished 2019 up 24% from their IPO price, many of the year's high-profile listings (e.g., Uber and Lyft) struggled to gain traction and traded well down.

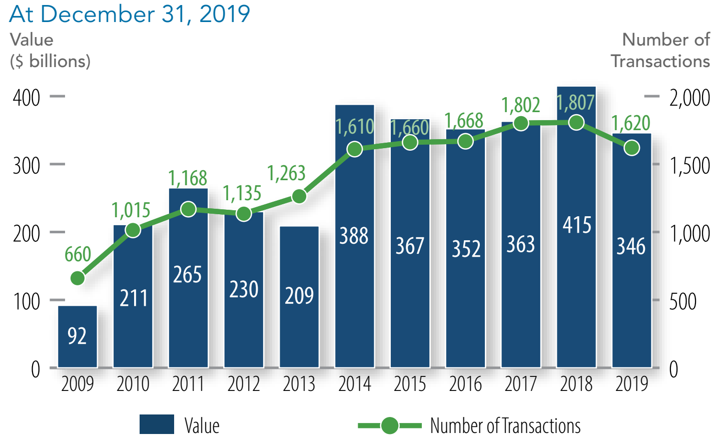
In Asia, 874 IPOs raised $101 billion during 2019, an increase of 8% from the prior year. The total included notable secondary listings of Alibaba ($12.9 billion) and Postal Savings Bank of China ($4.7 billion); however, PE–backed IPOs accounted for just 22% of proceeds raised in the region. In Europe, IPO proceeds totaled €22.2 billion, down 39% from 2018 and the lowest annual total since 2012. The muted IPO activity in Europe may be largely attributable to continued uncertainty, both globally, stemming from the U.S.'s trade wars, and regionally, caused by the ongoing Brexit tussle. PE-backed companies accounted for 58% of aggregate IPO proceeds, including the year's two-largest listings: Nexi (€2.1 billion) and TeamViewer (€2.0 billion).

Figure 1. Quarterly Global IPO Activity
At December 31, 2019



Source: Bloomberg, Renaissance Capital, PwC, and Pathway Research.

Figure 2. Global PE-Backed M&A Exit Value & Volume
At December 31, 2019

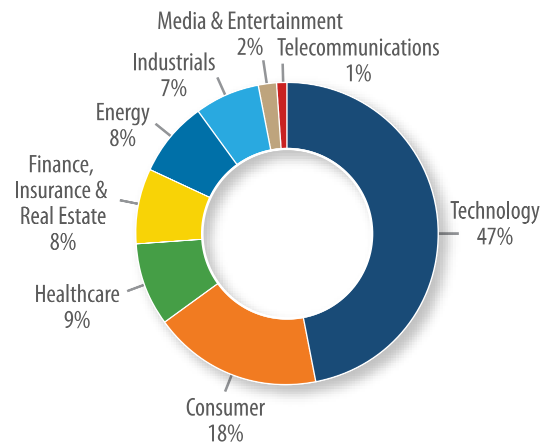


Source: Mergermarket.

U.S. Buyout Markets

Buyout activity in the U.S. exhibited a measured slowdown during 2019 as managers sought to balance high levels of dry powder with strong competition from both strategic and financial buyers and the general sense of uncertainty over the global macroeconomic outlook. During the year, U.S. buyout investment activity totaled $199 billion, according to Thomson Reuters and Pathway Research, a decline of 20% from 2018 and well below the annual record of $460 billion set in 2007. The decline was driven primarily by large-cap activity (i.e., transactions with an enterprise value of $1.0 billion or greater), which fell 30% year over year to its lowest annual value since 2013. Activity in the large-cap market was driven by a number of technology-related take-privates, including Hellman & Friedman's $11.2 billion buyout of Ultimate Software, Apollo's $6.0 billion purchase of Tech Data, and Francisco Partners' $4.3 billion acquisition of LogMeIn. The muted growth seen in the large-cap segment of the market over the past seven years serves as a positive indicator of the level of caution that most buyout managers have retained in the current market environment. In contrast, during 2007, six buyouts exceeding $20 billion were announced, nearly matching the total dollars invested during 2019 alone. Small- and middle-market activity during the year remained elevated, however, totaling $86.9 billion. The annual figure represented the category's second-largest total on record, falling just 4% below the $90.0 billion invested in small- and middle-market companies during 2018.

