

PRIVATE CAPITAL QUARTERLY

FIRST QUARTER 2019



INSIDE THIS ISSUE

Introduction	1
Private Equity	2
Venture Capital	2
Buyouts	4
Private Debt	6
Private Real Estate	7
Natural Resources	9
Disclosures	11
Research and Portfolio Management Team	12

IS FAIR FAIR?

INTRODUCTION

While the calendar has moved into Spring, fresh data on private capital performance is as of December 2018. The negative spike in public equity, credit, and energy prices in the fourth quarter quickly reversed in early 2019, and the impact on year-end private fund returns appears modest.¹ Fourth quarter private fund data remains preliminary as of this writing.

QUARTERLY RETURNS 4Q 2018	PRIVATE (LP)	PUBLIC MARKET
Venture	1.0%	-20.2%
Buyout	-1.7%	-13.5%
Credit Opportunities	-2.5%	-4.5%
PE Energy	-6.4%	-25.9%
Real Estate	0.9%	-5.7%

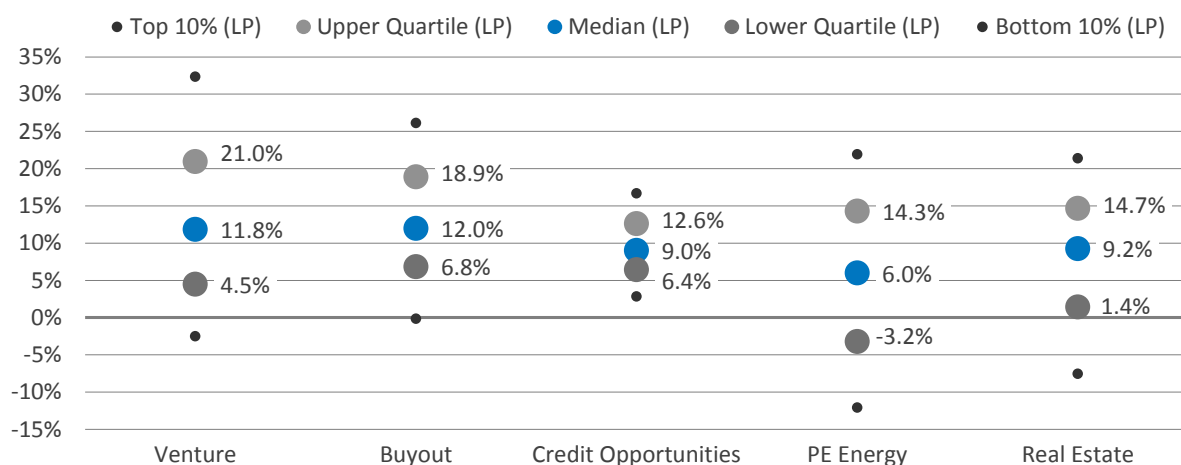
Data sources: FEG, Thomson One Horizon Summary Report; preliminary pooled average returns as of December 31, 2018

Is this a fair reflection of “fair market value”? Some argue this latent pricing effect distorts true value and unfairly smooths volatility measures; specifically, standard deviation of quarterly returns. Others note the valuation process for private funds appropriately reflects the long-term holding periods for these assets.

An MIT Sloan School of Management study on the accuracy of valuations in private equity concluded that fund managers displayed a tendency to reflect positive post-period public market performance in their valuations but to ignore the opposite.² That said, the study found year-end audited financials did not show the same effects.

On the basis of studies like this, investors have gained more comfort with the nuances of private capital investing and private markets continue to thrive. Recent industry reports were issued by management consultant powerhouses McKinsey and Bain. Bain comments, “We see fundamental shifts happening...toward much larger private capital opportunities versus traditional public equity models.”³ McKinsey concludes, “Private markets are going mainstream” and notes global private equity net asset value has grown 7.5x since 2002, more than twice as fast as public market capitalization.⁴ With increased sophistication on the part of both investors and managers as well as less-than-robust IPO activity, this trend appears to have legs.

PRELIMINARY 10-YEAR PRIVATE CAPITAL RETURNS



Data sources: Thomson One; preliminary data as of December 31, 2018. Vintage 2005-2015 funds. More recent vintage years are not mature.

FOOTNOTES

¹ Thomson One, preliminary data as of December 31, 2018; Public market indices: Russell 2000, S&P 500, Barclays High Yield, Russell 3000 Energy Sector, FTSE NAREIT All Equity.

² Czaronis, Megan and Kritzman, Mark, and Turkington, David, “Private Equity Valuations and Public Equity”, MIT Sloan School of Management, MIT Sloan Research Paper No. 5237-17, September 15, 2017.

³ Bain & Company, Inc., Global Private Equity Report 2019, www.bain.com.

⁴ McKinsey & Company, “Private Markets Come of Age,” McKinsey Global Private Markets Review 2019 www.mckinsey.com

PRIVATE EQUITY

Venture Capital

EXECUTIVE SUMMARY

FEG remains skeptical of abundant cash flowing into venture funds and venture-backed companies. Certain structural changes to the market are influencing the data. These changes include companies staying private longer, capital from non-traditional venture fund sources such as public cross-over or larger corporate investors, and the falling cost of scaling businesses. Performance has been strong but remains meaningfully unrealized for more recent years as the number of exits has declined.

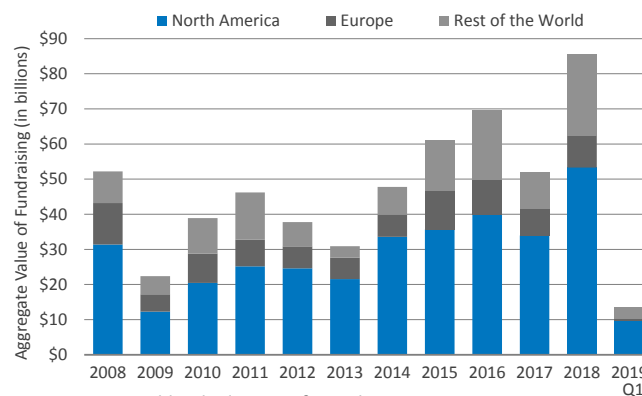
FUNDRAISING AND INVESTING

- Globally, venture funds raised over \$80 billion in commitments in 2018.¹ This was the highest amount raised since the peak of the technology bubble at the turn of the century and the fourth consecutive year that commitments to venture funds exceeded \$50 billion. Funds at the large end of the market have driven these dramatic increases. Fundraising in the first quarter was \$13 billion, down from recent record levels though still robust.

