

Private markets come of age

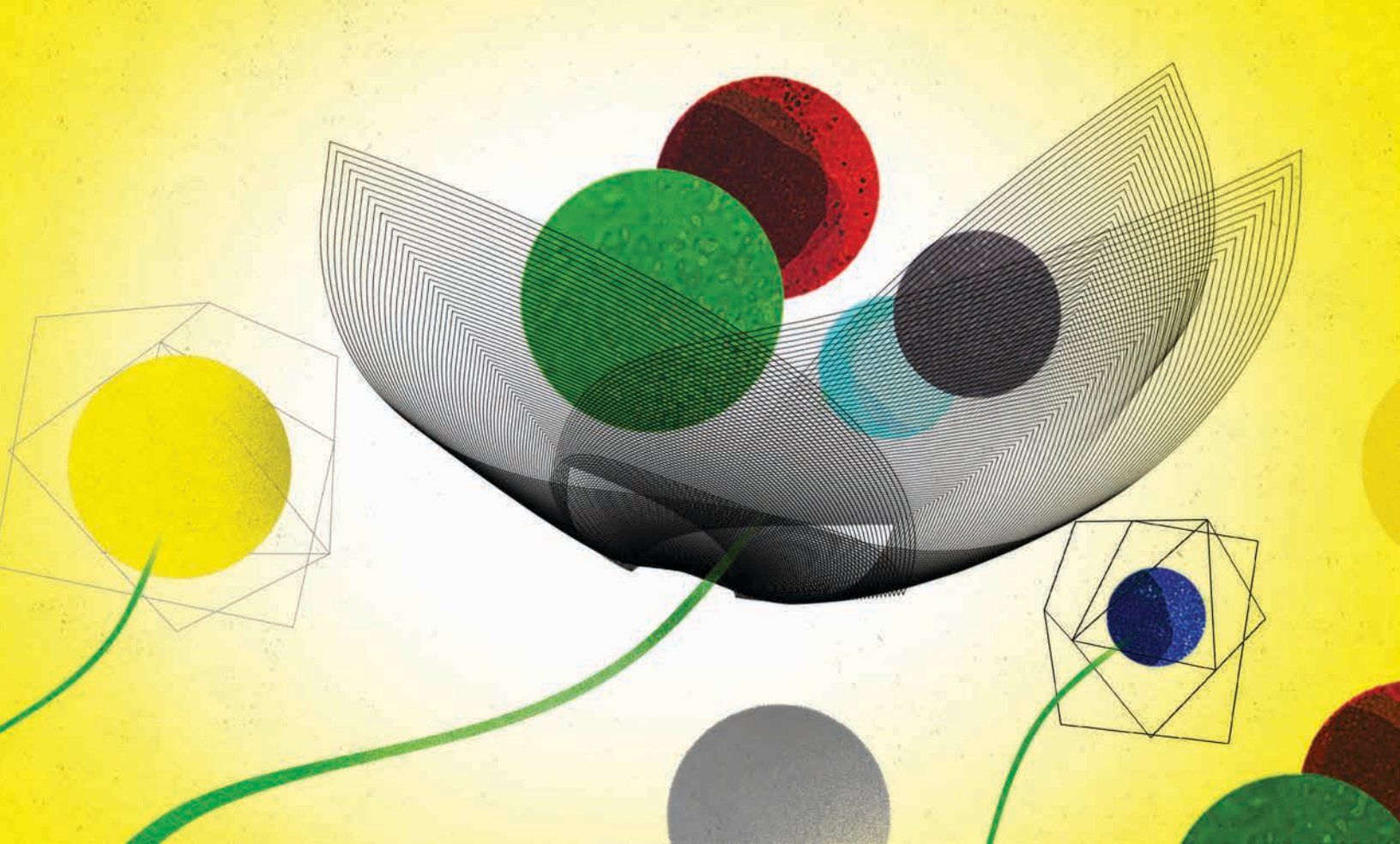
McKinsey Global Private Markets Review 2019





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Executive summary

Welcome to the 2019 edition of McKinsey's annual review of private investing. Our research on the industry's dynamics and performance in 2018 turned up several critical insights, including these trends:

- ***Private markets are going mainstream.*** Private equity's net asset value has grown more than sevenfold since 2002, twice as fast as global public equities. And consider the growth in US PE-backed companies, which numbered about 4,000 in 2006. By 2017, that figure rose to about 8,000, a 106 percent increase. Meanwhile, US publicly traded firms fell by 16 percent from 5,100 to 4,300 (and by 46 percent since 1996). Even some large investors that had previously stayed away are now allocating to private markets, seeing them as necessary to get diversified exposure to global growth.
- ***The industry reveals rapid development.*** In its structures and behaviors, a rapidly developing industry now offers many ways for investors to customize their exposure. As secondaries, long-duration funds, capital call lines of credit, and other structures proliferate, they are making the industry more flexible and accommodating to a range of investors.
- ***2018 is notably different than 2007.*** PE deal volume in 2018 finally surpassed 2007 highs. Will we look back at 2018 as a repeat of 2007's peak? Pricing is similar, covenant-light debt has returned, dry powder keeps rising, and every day new players enter. But private markets are twice as large; the average PE deal is smaller and less levered; club deals are no more; fundraising has taken a breather; pacing plans exist; and people know what vintage risk is. Whenever

the downturn comes, more experienced LPs may have greater staying power.