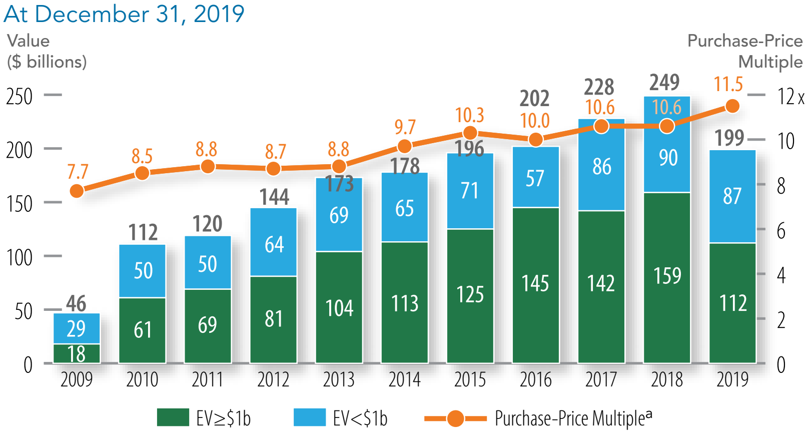
Figure 4. U.S. Buyout Transaction Value by Sector
At December 31, 2019
As a % of Transaction Value



Source: Thomson Reuters and Pathway Research.

Despite the tapered deal value in 2019, valuations continue to remain high: the average purchase-price multiple for buyouts completed during the year rose to 11.5x EBITDA, according to S&P LCD, up from 10.6x EBITDA during 2018. The increase was driven in part by the preponderance of software-related buyouts, which accounted for 17% of deal activity during the year, up from 13% during 2018, according to PitchBook Data, Inc. This increase was also consistent with that seen in the public markets, where average valuations for the S&P 500 index rose from 11.8x EBITDA to 14.2x EBITDA. As a result of the high valuation environment, general partners have remained focused on investments with strong competitive positioning and high-conviction value-creation plans, which can serve as means of mitigating the potential negative impacts of multiple contraction and tapering economic growth during the life of an investment.

Figure 3. U.S. Buyout Investment Activity
At December 31, 2019



Source: Thomson Reuters, S&P LCD, and Pathway Research.
Notes: Amounts may not foot due to rounding. • EV=Enterprise value.
[a]Average PPM (as a multiple of trailing EBITDA) of all LBOs.

Table 3. U.S. Buyout Investment Statistics
At December 31, 2019

	2007	2018	2019
Purchase Price/EBITDA	9.7x	10.6x	11.5x
Equity Contribution %	30.9%	40.1%	43.5%
Debt/EBITDA	6.0x	5.8x	5.8x
EBITDA/Cash Interest	2.1x	2.7x	2.7x

Source: S&P LCD.

European Buyout Markets

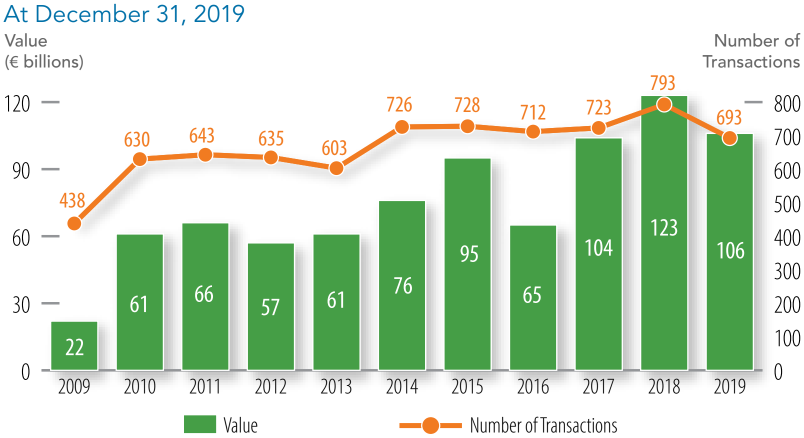
Following low levels of activity in the first nine months of the year, European buyout markets experienced a revival in the fourth quarter. According to data provided by CMBOR, the aggregate value of European buyouts completed in the fourth quarter was €41.1 billion—up 97% from the third quarter. This represents the second-highest quarterly total since the Global Financial Crisis (GFC), surpassed only marginally by the €41.6 billion of aggregate value in the fourth quarter of 2018. As a result of the strong fourth-quarter activity, 2019 finished the year with €106 billion in transaction value, down 14% from the prior year but still the second-most active year since the GFC.