INVESTMENT ACTIVITY

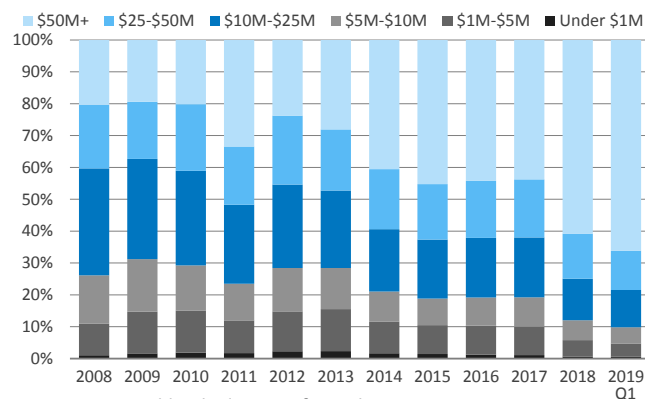
- Reflective of the fundraising environment and the longer hold periods, deal sizes and valuations continued to increase. Deal sizes of over \$50 million have accounted for over 60% of the capital invested thus far in 2019. Most notably, The We Company (parent company of WeWork) received \$5.0 billion from SoftBank's Vision Fund in January, which gave the company a \$42 billion pre-money valuation.
- Pre-money valuations of venture-backed companies continued to increase across both early- and later-stage companies.
- Venture-backed companies received over \$40 billion of funding in the first quarter of 2019, down from 2018's record high though elevated compared to recent years. In their later stages, venture-backed companies receive funds from all types of investors, including: mutual funds, hedge funds, corporate venture programs, and family offices. The amounts invested in later stage rounds far exceeded the amounts raised by venture funds.

FUNDRAISING



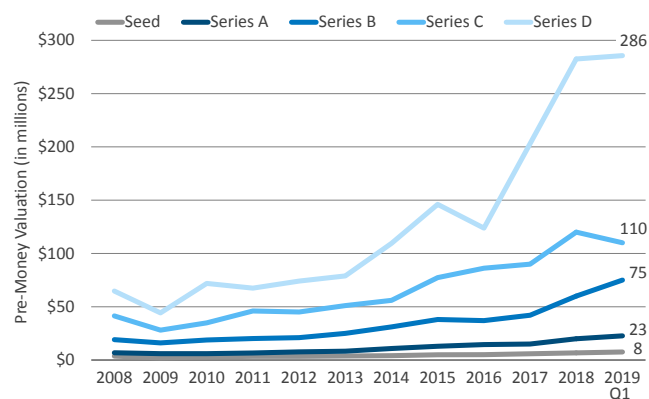
Data source: Pitchbook; data as of March 31, 2019

INVESTMENT BY DEAL SIZE



Data source: Pitchbook; data as of March 31, 2019

MEDIAN PRE-MONEY VALUATION BY FINANCING ROUND



Data source: Pitchbook; data as of March 31, 2019

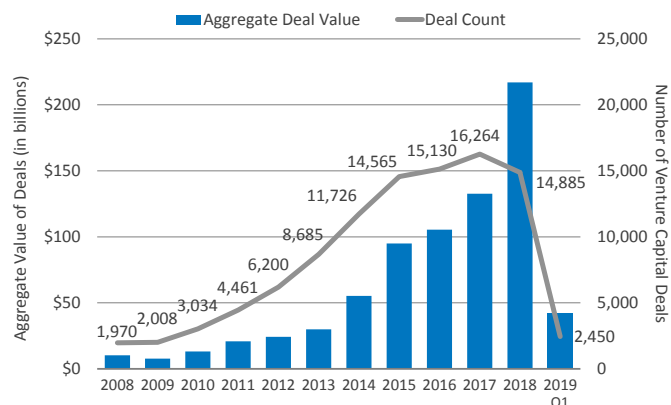
EXIT ENVIRONMENT

- Exit activity of venture-backed companies slowed in 2019 due to volatility in the public market in late 2018. Several notable initial public offerings (IPOs) were expected to occur in 2019; Lyft was priced in late March at a valuation of around \$23 billion, while Pinterest successfully listed in April with a roughly \$10 billion valuation.² The much-anticipated Uber IPO occurred in early May with a valuation of approximately \$76 billion.³ The public market rebound in the first quarter may likely boost exit activity in the coming quarters.

PERFORMANCE

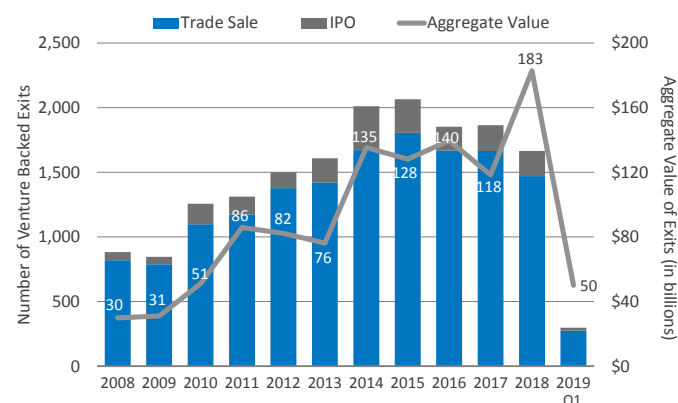
- Venture fund performance by vintage year rose steadily from 2005 to 2014. Recent vintages are not fully realized, and the most recent vintages are not fully deployed. Funds able to achieve early exits or sizeable financing rounds likely experienced a boost in performance.