- ***Co-investment has a supply challenge.*** Demand for PE co-investment vastly outstrips opportunities provided by GPs. The imbalance does more than just frustrate LPs; it keeps their portfolios from gaining the diversification necessary to optimize the risk-return balance of these instruments. Many LPs with one or two positions may be taking more risk than they realize.
- ***Growth in VC brings new questions.*** PE fundraising was down but venture capital bucked the trend, growing 13 percent year-on-year, and 18 percent annually since 2015. Now, ultra-large funds are stretching the definition of the asset class: where does VC end and growth begin? Is a billion-dollar deal really VC, or even growth? Some are putting billions of dollars at one go into rapidly growing but massive companies; meanwhile, industry stalwarts continue to invest entire funds smaller than that. And do most LPs really want to be in VC, given the relative difficulty of accessing the best funds?
- ***Infrastructure is building more than a foothold.*** Infrastructure fundraising grew 17 percent globally and 59 percent in Europe, backed by a long-term secular need for investment. The Global Infrastructure Initiative, led by McKinsey Global Institute, estimates that at least \$4 trillion of annual investment is required through 2035 to keep pace with economic growth. Some of this required investment will surely be filled by private markets investors, but a significant capital gap remains.

- ***Real estate LPs are seeking more discretion.*** Investment into vehicles in which LPs have more liquidity and more discretion continues to grow. Several large LPs have announced interest in growing “direct” investments, aligning with a long-term trend. Those investors not going direct have increased their discretion over cash flow timing by investing in open-end vehicles, driven in part by a preference for core funds as a substitute for fixed income. In today’s cap-rate environment, core investors face the paradox of not wanting to overpay while also recognizing that core typically outperforms riskier strategies in a contraction, and many are splitting the difference by investing in core-plus mandates, a quickly growing strategy.



Private investing is undergoing some of the biggest changes in its brief history. We welcome your questions and suggestions at investing@mckinsey.com. ■



Introduction

Private markets stayed strong in 2018. True, fund-raising was down 11 percent. But \$778 billion of new capital flowed in. Investors have a new motivation to allocate to private markets: exposure. More investors believe that private markets have become effectively required for diversified participation in global growth. Global private equity (PE) net asset value grew by 18 percent in 2018; this century, it has grown by 7.5 times, twice as fast as public market capitalization. Private markets have graduated from the fringes of the economy to the mainstream.

With growth comes maturity. In 2018, private markets continued to add flexibility, depth, and sophistication. Secondaries have scaled rapidly and made the asset class easier to access and to exit. Capital-call lines of credit have compressed the J-curve while drawing a watchful eye from some limited partners (LPs). Co-investment has

shaken off concerns about adverse selection to become an effectively standard dimension of pricing. Collectively, these developments have helped the industry broaden its appeal to LPs without abandoning its underlying structures.

The industry's conduct has changed with its context. Savvy general partners (GPs) have expanded their firms' abilities to take advantage of today's most prominent sources of value creation. McKinsey research shows that the 25 largest GPs all have operating teams, and most plan to expand them. Leading firms have also pioneered several digital techniques to wrest greater efficiencies in operations, deal sourcing, due diligence, and other core activities.

These are all noteworthy advances. Yet pressure continues to build in the system. Deal multiples have

continued to rise—to 11.1 times from 10.4 times in 2017—spurred in part by record levels of dry powder, at \$2.1 trillion. Deal volume hit a record, but the number of deals remained relatively flat for the fourth consecutive year.

On balance, then, the industry is in fine health. Even with the slowdown, 2018 was the third-highest fundraising year on record. And despite the flat trend in deal count, the value of PE deals reached a new high in 2018 at \$1.4 trillion, finally surpassing the pre-crisis peak in 2007. That feat, along with the sharp decline in public markets in Q4 2018, suggests that a look back at 2007 may still be in order. Whenever the next downturn comes, many in the industry are saying that lessons learned from the last crisis, deeper markets, and increasingly savvy management will help LPs and GPs alike better weather the storm.

About this report

This is the 2019 edition of McKinsey's annual review of private markets.¹ To produce it, we have developed new analyses drawn from our long-running research on private markets, based on the industry's leading sources of data.² We have also

conducted interviews with executives at some of the world's largest and most influential GPs and LPs. Finally, we have gathered insights from our colleagues around the world who work closely with asset owners and managers.

This report offers a review of capital inflows in 2018 and the rise in assets under management (AUM). It next discusses the deployment of capital, the outlook for dry powder, and the year in exits. We then consider the implications of the industry's growing size and influence, the broader range of investment options now available, and the implications for LPs and GPs as they set out to build enduring firms. We close with a look at the differences that market participants' experience might make in any future downturn. ■



1 Easing off the gas

Fundraising in 2018 did not quite match 2017's record haul but was not far behind, and signs already point to strong potential growth in 2019. AUM hit yet another all-time high, at \$5.8 trillion. LPs' allocations to private markets continue to lag their targets, a structural tailwind given more strength by the long run-up in public equities (the denominator effect). And in a year of mixed news in fundraising, one segment shone brightly: venture capital (VC) had its best year since 2012, capitalizing on nearly a decade of strong returns.

Fundraising slows

In 2018 fundraising slowed slightly from 2017's record clip, falling to \$778 billion (Exhibit 1)—down by 11 percent but still in very rare air. The decline was broad-based, as every region and most asset classes fell.³ The early prognosis for 2019 is for reinvigorated strength: by the end of 2018, large firms

had announced targets collectively exceeding \$300 billion,⁴ roughly twice as much as at this point last year. Some of the ambitious 2019 raises will not reach their goals, of course, but early indicators suggest optimism.

Despite the breather, 2018 was still the third-strongest fundraising year for the industry (trailing only 2017 and 2016). The long-term trend is more reliable than any one year, given imperfect data and the uneven pattern of large raises. With that in mind, it appears that industry growth remains on a fairly strong trajectory. Trailing seven-year cumulative fundraising, a reasonable proxy for fee-bearing assets, suggests that the industry's assets are at an all-time high (Exhibit 2). By that measure, fundraising in private markets has grown by 8 percent annually since 2013. Private debt, natural resources, and infrastructure have grown disproportionately faster

than private markets as a whole over that period. And while real estate has grown just 4 percent, the figure reflects only a partial picture of the asset class, as it is limited to closed-end funds. As we will discuss, open-end funds have been taking share, including several large diversified core equity funds and a market-leading core-plus fund.