The aggregate transaction value in the fourth quarter was driven by high activity at the large end of the market. The two largest deals of the year closed in the fourth quarter: the EQT-led €9.4 billion spinout of Nestle Skin Health and the €5.6 billion take-private acquisition of Merlin Entertainment led by The Blackstone Group. Eight large-cap deals valued at or above €1 billion were completed in the fourth quarter, representing an aggregate transaction value of €27.6 billion—the second-highest total since the GFC, surpassed only by the €29.4 billion posted in the fourth quarter of 2018.

Notably, six of the quarter's eight large-cap deals were completed in the UK. This represents a significant step up from only one UK large-cap deal in the first nine months of the year and coincided with the confirmation of a new prime minister, who promised a quick resolution to the Brexit deadlock. It remains to be seen if this positive sentiment will be maintained throughout 2020 or if it will be weighed down by refreshed uncertainty around the future relationship between the UK and the EU. As a result of its strong fourth-quarter performance, the UK maintained its ranking as the most active buyout market in Europe in 2019. The UK accounted for €30.8 billion of the European total for the year, followed by the DACH region, with €23.2 billion, and the Benelux region, with €13.2 billion.

Against the backdrop of high buyout activity, European credit markets became more active in the fourth quarter: primary high-yield issuance totaled €27.4 billion, up 58% from the prior quarter, according to UBS. This coincided with a reduction in the cost of borrowing: spreads on BB-rated euro-denominated bonds decreased from approximately 250 basis points to around 215 basis points. Overall, credit market conditions continue to be conducive to leveraged buyout activity.

Figure 5. European Buyout Transaction Value & Volume
At December 31, 2019



Source: CMBOR, Ernst & Young, and Equistone Partners Europe.

Table 4. Largest European Buyouts That Closed in 4Q19
At December 31, 2019

Buyer	Target	Country	Value (MM)
EQT Partners	Galderma (fka Nestle Skin Health)	Switzerland	€9,394
The Blackstone Group	Merlin Entertainment	UK	€5,581
Apax Partners, Warburg Pincus	Inmarsat	UK	€3,042
Bain Capital	Kantar	UK	€2,808
TDR Capital	BCA Marketplace	UK	€2,223

Source: CMBOR, Ernst & Young, and Equistone Partners Europe.

Asia Private Equity

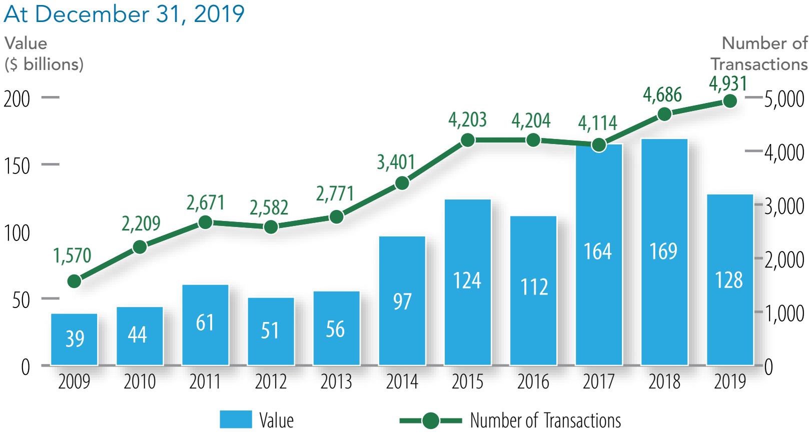
The Sino-American trade war reached a major milestone in October, when U.S. and Chinese officials agreed on the outlines of a phase-one trade deal. Under the terms of the agreement, the U.S. agreed to suspend planned tariff escalations and to halve existing 15% tariffs on $120 billion worth of Chinese goods. In return, China committed to increasing the purchase of U.S. agricultural products and to bolstering intellectual property enforcement. The ease in trade tensions calmed public markets and pushed major Asian stock indices to rally and deliver strong fourth-quarter returns.