INVESTMENT ACTIVITY



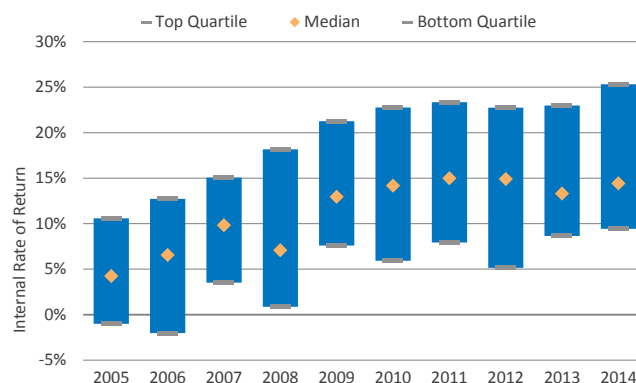
Data source: Pitchbook; data as of March 31, 2019

EXIT ACTIVITY



Data source: Pitchbook; data as of March 31, 2019

PERFORMANCE



Data source: Thomson One; data as of September 30, 2018

FOOTNOTES

¹ Pitchbook, data as of March 31, 2019.

^{2,3} Business Insider, Here Are the Mega IPOs So Far in 2019, April 8, 2019, markets.businessinsider.com.

Buyouts

EXECUTIVE SUMMARY

Near-record levels of available capital (i.e., dry powder) combined with elevated purchase price multiples are reason for concern within the buyout strategy. Fewer funds are closing, but those which are closing are larger, pushing median and average fund sizes even higher. Increased competition, high valuations, and market volatility have started to negatively impact private equity-backed exit activity. Despite these trends, private equity fundraising remains constant and shows no sign of slowing down. Limited partners continue to allocate capital to leveraged buyout strategies, with the bulk of the capital in vehicles raising more than \$1.0 billion in aggregate capital commitments. The proliferation of capital allocated to middle-market strategies is likely to have an impact on the lower-middle-market in the form of larger valuations and increased deal activity. The number of transactions between private equity firms—secondary buyouts or sponsor-to-sponsor—is likely to increase. Given this backdrop, investors should remain cautious. Limited partners should continue to favor general partners with investment philosophies built on fundamental value and operational improvement, not financial engineering. Disciplined management teams with experience leading companies thru multi-year macroeconomic cycles should be able to benefit if/when the broader private equity market experiences a downturn.

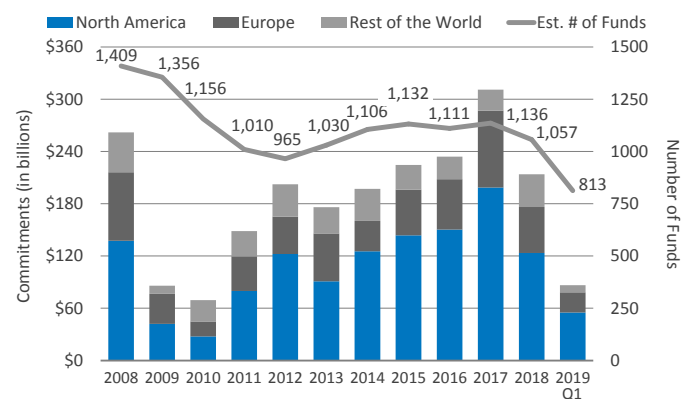
FUNDRAISING AND INVESTING

- Fundraising for buyout strategies shows little signs of abating. During the first quarter of 2019, global leveraged buyout funds raised roughly \$86 billion of aggregate capital commitments.¹ This represents a 35% increase from the same period in the prior year.
- Approximately \$55 billion, or 64% of the capital, was raised by North American-focused buyout funds. An additional \$23 billion, or 27% of the capital, was raised for European-focused funds.² The rest of the world represented approximately 9% of aggregate capital commitments raised. This is not surprising given control equity transactions are more common in North America and Europe.³
- Over the last 10 years, capital commitments have become more concentrated in the largest funds. Since 2008, the average global buyout fund raised has grown from roughly \$700 million to more than \$1.5 billion.⁴

INVESTMENT ACTIVITY

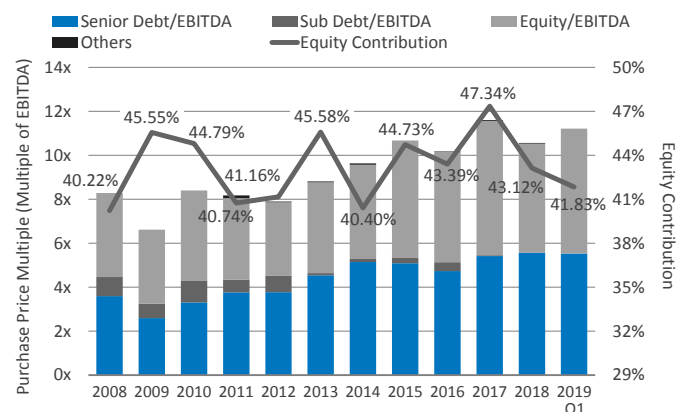
- During the first quarter of 2019, the average purchase price multiple for middle-market buyout transactions was 11.2x earnings before interest, taxes, depreciation, and amortization (EBITDA). Leverage ratios remained relatively constant.⁵ According to S&P Capital IQ, the average debt multiple for middle-market LBOs was roughly 5.5x EBITDA, slightly below the 2007 peak of 5.8x EBITDA.⁶
- Equity contributions in both middle-market and large buyout transactions remained steady at roughly 42%.⁷ For large market transactions, the peak was approximately 46% in 2009 when financing was

FUNDRAISING AND ESTIMATED NUMBER OF ACTIVE FUNDS



Data source: Pitchbook; data as of March 31, 2019. Note: Data reflects the number of global buyout funds with a final closing in the current vintage year plus the prior three vintage years.

AVERAGE PURCHASE PRICE MULTIPLES AND EQUITY CONTRIBUTION



Data source: S&P Leverage Buyout Review; data as of March 31, 2019

scarce.⁸ The low point was in 2006 when the ratio dipped to roughly 30%.⁹ Contributions in middle-market transactions peaked in 2017 around 47% but have since fallen to current levels.¹⁰ (The S&P Capital IQ data only represents a sample set of leverage buyout transactions executed during a given time period.)