Regional fundraising

Differences emerge in fundraising among regions, fund sizes, and asset classes.

North America and Europe. Private market fundraising slipped in 2018 on both sides of the Atlantic. In North America, private markets decreased by 8 percent to about \$450 billion, and PE fundraising by 14 percent. This may reflect some “lumpiness” in the timing of large raises, rather than a cyclical decline, however, as approximately \$190 billion in additional fundraising was pending at year-end for North American funds.⁵ European fundraising also was down slightly (by 4 percent for private markets overall and by 11 percent for PE), influenced also in part

Exhibit 1 Private market fundraising fell ~11% in 2018.

Private market fundraising,¹ 2018

		Private equity	Closed-end real estate ²	Private debt	Natural resources	Infrastructure	Private markets
North America	Total, \$ billion	212	68	67	58	42	448
	2017–18, \$ billion	-33.2	-8.9	-8.1	4.3	7.5	-38.5
	YoY change, %	-13.5	-11.6	-10.7	8.0	21.8	-7.9
Europe	Total, \$ billion	82	28	36	28	34	207
	2017–18, \$ billion	-10.2	-9.4	-5.6	3.8	12.4	-9.0
	YoY change, %	-11.2	-25.1	-13.3	16.0	58.8	-4.2
Asia	Total, \$ billion	77	13	4	4	4	103
	2017–18, \$ billion	-32.8	2.3	-4.4	-0.9	-1.2	-37.1
	YoY change, %	-29.8	21.2	-50.9	-18.7	-22.9	-26.5
Rest of world	Total, \$ billion	14	0.5	1	4	2	21
	2017–18, \$ billion	1.4	-3.9	-0.6	-5.6	-6.6	-15.2
	YoY change, %	11.6	-89.1	-48.2	-59.8	-75.0	-42.4
Global	Total, \$ billion	385	110	109	93	82	778
	2017–18, \$ billion	-74.9	-19.8	-18.7	1.6	12.1	-99.8
	YoY change, %	-16.3	-15.3	-14.7	1.8	17.3	-11.4

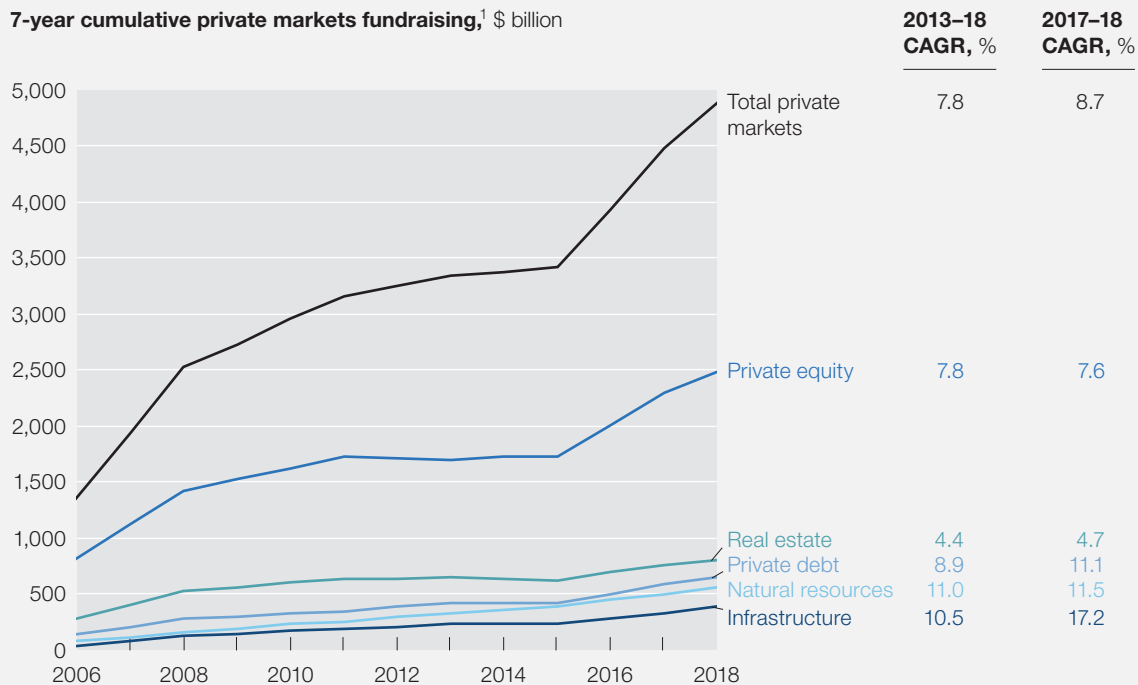
¹ Excludes fund of funds and secondaries.

² Closed-end funds that invest in property. Includes core, core-plus, distressed, opportunistic, and value-added real estate, as well as real-estate debt funds.

Data source: Preqin

Exhibit 2 Private markets trailing fundraising was at an all-time high in 2018.

7-year cumulative private markets fundraising,¹ \$ billion



¹ Private markets refers to private equity, real estate private equity (i.e., closed-end funds), private debt closed-end funds, natural resources closed-end funds, and infrastructure closed-end funds. All fund types are included, except for secondaries and funds of funds, which are excluded to avoid double counting of capital fundraised.

Data source: Preqin

by the timing of fundraising, as well as the slowing growth in major Eurozone countries, and uncertainty about Brexit and its potential effect on Europe.

Real asset classes performed better, with growth in infrastructure (22 percent in North America and 59 percent in Europe) and natural resources (8 percent and 16 percent) outweighing declines in closed-end real estate. Growth in real assets over the past few years has been driven by the emergence of megafunds (funds of \$5 billion or more), especially in the United States and Europe. Since 2013, eight such infrastructure funds have raised, collectively, more than \$68 billion. Three of those raised in 2018. In real estate, despite the overall slowdown in fundraising, 15 megafunds have been raised since 2013, including four in 2018.