IPO activity also picked up in the fourth quarter: 320 companies completed public offerings on Asia-based exchanges, according to data provided by Bloomberg. The $51.2 billion in proceeds raised represents a 120% increase quarter over quarter and a 49% increase year over year. The active IPO market was driven primarily by the high-profile secondary listings of Alibaba on the Hong Kong Stock Exchange and of Postal Savings Bank of China on the Shanghai Stock Exchange, which collectively raised $17.7 billion. According to *Asia Venture Capital Journal* (*AVCJ*), PE-backed IPOs accounted for $5.8 billion of proceeds raised during the fourth quarter. Notable PE-backed IPOs include the listings of Warburg Pincus–backed ESR Cayman ($1.4 billion) and Hillhouse Capital–backed Topsports International ($1.1 billion). Both public offerings were on the Hong Kong Stock Exchange and represented the only two PE-backed IPOs that raised more than $1.0 billion during the fourth quarter.

As a result of uncertainty stemming from the trade dispute, regional geopolitical tensions, and lower growth expectations in China, India and Japan contributed to a relatively subdued regional private equity investment and fundraising environment in 2019. Asia private equity investment fell 24% year over year to $128 billion. The fundraising drop-off was even steeper: Asian private equity managers raised just $47.9 billion, compared with $78.7 billion in 2018.

Private equity investment activity partly recovered in the fourth quarter, however, increasing 16% from the prior quarter to $32.6 billion, according to *AVCJ*. China was once again responsible for the lion's share of investment activity ($13.9 billion, or 43%) and the region's largest deal: Tenglong Holdings Group, an internet data-center solution provider, which raised $3.7 billion in a Series A round of financing led by Morgan Stanley Private Equity Asia and Nanshan Capital. The second-largest deal in the Asia-Pacific region was KKR's $2.2 billion acquisition of Arnott's, an Australian producer of biscuits and snack foods.

Figure 6. Asian PE Transaction Value & Volume
At December 31, 2019



Source: *AVCJ*.

Table 5. Largest Asia PE Investments in 4Q19
At December 31, 2019

Buyer	Target	Country	Value (MM)
Morgan Stanley Private Equity Asia, Nanshan Capital	Tenglong Holding Group	China	$3,700
KKR	Arnott's Biscuits	Australia	$2,200
Yunfeng Capital, Alibaba	Meinian Onehealth	China	$1,025
Softbank, Ant Financial, Discovery Capital	Paytm	India	$1,000
KKR	NVC China	China	$794

Source: *AVCJ*.