- Partially due to the current high-multiple environment, the “buy-and-build” strategy continues to proliferate because the strategy allows buyers to average down the blended multiple. During the first quarter of 2019 add-ons accounted for more than 70% of all U.S.-based private equity transactions.¹¹

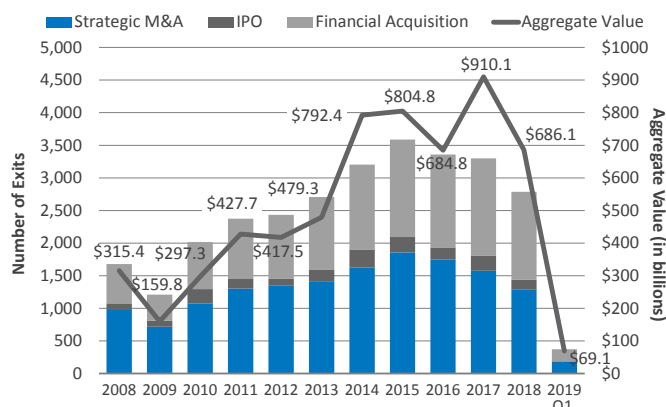
EXIT ACTIVITY

- Approximately \$69 billion in proceeds was generated by 374 private equity-backed exits during the first quarter 2019.¹² Year-over-year, aggregate value and volume fell 50% and 27%, respectively. Public market volatility in late 2018 likely led to markdowns of portfolio companies that were positioned for exit. As a result, it is possible that general partners have postponed sales processes to wait for a friendlier exit environment. Market activity is expected to increase during the second quarter of 2019.
- Trade sales to strategic or financial acquirers represented the majority of global buyout-backed exits. Initial public offerings (IPO) accounted for less than 5% of the aggregate number of exits.¹³
- Since the global financial crisis, median hold periods of private equity investments have increased from roughly four years to six years.¹⁴ Longer hold periods are likely due to private equity firms’ increased emphasis on add-ons and operational improvements to drive value creation.

PERFORMANCE

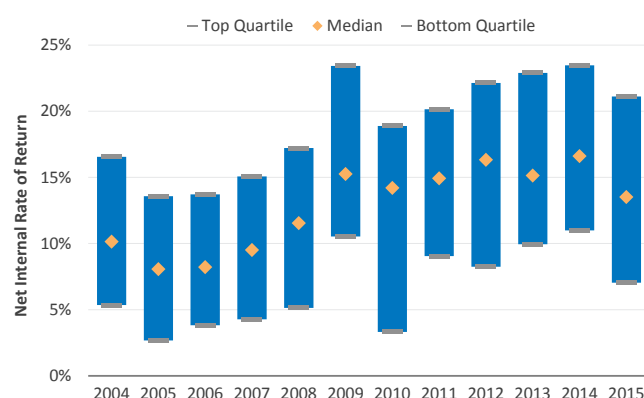
- Performance was strong through the third quarter of 2018 and preliminarily through year-end. As of September 30, 2018, the 1-, 3-, 5-, and 10-year time-weighted returns were 17.1%, 15.5%, 14.1%, and 11.6%, respectively.¹⁵
- The dispersion of returns between top- and lower-quartile funds has consistently been over 800 basis points, demonstrating the importance of manager selection.

EXIT ACTIVITY



Data source: Pitchbook; Financial Acquisition includes secondary buyout and buyout by management; data as of March 31, 2019

PERFORMANCE BY VINTAGE YEAR



Data source: Thomson One; data as of September 30, 2018

FOOTNOTES

¹⁻⁴ Pitchbook, data as of March 31, 2019.

^{5, 10} S&P Leveraged Buyout Review—First Quarter 2019.

¹¹⁻¹³ Pitchbook, data as of March 31, 2018.

¹⁴ McKinsey & Company, “Private Markets Come of Age,” February 2019.

¹⁵ Thomson One — Horizon Summary Report as of September 30, 2018.

PRIVATE DEBT

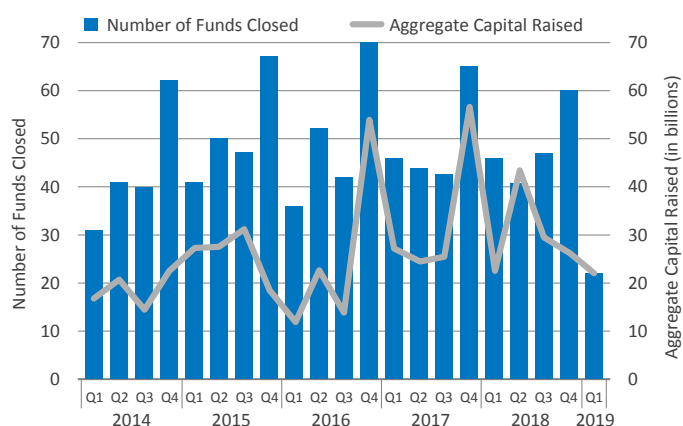
EXECUTIVE SUMMARY

Demand for private lending strategies remains robust, although significant dry powder remains on hand given the prior two years of record fundraising. Investors continue to embrace the yield premium available in the private credit markets relative to public credit markets. Fundamentals appear stable due to robust earnings. Distressed investment opportunities remain in “wait and see” territory for investors considering new commitments.

FUNDRAISING

- Private debt fundraising remained in a cyclical pattern as of the first quarter 2019, with consistent spikes in the number of funds closed in the fourth quarter of each of the past five years.¹
- Fundraising, on the other hand, declined in recent quarters following large spikes in each of the past two years. Industry data indicates a record amount of dry powder was available for private debt transactions in 2018.²
- Fundraising totals have been driven by a small number of large funds. The trend toward larger funds likely reflects demand from larger institutional investors who limit their ownership percentage of any given fund.