The growth of infrastructure in 2018 is particularly noteworthy for both North America and Europe. In the United States in particular, public-private partnerships are gaining ground with support from recent administrations, given ongoing fiscal constraints and the aging of the country's infrastructure. In Europe, the expectation of continued privatization of public infrastructure assets, as well as the divestment of non-core assets by operators are fueling growth.

Asia. Private market fundraising in Asia has grown at an average of 7 percent annually since 2013, led by PE's healthy 9 percent growth. Against that backdrop, 2018 was a disappointment, as fundraising fell by about 27 percent, pulled down mainly by PE. Foreign managers—that is, those based outside

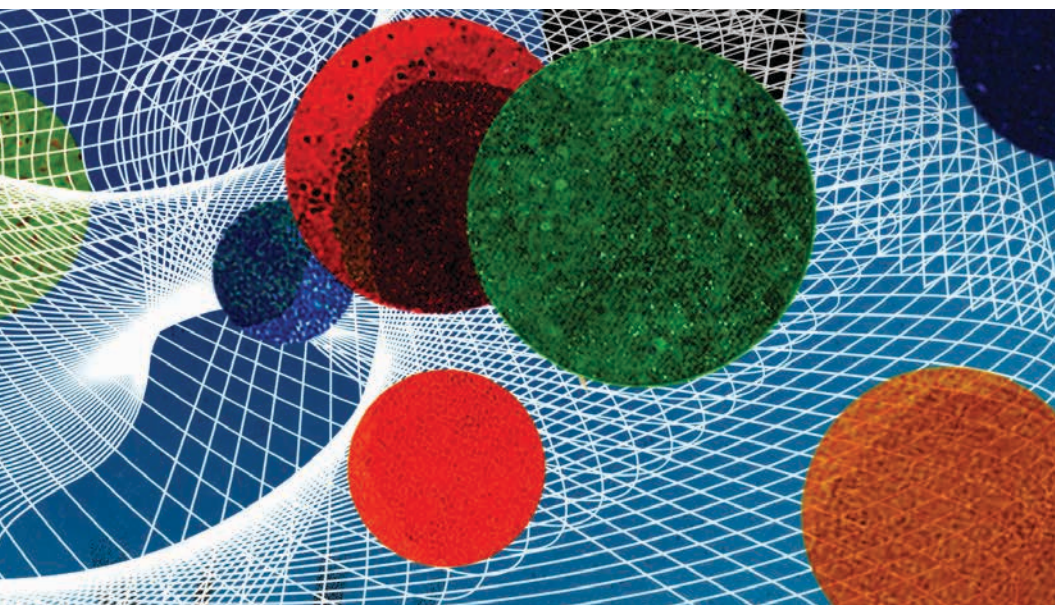
of Asia, raising Asia-targeted funds—raised \$41 billion in 2018, including \$33 billion from the United States, the highest such amount ever. Yet fundraising from Asia-based managers for the region nearly halved, from \$121 billion in 2017 to \$62 billion in 2018. Closed-end real estate, in contrast, remained popular, up 21 percent for the year. Over three-quarters of this growth came from US-based managers raising Asian-focused real estate funds.

The retrenchment by Asia-based managers appears to reflect a couple factors, starting with headwinds on the growth rates of the regional economy, as well as trade tensions with the United States. Tightened regulations also affected fundraising this year. In a bid to deleverage its financial markets, China's government issued new asset management regulations that prevent nonfinancial entities from borrowing capital to invest in venture and other

PE funds. Stricter regulations emerged on PE investment by high net-worth individuals through nonbank wealth management firms. On top of that, new rules ban commercial banks from using the proceeds from selling short-term wealth management products to invest in PE. This has constrained capital flows into Asia's private markets, which has made fundraising more challenging for some private market firms.

Fund size: Megafunds still strong

Megafunds remain attractive to investors, absorbing an ever-greater share of funds raised. Thirty-two funds of \$5 to \$10 billion were raised between 2007 and 2012, and 75 in the six years since. In 2018 alone, 19 funds of this size were raised, and they absorbed a greater share of private market fundraising—20 percent, up from 12 percent in 2013, when eight funds were raised. Megafunds accounted for 29 percent of



total private market fundraising in 2018, up from 15 percent three years earlier (Exhibit 3).

Funds of \$10 billion or more have also boomed, albeit at a slower rate of growth. Eighteen such funds were raised between 2007 and 2012, and 25 in the six years since. Their share of total fundraising eased slightly from 2017's peak of 13 percent, down to 9 percent in 2018. The decrease likely does not indicate any material headwinds against funds of this size, but rather reflects the small number of firms capable of such large raises. In any given year, the number of \$10 billion-plus funds can vary substantially.⁶