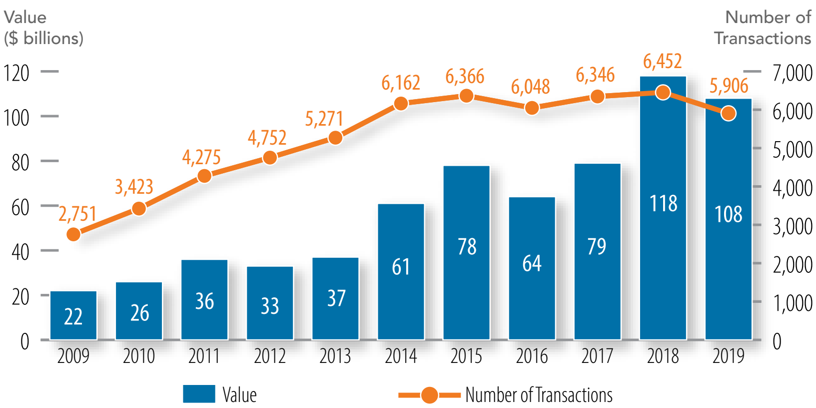
U.S. Venture Capital

The venture capital industry in the U.S. experienced another landmark year during 2019, driven by continued technological innovation, growing interest from a host of both traditional and nontraditional venture capital investors, and an accommodative exit environment. Venture-backed IPO value rose during 2019 to record heights, totaling $28.2 billion in proceeds and surpassing the prior record set in 2000 by 4%. The total was driven by a number of large unicorns that held long-awaited IPOs, including Uber and Lyft. Despite the record year, the number of new IPOs remained moderate: 87 venture-backed companies went public in 2019, which was even with 2018 but well below the 270 listings in 2000. Venture-backed companies performed well in the public markets overall, finishing the year up 38% from IPO price to year-end, on average. However, the year's four IPOs of greater than $1.0 billion—Uber (–34% return), Lyft (–40% return), Pinterest (–2% return), and Peloton (–2% return)—all traded below their IPO prices by year-end. This performance, along with the recent stumbles of WeWork, are being viewed as cautionary tales for venture capital investors, many of whom are reiterating the importance of startup companies striking a balance between growth and profitability.

M&A exit markets for venture-backed companies continued at a similarly healthy pace, although both activity and transaction value fell from a strong 2018. According to PitchBook Data, Inc., M&A exit value for venture-backed companies totaled $57.7 billion from 802 transactions in 2019, which represent declines of 11% and 13%, respectively, from the prior year. Strategic investors remained active buyers of venture-backed companies and accounted for several of the year's largest exits, including Paypal's $4.0 billion buyout of shopping and rewards platform Honey, and Johnson & Johnson's $3.4 billion buyout of robotic medical device developer Auris Health.

Venture capital investment activity in the U.S. remained high across all investment stages in 2019. During the year, venture capital investment activity totaled $108 billion, according the PwC/CB Insights MoneyTree™ Report. The total represented a decline of 9% from the prior year but was still the second-largest annual value since 2000. Nontraditional venture capital investors played a large role in the annual total, participating in funding rounds that accounted for 71% of invested capital during the year. Most notably, SoftBank Group continued to make its impact on the venture capital landscape, taking part in four of the year's five largest financings, including Cruise Automation ($1.2 billion), Flexport ($1.0 billion), and WeWork ($1.0 billion). The active investment environment in the venture capital market helped to boost the number of existing unicorns in the U.S. as of year-end to 199—an all-time high—which should set the stage for another dynamic year during 2020.

Figure 7. U.S. Venture Capital Transaction Value & Volume
At December 31, 2019



Source: PwC & CB Insights MoneyTree™ Report.

Table 6. Largest U.S. Venture Capital Deals in 4Q19
At December 31, 2019

Company	Select Investors	Value (MM)
Bright Health	Bessemer Venture Partners, New Enterprise Associates, Redpoint Ventures	$635
Chime	Coatue Management, General Atlantic, ICONIQ Capital, Menlo Ventures	$500
Databricks	Andreessen Horowitz, Coatue Management, New Enterprise Associates	$400
Convoy	Fidelity Investments, Greylock Partners, Lone Pine Capital	$400
Vacasa	Level Equity, NewSpring Capital, Riverwood Capital, Silver Lake	$319

Source: PwC & CB Insights MoneyTree™ Report.

Private Credit Markets

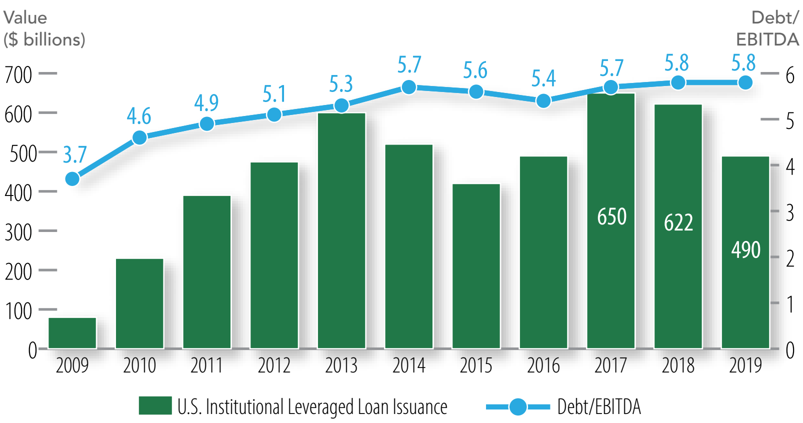
Performing Credit: Primary Markets Remain Accommodative Overall