QUARTERLY GLOBAL PRIVATE DEBT FUNDRAISING



Data source: Preqin Pro; data as of March 31, 2019

FUNDAMENTALS AND ACTIVITY

- Fundamentals in middle-market lending appear to be stable, although looser covenants and an increase in the amount of adjustments to earnings have been concerning.
- Debt multiples (debt/EBITDA) remain below the 2007 peak while equity and earnings contributions remain strong.
- Recent purchase price multiples for middle-market leveraged buyouts came off their year-end 2017 peak of 11.6x but remain elevated.
- Transaction volume in the U.S. middle-market was weak in early 2019. The first quarter volume of \$1.4 billion tracks well below the \$10.7 billion in volume recorded for calendar 2018. This decline is likely the result of year-end market volatility and rich purchase price multiples.

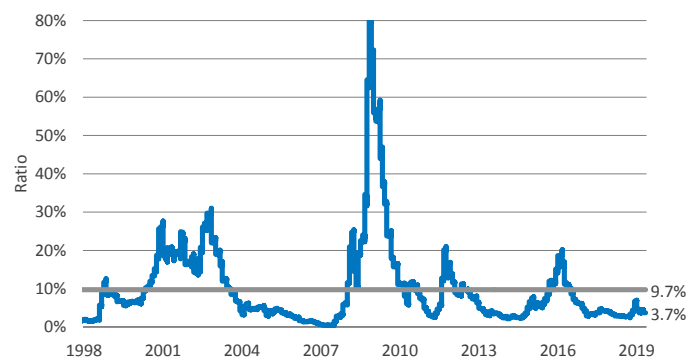
	2007	2018
Debt/EBITDA Multiples	5.8x	5.5x
Equity Contribution	32%	42%
Purchase Price Multiple	9.3x	11.2x
Pro Forma EBITDA	\$29.0M	\$43.9M

Data sources: S&P Leverage Buyout Review 1Q 2019, S&P Global Market Intelligence High-End Middle Market Leading Review 1Q 2019

DISTRESSED UPDATE

- The distressed ratio for U.S. high yield bonds ticked higher in the U.S. in the fourth quarter of 2018 as the broad markets dramatically sold off. Energy-related credits were particularly hard hit.
- The first quarter of 2019 was similarly volatile, but to the upside. Prices for corporate bonds and loans bounced back strongly, moving the ratio back toward historical lows. As such, a meaningful distressed opportunity has not developed.

U.S. HIGH YIELD DISTRESSED RATIO (DAILY)



Data sources: Bank of America/Merrill Lynch, Bloomberg, L.P.; data as of March 25, 2019. Note: Distressed ratio = Full market value of U.S. High Yield Distressed Index (HODI) as a percentage of full market value of broad U.S. High Yield Index (HOOO)

FOOTNOTES

¹ Preqin, Quarterly Update: Private Debt Q1 2019.

² Burgiss Manager Universe, 4Q 2018 Global Private Capital Review.

PRIVATE REAL ESTATE

EXECUTIVE SUMMARY

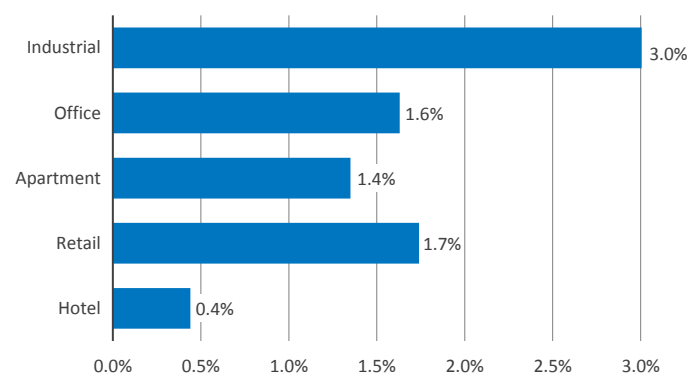
Over the past decade, low interest rates and global monetary stimulus have been critical factors supporting the real estate market's recovery, and a potential reversal of these tailwinds could lead to a correction. The real estate recovery has reflected both steadily improving fundamentals as well as investors' search for yield in a low interest rate environment, which has positively impacted real estate values in major metropolitan markets and more recently in secondary markets.

Despite cap rates being near record lows in many markets, commercial real estate continues to offer attractive yield spreads compared to 10-year government bonds. Broad demographic trends continue to impact real estate, including the rise of online retailing (negative for retail; positive for industrial), shared work environments (office sector), and a desire for increased connectivity that is changing how and where people live and work (multi-family/apartment sector). FEG maintains a cautious outlook for the broad commercial real estate markets and continues to focus on identifying managers with theme-based, opportunistic strategies and a bias towards more defensive sectors.

MARKET RETURNS

- Real estate values for "core" properties, as measured by the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI), experienced a total return of 1.8% during the first quarter, following a 1.4% gain in the fourth quarter of 2018. Longer-term, the index return was approximately 10% on an annualized five-year basis as of March 31, 2019. Occupancy for properties in the NCREIF remained near 94%, a 16-year high, and cap rates declined slightly to 4.7%, a record low.¹ In the public real estate market, REITs posted a 5.7% loss in the fourth quarter of 2018 and a gain of 16% in the first quarter of 2019, benefiting from an accommodative monetary policy from the Federal Reserve.
- In terms of property type, the industrial sector continued to outperform, with a return of 3.0% for the quarter, driven by continued growth in demand for warehouse space from online retailers. Conversely, the hotel sector underperformed the broad index and other property types with a marginally negative return of 0.4% for the quarter. The hotel sector has been impacted by higher labor costs and concerns about slower economic growth.²

NCREIF NATIONAL PROPERTY INDEX SECTOR RETURNS
First Quarter 2019



Data source: NCREIF; data as of April 25, 2019

MARKET TRENDS

- The private real estate market continues to benefit from a low interest rate environment and strong demand from institutional investors, which is reflected in robust transaction volume in the U.S. over the past year. Rent and occupancy fundamentals within the commercial real estate market continue to hold up well, with demand driven by a healthy job market and strong GDP growth in the first quarter. New supply growth has not reached problematic levels for most sectors. Overall, fundamentals remain positive, although rental rates and net operating income (NOI) are growing at a slower pace. Labor costs and a lack of available workers continues to present challenges in operationally-intensive real estate sectors such as hotels and senior living.