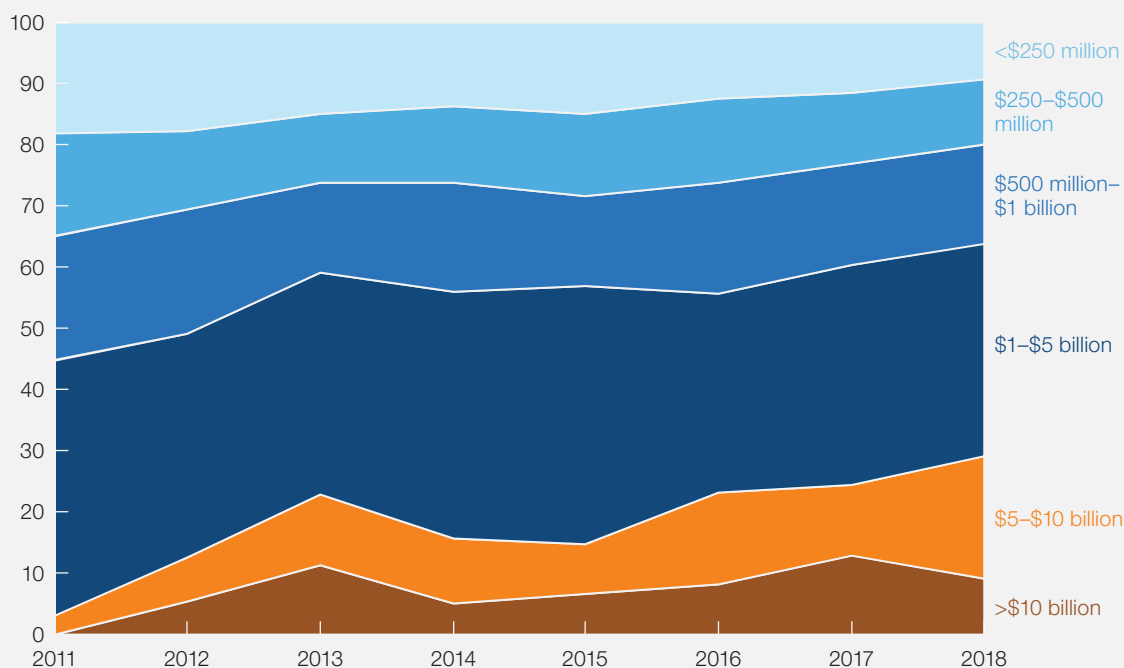
Fundraising by asset class

Fundraising fell for most private market asset classes in 2018 (see Exhibit 1). Private equity, closed-end real estate, and private debt each declined by 14 to 16 percent. Infrastructure fundraising bucked the trend, however, rising by 17 percent from 2017 to 2018. And bright spots could be found even in the asset classes that experienced a drop-off.

Private equity. Fundraising for PE buyouts declined by 21 percent year on year. But funds of \$1 billion to \$5 billion did the opposite, growing 21 percent in 2018. This surge helped buyout funds of this size

Exhibit 3 Megafunds now account for nearly 30% of all fundraising.

Global private markets fundraising^{1,2} by fund size and year, % of total in-year fundraising



¹ Private markets refers to private equity, real estate private equity (i.e., closed-end funds), private debt closed-end funds, natural resources closed-end funds, and infrastructure closed-end funds.

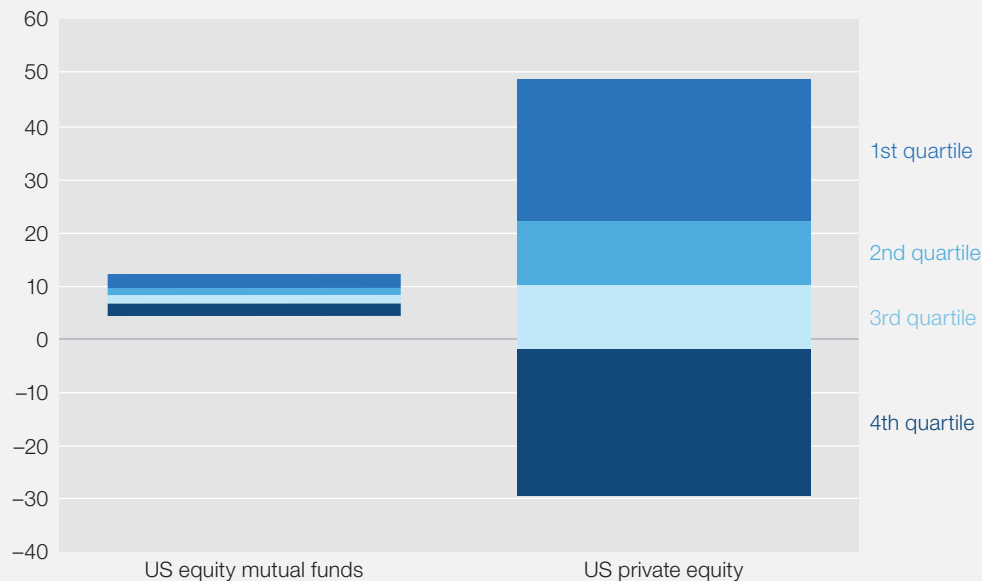
² All fund types are included, except for secondaries and fund-of-funds, which are excluded to avoid double counting of capital fundraised.

Data source: Preqin

Exhibit 4

Return dispersion is much greater in private equity than in public markets.

5-year annual returns from US private equity funds and US mutual funds by performance percentile, 2013–18, %



Data source: Morningstar, Burgiss

grow as a share of all buyout fundraising from 22 percent to 33 percent.

PE remains the largest of all private markets. The dispersion of returns—long a defining feature of the asset class—remains extremely wide (Exhibit 4), which means that savvy (or lucky) LPs that are able to pick top managers can outperform the median by a wide margin.

Of course, choosing the right PE manager is not easy. It used to be the case that GPs that delivered top-quartile funds were likely to repeat the feat in subsequent funds. But as we first noted in 2010, this persistency of outperformance has been declining, especially since 2007, with bottom-quartile funds nearly as likely to outperform as top-quartile funds. This is counterintuitive for the many industry observers who believe, simply, that skill matters.