Leveraged credit markets were accommodative overall in 2019, although there were periods of volatility that impacted sentiment and constrained overall leveraged loan issuance. U.S. leveraged loan issuance (institutional and pro rata) totaled $490 billion in 2019, down 23% from the prior year, according to S&P LCD. A slowdown in overall M&A activity and a flight to higher-quality loans, particularly in the third quarter, helped to drive lower leveraged loan volumes in 2019. CLO issuance in the U.S. totaled $118 billion in 2019, a decline of 8% from 2018 but still one of the strongest years on record. CLOs are the primary buyer of leveraged loans, and their presence in the market has helped stoke demand for new issuance. Leveraged loan yields declined overall in 2019: the yield-to-maturity for the S&P Leveraged Loan 100 index was 5.63% at the end of the year, down from 6.95% at the end of 2018. In the middle market (i.e., borrowers with less than $50 million in annual EBITDA), conditions remain generally favorable for borrowers. Middle-market borrowers have benefited from the growth of the direct-lending asset class since 2010, which has increased the supply of debt capital to this segment of the market. However, most directly originated loans continue to enjoy a yield premium over syndicated loans and are typically more-conservatively structured. In 2019, direct-lending funds raised $50.0 billion, up 9% from the prior year but well below the record high of $72.6 billion raised in 2017.

Distressed Debt: Indicators of Distress Remain at Low Levels Overall

Indicators of distress in the U.S. high-yield and leveraged loan markets increased in the fourth quarter of 2019 but remain at low levels overall. The trailing 12-month high-yield default rate was 3.3% at the end of 2019, up from 2.2% at the end of the third quarter and above the nonrecessionary average of 2.4%, according to Fitch Ratings. Fourth-quarter default volume totaled $16.2 billion in par value, which represents more than 40% of the year's total. Two energy companies, EP Energy and Chesapeake Energy, accounted for $6.5 billion, or 40%, of the quarter's default value. In the leveraged loan markets, the trailing 12-month default rate at the end of 2019 was 1.8%, unchanged from the prior year and equal to the nonrecessionary average. Outside of a few industry sectors, including energy, the leveraged credit markets continued to show few signs of distress overall due to the relatively benign economic environment, accommodative credit markets, and solid operating performance in most industry sectors. Without a significant supply of defaulted debt or widespread distress in the current market environment, distressed debt investors continue to focus on idiosyncratic opportunities to deploy capital.

Figure 8. U.S. Institutional Leveraged Loan Issuance
At December 31, 2019



Source: S&P LCD.

Figure 9. High-Yield Bond Spreads over U.S. Treasuries
At December 31, 2019

Source: BofA Merrill Lynch.

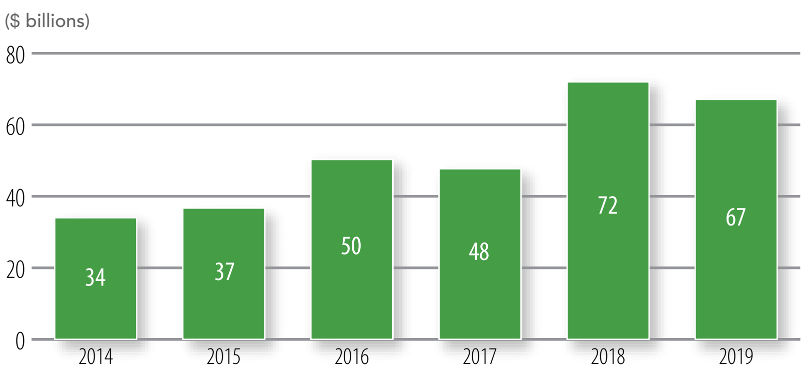
Infrastructure

Following a particularly robust fundraising environment during the first three quarters of 2019, the pace of capital raised moderated during the fourth quarter: five private infrastructure funds raised $8.6 billion—down from $20.4 billion raised in the third quarter—which brought the full-year total to $67.1 billion. Fourth-quarter fundraising activity was driven by North Haven Infrastructure Partners III, which raised $5.5 billion and accounted for 64% of total capital raised during the quarter; other notable funds raised during the quarter include BlackRock Global Renewable Power Fund III ($1.0 billion), Mirova Eurofideme 4 ($951 million), and Kimmeridge Energy Fund V ($800 million). Fundraising is expected to again accelerate in 2020, particularly in the latter half of the year.