RETAIL: The decline in retail real estate values that began with lower-quality malls five years ago continues and is beginning to impact even those areas of retail previously viewed as immune to disruption. The list of retail store closings continues to grow and was estimated at over 6,000 as of late first quarter. Pricing for many types of retail assets continues to deteriorate, with properties trading at surprisingly wider cap rates than may be reflected in appraisal values.

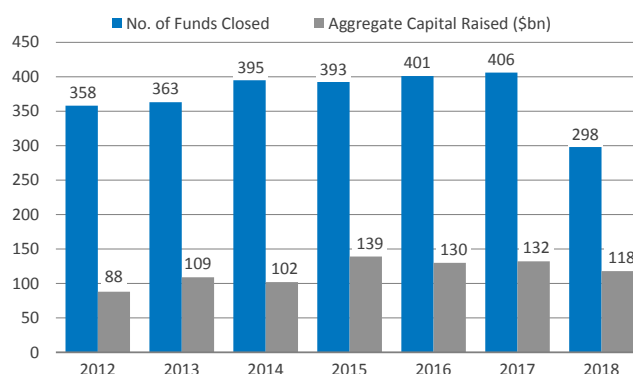
INDUSTRIAL: Distress in retail has translated to strong performance in the industrial sector, making it the top-performing property type over the past year, with a record transaction volume and rental growth rates in excess of 7%. Cap rates continue to compress and now stand at 4%, with properties in some areas trading below this level. The positive factors driving industrial real estate include broad structural changes such as the rise of online retailing and the evolution of global supply chains.³

OFFICE: The national vacancy rate remained steady at 13.7% in the first quarter of 2019 and the average office asking rent in the U.S. averaged \$36/square foot, an increase of 1.0% compared to year-end.⁴ Transaction activity in the office sector slowed in the first quarter, with only \$13.3 billion in deals closed, down 37% from the \$21.1 billion closed in the first quarter of 2018. One reason for the slowdown was a carryover from the volatility in the capital markets during the fourth quarter when interest rates increased and investors were concerned about the state of economic growth.⁵ While rents have risen, tenant improvement allowances have increased at an accelerated pace, making net effective rent growth less material.

FUNDRAISING

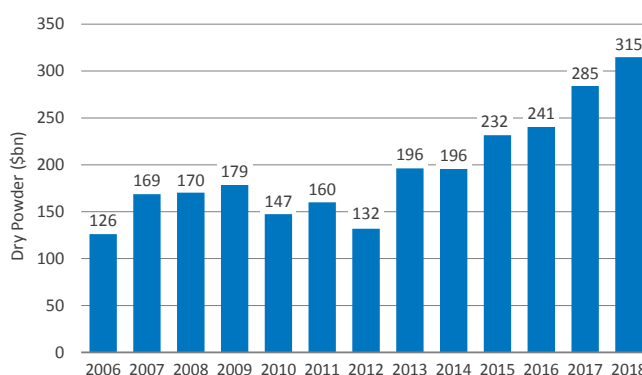
- A total of 298 real estate funds closed in 2018—as per the latest available data—raising a combined \$118 billion. This represents a small decline from the \$132 billion raised in 2017 and a significant reduction from the 406 funds closed in that year.⁶ This trend toward fewer but larger funds is evident across the private capital landscape.
- Dry powder held by private real estate funds was over \$300 billion as of year-end 2018. At the start of 2019, there were approximately 675 real estate funds in the market, seeking a total of \$250 billion. This is up significantly from a year ago when 573 funds were targeting a combined \$191 billion.⁷
- Flush with cash, private real estate funds are facing the challenge of deploying capital into investments that meet their targeted return profiles.⁸ This could be particularly problematic for large funds that continue to dominate the landscape. Blackstone closed on its latest opportunistic real estate fund at \$20 billion in the first quarter, and Brookfield completed fundraising on its third global flagship real estate fund with \$15 billion in capital commitments.⁹ Factoring in leverage, these funds will have buying power in excess of \$70 billion. One possible strategy for these funds could be to pursue public-to-private transactions in the REIT sector.

GLOBAL ANNUAL PRIVATE REAL ESTATE FUNDRAISING
2012–2018



Data source: Preqin; January 2019

GLOBAL PRIVATE REAL ESTATE DRY POWER



Data source: Preqin; January 2019

FOOTNOTES

^{1,2} NCREIF, March 25, 2019.

^{3,4} Preqin, January 2019.

⁵ CBRE Research, "2019 Global Industrial & Logistics Prime Yields."

^{6,7} National Office Report – Yardi Matrix, April 2019.

^{8,9} Putzier, Konrad, "Real Estate Funds Have a Problem: Too Much Cash," The Wall Street Journal, March 26, 2019.

NATURAL RESOURCES

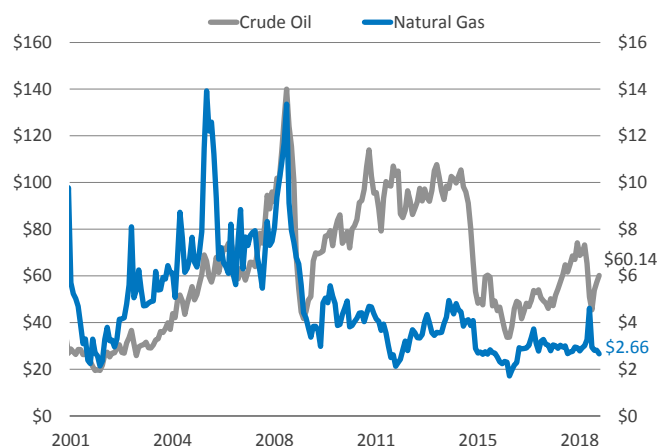
EXECUTIVE SUMMARY

The U.S. energy environment continues to evolve, with record-levels of production and volatile commodity prices for the foreseeable future. Private energy funds face multiple challenges and will need to adapt to changing market conditions and investor expectations. Moreover, the strategies pursued by private energy funds will need to adapt to reflect the current environment and will likely involve longer holding periods and fewer “quick” realizations. FEG is focused on engaging managers who understand these factors and have integrated them into their investment strategies to remain competitive in this market.