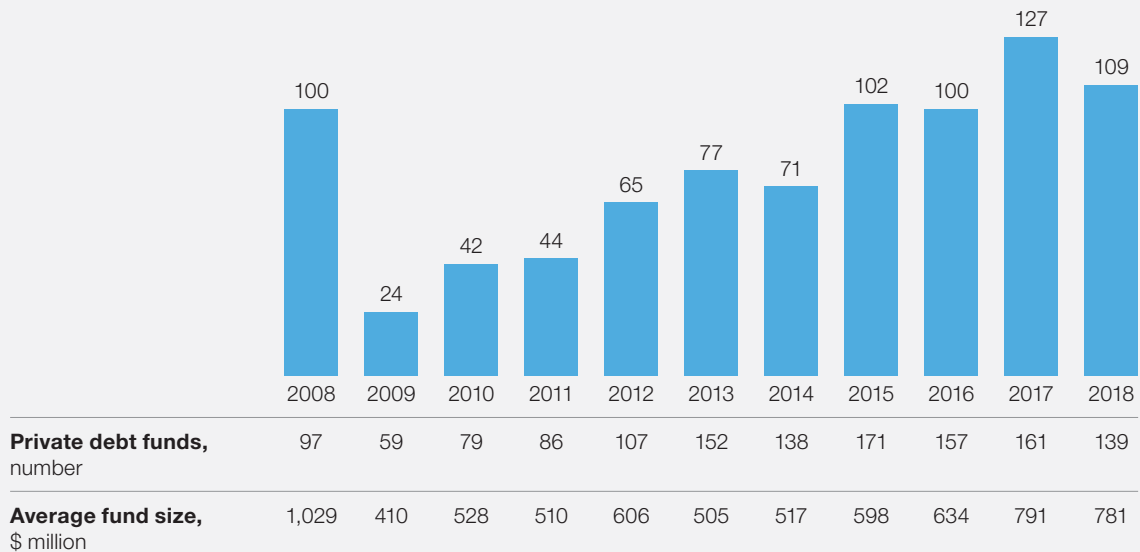
Recent studies may point the way to resolving this apparent inconsistency. Research suggests that while persistency of funds may be on the decline, persistency in the performance of individual managers remains statistically significant.⁷ Indeed, some of the most sophisticated LPs have for years sought to calculate returns for individual deal makers for precisely this reason. If the two trends continue, however, it may raise interesting questions about the firm model. For example, over time, what will keep persistently successful individuals from leaving less persistently successful institutions?

A perhaps related development is the resurgence of \$1 billion-plus first-time funds (FTFs). At-scale FTFs were raised fairly often in North America and Europe before the global financial crisis (including ten over 2004–07) but almost entirely

Exhibit 5

Private debt fundraising has exceeded \$100 billion for the past four years.

Private debt fundraising by closing year, \$ billion



Data source: Preqin

disappeared after 2009. Just two were raised in these regions from 2010 to 2014. They have now returned, with seven at-scale FTFs raised in North America and Europe since 2015. Two were long-duration funds founded by industry veterans, while one is a venture-capital fund. These new FTFs reflect both a rebound in successful deal makers striking out on their own and a response to rising LP demand for more tailored private market exposures.

In Asia, which had fewer at-scale funds to begin with and which has seen greater lateral movement among senior professionals, growth in FTFs did not slow at all in the early 2010s. Since then, the region has seen 33 at-scale FTFs as capital has continued to pour into the region.

(One other development in PE fundraising bears mentioning: the strong uptick in venture capital.

See the sidebar “Venture capital’s very good year” on page 17.)

Private credit. Private credit fundraising softened in 2018 (down 15 percent versus 2017), but its long-term growth trend remains intact. In fact, 2018 was the second-highest fundraising year in history for the asset class (Exhibit 5). Seven-year trailing fundraising has grown at an average of 9 percent per annum since 2013, outpacing both PE and closed-end real estate growth, on the back of sustained low interest rates and a long economic expansion.

Annual returns for private debt have averaged around 10 percent since 2008, with higher yields than are available in public debt. This has been an attractive proposition to more and more investors. A good indication is high-yield spreads, which reached ten-year lows in 2018 before widening again in the fourth quarter.

Private credit funds (and hedge funds, which are not included in our data) are now filling a financing void for many middle-market and sponsor-owned companies, helping sectors and providing security structures avoided by banks. Private credit has also increasingly returned to covenant-light lending as the market has grown hotter: in a recent survey by the Alternative Credit Council, 38 percent of North American private credit lenders reported lower financial covenants in the past year, versus just 8 percent reporting higher covenants.

Infrastructure. Private market allocations to infrastructure expanded appreciably in 2018. That's part of a secular trend: both public and private infrastructure spending (on roads, bridges, tunnels, airports, ports, power, water, and telecommunications) has grown at 4.2 percent annually in recent years. Most sectors, including transport, power, water, and telecom, are on the rise, in both developing and developed economies. The trend has legs: the McKinsey Global Institute, estimates that at least \$4 trillion of annual investment is required through 2035 to keep pace with economic growth. Some of this required investment will surely be filled by private market investors. But, even at the rapid rate of fundraising in this asset class, a significant infrastructure financing gap is likely to persist and present further opportunities for private capital.

In addition to strong long-term demand, traditionally defined infrastructure tends to be less correlated with public markets and provides some hedge against economic uncertainty and inflation, given many of these assets have a contract structure or regulatory compact that enables inflation costs to be passed through to customers. Attractive returns relative to fixed income assets (the typical comparable for infrastructure assets) are helping drive capital into infrastructure. Most infrastructure investments (such as power plants, transmission lines, and so on)

involve counterparty risk with the government, which typically bears the cost if revenues do not meet projections. While government debt usually yields in the low single digits, infrastructure investment, which has a similar risk profile, can yield returns of at least mid-single digits. Hence, the typical investor is getting government-type risk with higher returns.

As we noted earlier, infrastructure's growth in fundraising is almost entirely driven by North America and Europe. This same growth, however, was not experienced in Asia, where infrastructure fundraising was down 23 percent for the year, despite seeing moderate growth until 2016. This is partly attributable to the slowing rate of infrastructure spending in China over the last few years, after an enormous infrastructure boom over the past decade. This has limited the need for private market capital for the time being.