Infrastructure deal flow reached record highs in 2019: aggregate infrastructure deal value totaled $83.5 billion, a 9% increase from 2018. Activity ramped up during the fourth quarter of 2019: 28 infrastructure investments were completed for an aggregate value of $22.4 billion. Midstream energy drove activity during the quarter, accounting for 57% of capital deployed. Specifically, two large midstream investments in master limited partnerships (MLPs) accounted for the majority of capital deployed during the quarter. IFM Investors completed a $6.5 billion take-private acquisition of Buckeye Partners—an owner and operator of a diversified network of integrated assets providing midstream logistic solutions—and The Blackstone Group led a consortium of investors in the $6.3 billion take-private acquisition of Tallgrass Energy—an owner and operator of strategically important midstream assets in the Bakken and Rockies. Both transactions are examples of private investors finding value among publicly traded MLPs that have experienced pronounced share-price declines in recent quarters.

Alternative energy proved to be at the forefront of private infrastructure activity in 2019. Although other sectors, such as midstream energy, completed larger transactions and thus deployed a greater amount of capital, alternative energy accounted for the largest number of deals, representing 21% of the private infrastructure deals announced in 2019. These deals represent an aggregate value of $7.5 billion. Private investment in renewables is projected to continue to increase over the next several years as energy from solar and wind, complemented with battery storage, becomes cost competitive. Notably, in its most recent renewables report, the International Energy Agency forecasts that renewable power capacity is set to expand by 50% between 2019 and 2024, with solar energy leading the expansion. Not surprisingly, solar energy assets accounted for a majority of the alternative energy deal flow during 2019 at approximately 55%.

Figure 10. Global Private Infrastructure Capital Raised
At December 31, 2019



Source: PitchBook Data, Inc.

Table 7. Notable Infrastructure Deals in 4Q19
At December 31, 2019

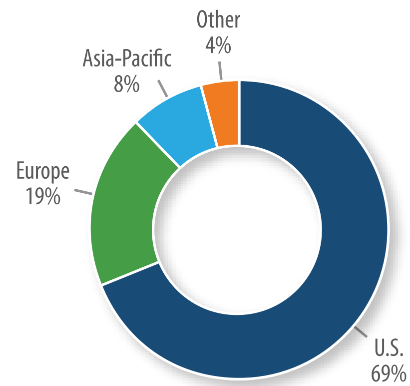
Asset/Company	Acquirer	Industry	Region	Deal Size (MM)
Buckeye Partners	IFM Investor	Midstream	U.S.	$6,500
Tallgrass Energy	Blackstone-Led Group	Midstream	U.S.	$6,300
Cove Point Terminal	Brookfield Asset Management	Midstream	U.S.	$2,000
Vicinity Energy	Antin Infrastructure Partners	Other Energy	Australia	$1,250
Emergent Cold	Lineage Logistics Holdings	Logistics	U.S.	$900

Source: PitchBook Data, Inc.

Private Equity Fundraising Market

Mirroring a strong third quarter, worldwide private equity fundraising activity reached $153 billion during the fourth quarter—the eighth-consecutive quarter that more than $100 billion was raised—according to data from Thomson Reuters and Pathway Research. The rapid fundraising pace during the second half of the year helped to catapult the annual total for 2019 to $560 billion, an increase of 16% from the prior year and the largest annual total on record. This marked the first year that worldwide fundraising activity exceeded $500 billion, outpacing the $437 billion raised at the peak of the private equity market in 2007. Top-line growth in fundraising activity was driven by U.S.-based funds, which accounted for 69% of the annual total. During the year, U.S.-based managers raised 82 funds larger than $1.0 billion, led by the record $26.8 billion close of Blackstone VIII—the largest buyout fund in history. In contrast, fundraising activity in Europe increased just nominally, and most notably, Asia-Pacific funds experienced a 39% year-over-year decline in the total amount raised. European fundraising was largely concentrated in buyouts, which accounted for 70% of capital raised during the year, propelled by the mega-buyout fundraisings of Permira VII (€11.0 billion) and the Seventh Cinven Fund (€10.0 billion).