OIL PRICES

- Following a 38% decline during the fourth quarter of 2018, oil prices rallied 32% in the first quarter to close at \$60/barrel, compared to \$45/barrel at year-end, which represented the largest quarterly gain since 2009.¹ Key factors contributing to gains included strong economic data in the U.S. and China; improved sentiment surrounding U.S.-China trade talks; and ongoing geopolitical instability, which contributed to positive sentiment for oil prices. Additionally, a decline in the rig count indicated the potential for lower production and tighter supplies. U.S. sanctions on oil from Venezuela and Iran contributed to expectations that crude prices could strengthen over the course of the year. Finally, OPEC’s agreement in late 2018 to cut production effectively took 1.2 million barrels a day out of the global market during the first part of the year, further bolstering prices.²

CRUDE OIL AND NATURAL GAS PRICES



Data source: Bloomberg, L.P.

NATURAL GAS PRICES

- After posting gains early in the quarter due to cold January weather, natural gas prices declined later in the quarter on lower demand for liquid natural gas (LNG) exports and warmer weather in February and March. For the first quarter, natural gas prices declined 9.5%, finishing at \$2.66/MMBtu compared to \$2.95/MMBtu at year-end.³ While natural gas storage is currently 30% below the five-year average—the largest deficit in over four years—prices remain under pressure largely due to growth in domestic production. The EIA forecasts that the U.S. will produce an average of 90.7 Bcf/d in 2019, a 9% increase over the 2018 average.⁴ On the demand side, U.S. domestic and export demand both continued to grow, driven in large part by the installation of natural gas generating capacity. However, with strong growth in production, the macro outlook for natural gas in the medium- to long-term is largely unchanged, and most analysts expect limited upside despite lower storage levels. The gas markets should have ample supply to meet increased demand for liquid natural gas exports and from industrial and power consumption.

EVOLUTION OF PRIVATE ENERGY: THE ROAD AHEAD

- Due in large part to the commodity price downturn that began nearly five years ago, the private equity energy model continues to face pressures on multiple fronts. These issues are impacting all facets of the business, from capital raising to exits, and ultimately affecting potential returns for investors. The following is a brief analysis of the current environment as of early 2019 and FEG’s thoughts on the path ahead:

YEAR-END 2018 VALUATIONS: As expected, year-end 2018 performance results for private energy funds showed markdowns in reserves and valuations, reflecting the sharp declines in oil prices during the fourth quarter. These declines reversed themselves to some degree in the first quarter of 2019 due to a sharp rebound in oil prices subsequent to year end. Nevertheless, investors in private energy are feeling the impact of volatile commodity prices.

MERGERS AND ACQUISITIONS: Driven by the precipitous decline in oil price in the fourth quarter, U.S. deal activity fell to just \$1.6 billion in the first quarter, a 10-year record low. Many characterized the market as “frozen,” as an aversion to the energy sector and all things tied to oil and gas by institutional investors’ limited transaction activity. Public energy companies continued their efforts to preserve cash flow, resulting in limited appetite for capital raises in the debt and equity markets. Total deal value was down 91% compared to the fourth quarter of 2018 and down 93% from the same period last year.⁵ The rally in oil prices did little to stimulate transaction activity in the sector. Corporate consolidation and the demand for royalty and minerals assets remain the key themes in the industry. Subsequent to quarter-end, Chevron agreed to acquire Anadarko for \$50 billion in total consideration. Many analysts expect that this mega merger could be the impetus for more corporate consolidation.

INVESTOR PRESSURES: Investors allocated significant capital to private energy funds in late 2014 and 2015, and have received limited distributions thus far. Performance for energy funds that deployed capital during the downturn of 2015-2016 has been strong, but many deals remain unrealized. Given the generally poor performance of public energy companies since the commodity price downturn which began in late 2014, there is a sense that energy companies have been consumers of capital with little in the way of returns to investors. Adding to these pressures, many of the limited partners in private energy funds have historically included a high concentration of endowments and foundations—groups which are facing pressure to reduce their investment into hydrocarbons.

PRIVATE ENERGY MODEL: Traditionally, private energy managers pursued a model that involved creating small companies comprised of industry professionals (landmen, geologists, and cfos) that acquire acreage positions, drill wells to establish production, and then sell or “flip” their acreage positions to publicly-traded companies after establishing “proof of concept.” The natural buyers of private equity-backed energy companies, which included public E&P companies and upstream MLPs, are now either gone or are not looking to acquire acreage positions. The drop in oil prices combined with energy companies’ move toward greater capital discipline—preserving cash and paying down debt—has resulted in diminished demand for assets held by private equity-backed firms.

Additionally, with the rise of “mega funds” in private energy, there is a glut of management teams and an oversupply of assets for sale. By one estimate, there are over 400 private equity-backed portfolio companies—155 in the Permian alone—with more than \$100 billion in private equity dry powder currently available.⁶ The long-term sustainability of some of these PE-backed companies is questionable under the current model, which involves a two-tiered fee structure in which fees and carry go to the management of the portfolio company on top of the 2% and 20% being paid to the fund.

CONSTRUCTIVE FACTORS: Despite these challenges, several aspects of the private energy model still provide attractive opportunities relative to public markets. For example, private energy portfolio companies generally have lower debt-to-capitalization ratios and a stable source of capital from their sponsors. Energy managers have the ability to invest in both oil and natural gas, as well as midstream infrastructure, providing a broad opportunity set and some diversification. Additionally, private equity funds generally use hedging to protect against commodity price downturns, which could offset some of the impact from volatile commodity prices. Also, due to their long-term structures, private energy managers are under no pressure to sell assets in a challenging market and will only selectively do so in situations that make sense. Within private energy, the “operator fund” model—with its focus on acquisition and management of proven, developed, and producing reserves—is less reliant on assets sales and instead generates returns largely from cash flow from production. This is a model that generally has proven effective over multiple commodity price cycles, although these funds tend to be more directly impacted by commodity price movements, as was the case in the fourth quarter of 2018.

FOOTNOTES

¹⁻⁴ www.eia.gov, March 2019.

⁵ EnCap Quarterly Letter, March 2019.