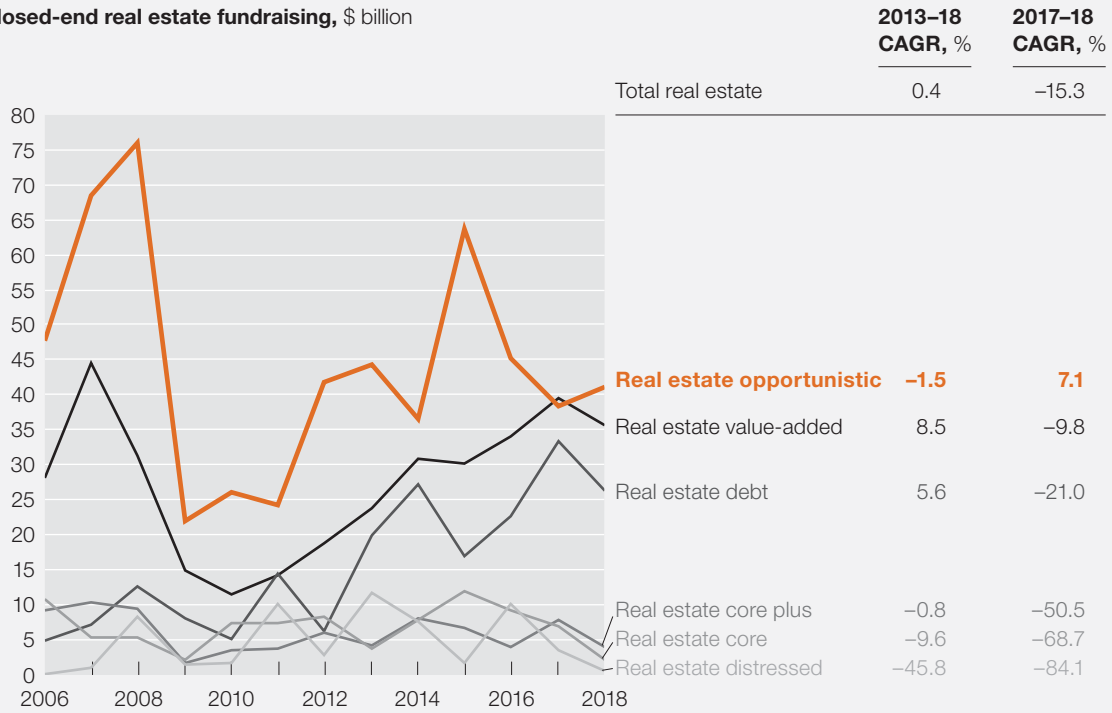
Real estate. Investment into vehicles in which LPs have more liquidity and more discretion continues to grow. Closed-end fundraising has declined, down 15 percent year over year. While few institutions have the scale, resources, and governance models to build full direct-investing programs, several have announced interest in other discretionary vehicles, including co-investments, separate accounts, and single-asset investments. These institutions are on trend: allocations to direct strategies within institutional real estate portfolios greater than \$10 billion have shifted from 31 percent in 2010 to 47 percent in 2016, according to CEM, a leading benchmarking firm for institutional investors.

Even investors not going direct have increased their discretion over cash flow timing. With LPs searching for yield in a low-rate environment with muted fixed-income returns, core strategies have gained share, especially through open-end funds. Gross net asset value (NAV) of open-end vehicles grew at an

Exhibit 6

Opportunistic remains the most popular closed-end real estate strategy.

Closed-end real estate fundraising, \$ billion



Data source: Preqin

average of 14 percent per year during 2012–2017, while closed-end vehicles grew just 5 percent annually during the same period. However, in today’s cap-rate environment, core investors face the paradox of not wanting to overpay while also recognizing that core typically outperforms riskier strategies in a contraction. Many are seeking to split the difference by investing in core-plus mandates, a quickly growing strategy. One relatively new core-plus entrant has reached scale and continues to grow rapidly, and several other prominent managers have entered the space.

Opportunistic fundraising, the lone bright spot in closed-end fundraising, bounced back after two down years, growing by 7 percent in 2018 (Exhibit 6). That growth was driven in part by a small number

of large successful raises. After a single year in which commitments to value-add strategies outpaced opportunistic, normalcy returned in 2018, and opportunistic was once again the most funded closed-end strategy. Sustained performance has given investors the confidence needed to come back to opportunistic strategies after the global financial crisis.

The three trends highlighted appear to have staying power. More firms are going direct; open-end vehicles, particularly in core-plus, are growing; and one manager is targeting the largest opportunistic raise ever in 2019, with several other large funds in the market (all told, they seek \$59 billion).

In this evolving landscape, GPs must meet LPs’ demands across a range of strategies and vehicles. The

largest RE managers have taken notice and, in a shift reminiscent of the breakout moment experienced in private equity more than a decade ago, at-scale RE managers are breaking away from the pack. Using their size and capabilities, the largest managers now serve LPs and retail investors with a wide range of products, including separate accounts. The two largest firms manage 10 percent of the industry's assets; both are multi-asset class managers with professionalized fundraising and a growing suite of new products across risk strategies and vehicle types, including an industry-leading non-traded