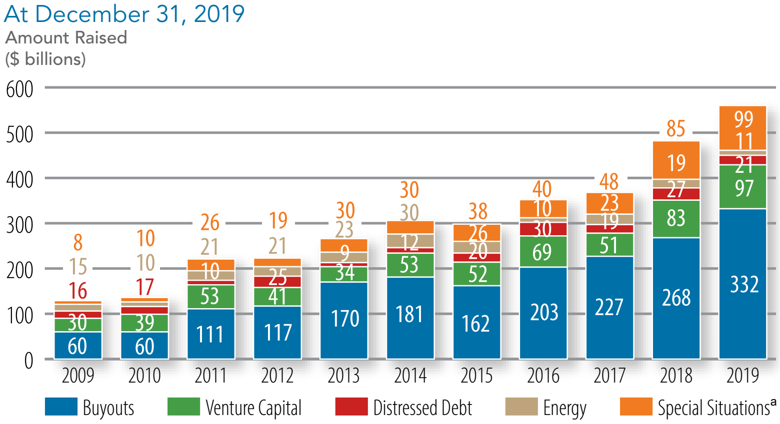
Figure 12. Private Equity Fundraising By Region
At December 31, 2019
As a % of Amount Raised



SOURCE: Thomson Reuters and Pathway Research.
NOTES: Percentages are based on net amounts raised, which are adjusted for fund-size reductions.
Data is continuously updated and is therefore subject to change.

The year-over-year surge in fundraising activity was driven by increases in activity in the buyouts, venture capital, and special situations strategies, which each experienced double-digit growth during 2019. Buyout and special situation funds, in particular, posted record-setting annual totals of $332 billion and $99.5 billion, respectively. Notable buyout funds raised during 2019 include the aforementioned Blackstone VIII, Advent International GPE IX ($17.5 billion), and TPG VIII ($14.0 billion). These funds alone accounted for 18% of the annual buyout total—further evidence of the continued ability of prominent general partners to raise capital at the larger end of the market. Venture capital fundraising reached its highest level since the dot-com bubble in 2000, securing $97.0 billion in commitments during the year—a 16% increase from the prior year. Similar to the broader market, 67% of total commitments raised by venture capital funds came from U.S.-based managers. The largest venture capital funds raised during 2019 include NEA 17 ($2.8 billion), TCV X ($2.7 billion), and Andreessen Horowitz LSV Fund I ($2.0 billion).

Figure 11. Global Private Equity Fundraising by Strategy
At December 31, 2019



SOURCE: Thomson Reuters and Pathway Research.
NOTES: Fundraising amounts are based on net amounts raised, which are adjusted for fund-size reductions. • Data is continuously updated and is therefore subject to change. • Amounts may not foot due to rounding. • [a]Comprises generalist, special situations, and other fund strategies not classified as buyout-, venture capital–, distressed-, or energy-focused.

Table 8. Notable Funds Raised in 4Q19
At December 31, 2019

Fund	Strategy	Region	Amount (MM)
Green Equity Investors VIII	Buyouts	U.S.	$12,000
Dyal Capital Partners IV	Special Situations	U.S.	$9,000
Carlyle Europe Partners V	Buyouts	Europe	€6,400
Veritas Capital Fund VII	Buyouts	U.S.	$6,500
KPS Special Situations Fund V	Special Situations	U.S.	$6,000

About Pathway Capital Management, LP

Founded in 1991, Pathway provides private market fund solutions for institutional investors worldwide. Pathway manages capital on behalf of some of the largest corporate and public pension plans, government entities, and financial institutions around the globe. Since its formation, the firm has committed more than $85 billion to more than 700 private market investments.

Pathway is registered as an investment adviser with the SEC in the United States and as a portfolio manager and exempt market dealer in Ontario, Quebec, and Saskatchewan, Canada. Pathway's wholly owned UK subsidiary is regulated in the UK by the Financial Conduct Authority. Pathway's wholly owned Hong Kong subsidiary is regulated in Hong Kong by the Securities and Futures Commission.

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