⁶ Grey Rock Energy Partners – Fourth Quarter 2019 Letter.

INDICES

The S&P 500 Index is capitalization-weighted index of 500 stocks. The S&P 500 Index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.

HFRI ED: Distressed/Restructuring Index

Distressed/Restructuring strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments which are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. In contrast to Special Situations, Distressed Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.

Information on any indices mentioned can be obtained either through your consultant or by written request to information@feg.com.

DISCLOSURES

This report was prepared by Fund Evaluation Group, LLC (FEG), a federally registered investment adviser under the Investment Advisers Act of 1940, as amended, providing non-discretionary and discretionary investment advice to its clients on an individual basis. Registration as an investment adviser does not imply a certain level of skill or training. The oral and written communications of an adviser provide you with information about which you determine to hire or retain an adviser. Fund Evaluation Group, LLC, Form ADV Part 2A & 2B can be obtained by written request directly to: Fund Evaluation Group, LLC, 201 East Fifth Street, Suite 1600, Cincinnati, OH 45202, Attention: Compliance Department.

The information herein was obtained from various sources. FEG does not guarantee the accuracy or completeness of such information provided by third parties. The information in this report is given as of the date indicated and believed to be reliable. FEG assumes no obligation to update this information, or to advise on further developments relating to it. FEG, its affiliates, directors, officers, employees, employee benefit programs and client accounts may have a long position in any securities of issuers discussed in this report.

Index performance results do not represent any managed portfolio returns. An investor cannot invest directly in a presented index, as an investment vehicle replicating an index would be required. An index does not charge management fees or brokerage expenses, and no such fees or expenses were deducted from the performance shown.

Neither the information nor any opinion expressed in this report constitutes an offer, or an invitation to make an offer, to buy or sell any securities.

Any return expectations provided are not intended as, and must not be regarded as, a representation, warranty or predication that the investment will achieve any particular rate of return over any particular time period or that investors will not incur losses.

Past performance is not indicative of future results.

Investments in private funds are speculative, involve a high degree of risk, and are designed for sophisticated investors.

An investor could lose all or a substantial amount of his or her investment. Private capital funds' fees and expenses may offset private capital funds' profits. Private capital funds are not required to provide periodic pricing or valuation information to investors except as defined in the fund documents. Private capital funds may involve complex tax structures and delays in distributing important tax information. Private capital funds are not subject to the same regulatory requirements as mutual funds. Private capital funds are not liquid and require investors to commit to funding capital calls over a period of several years; any default on a capital call may result in substantial penalties and/or legal action. Private capital fund managers have total authority over the private capital funds. The use of a single advisor applying similar strategies could mean lack of diversification and, consequently, higher risk.

All data is as of March 31, 2019 unless otherwise noted.

RESEARCH AND PORTFOLIO MANAGEMENT TEAM

LILLIAN B. AMBROSIUS

Research Analyst
Global Equities

CHERYL A. BARKER

Senior Research Liaison
Global Equities

NOLAN M. BEAN, CFA, CAIA

Managing Principal
Head of Institutional Investments

KEITH M. BERLIN

Senior Vice President
Director of Global Fixed Income and Credit

PATRICK BONNELL

Research Analyst
Global Fixed Income and Credit

CHRISTIAN S. BUSKEN

Senior Vice President
Director of Real Assets

KEVIN J. CONROY, CFA, CAIA

Vice President
Hedged Strategies

MATT DENBLEYKER

Vice President
Real Asset Research Analyst

BRAD DERFLINGER, CFA

Vice President
Assistant Portfolio Manager,
Risk Management

GREGORY M. DOWLING, CFA, CAIA

Managing Principal
Chief Investment Officer,
Head of Research

SUSAN MAHAN FASIG, CFA

Managing Principal
Portfolio Manager, Private Investments

ANTHONY L. FESTA, CFA

Managing Principal
Head of Portfolio Strategy

ANANYA HANDA

Research Analyst
Global Fixed Income and Credit

EMILY C. HOGYA

Senior Portfolio Analyst
Portfolio Management

BRIAN A. HOOPER

Vice President
Global Equities

GREGORY D. HOUSER, CFA, CAIA

Director
Research

MARK A. KOENIG, CFA

Senior Vice President
Director of Quantitative Analysis

J. ALAN LENAHAHAN, CFA, CAIA

Managing Principal
Chief Investment Officer,
Head of Portfolio Management

CHARLIE W. LUECKE

Senior Research Analyst
Private Equity

LAUREN M. MAYERNIK

Research Analyst
Private Equity

SEAN P. MCCHESENEY

Vice President
Hedged Strategies

MICHAEL J. O'CONNOR, CFA, CAIA

Vice President
Assistant Portfolio Manager,
Public Investments

BENJAMIN C. SULLIVAN

Research Analyst
Global Equities

G. SCOTT TABOR, CAIA

Senior Vice President
Private Capital

STEVEN G. THIEME, CFA, CAIA

Senior Research Analyst
Hedged Equity

NATHAN C. WERNER, CFA, CAIA

Senior Vice President
Director of Private Equity

201 East Fifth Street
Suite 1600
Cincinnati, Ohio 45202
513.977.4400
information@feg.com
www.feg.com

Cincinnati | Dallas | Indianapolis

Subscribe to FEG's communications
at www.feg.com/subscribe.

The CFA designation is a professional certification issued by the CFA Institute to qualified financial analysts who: (i) have a bachelor's degree and four years of professional experience involving investment decision making or four years of qualified work experience [full time, but not necessarily investment related]; (ii) complete a self-study program (250 hours of study for each of the three levels); (iii) successfully complete a series of three six-hour exams; and (iv) pledge to adhere to the CFA Institute Code of Ethics and Standards of Professional Conduct.

The Chartered Alternative Investment Analyst Association® is an independent, not-for-profit global organization committed to education and professionalism in the field of alternative investments. Founded in 2002, the CAIA Association is the sponsoring body for the CAIA designation. Recognized globally, the designation certifies one's mastery of the concepts, tools and practices essential for understanding alternative investments and promotes adherence to high standards of professional conduct.

Research and Portfolio Management Team as of date of publication.