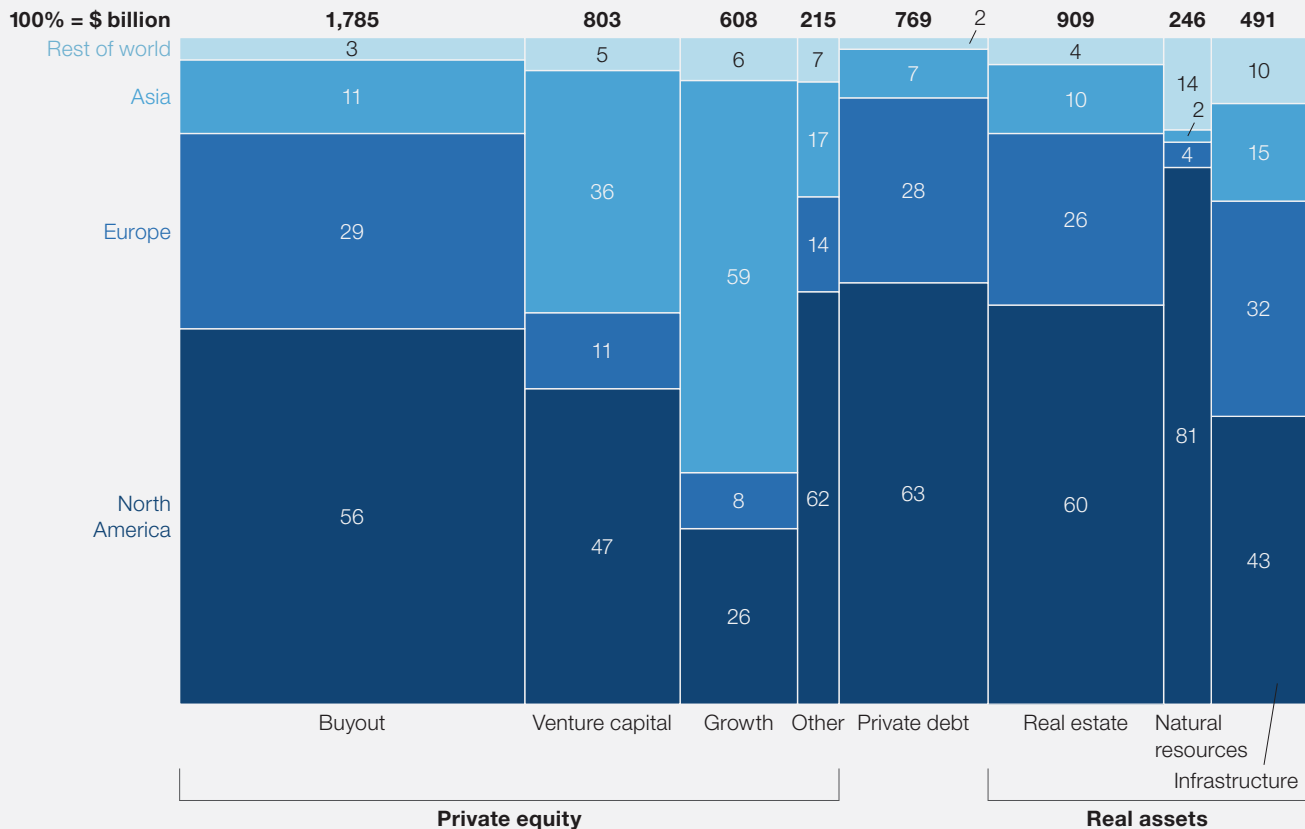
REIT. Those endeavoring to keep pace should follow suit.

AUM: Still growing

Despite the downtick in fundraising, private market AUM reached approximately \$5.8 trillion in 2018, up 12 percent from \$5.2 trillion in 2017, with PE accounting for just over half of the total (Exhibit 7). That outcome is a reminder that the \$778 billion raised in 2018 is still an astonishing sum, albeit slightly less than the strong sums of prior years. Even as GPs mark their portfolios to market to reflect recent

Exhibit 7 Private markets AUM now totals \$5.8 trillion.

Private market assets under management, 2018, %

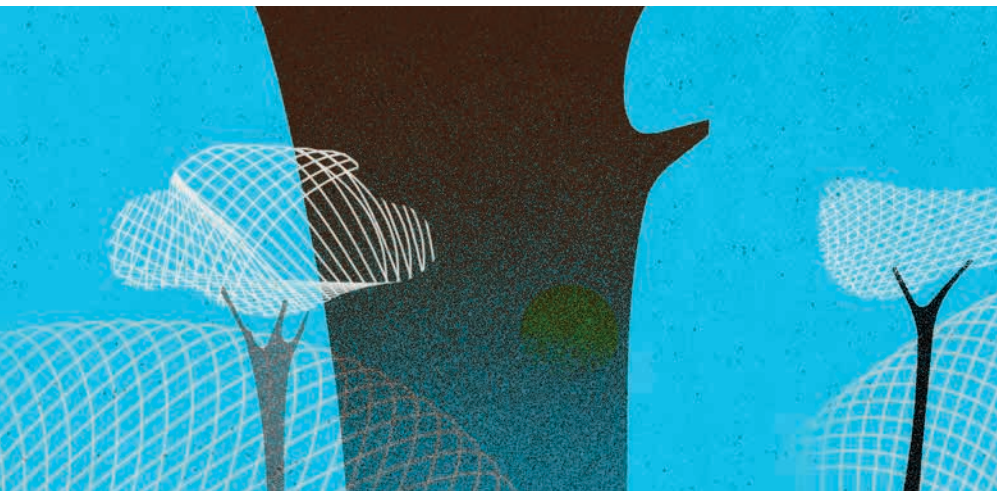


Data source: Preqin

public market volatility, the overall trend appears unlikely to shift much.

Even greater growth in fundraising may be in the cards. As public market valuations have soared, LPs' private market allocations (and PE in particular) have remained consistently underweight. If LPs redouble efforts to reach their stated targets—or if those targets rise on the back of continued outperformance—

then this long-standing structural tailwind for private markets could acquire new force. It is possible that a sustained correction, coupled with record levels of dry powder, could eliminate this overhang, snapping actual allocations in line with targets. Unless and until that correction arrives, however, LPs will likely either remain underweight or further accelerate their commitments to private markets. ■



Venture capital's very good year

VC was an outlier in 2018 PE fundraising, increasing 13 percent from 2017 while buyout fundraising fell more than 21 percent (Exhibit A). Over the past five years, VC fundraising has grown at 18 percent per annum, versus just 4 percent for buyouts. With this surge, venture's share of total PE fundraising increased from 15 percent in 2017 to 20 percent in 2018, the second-highest since 2012.

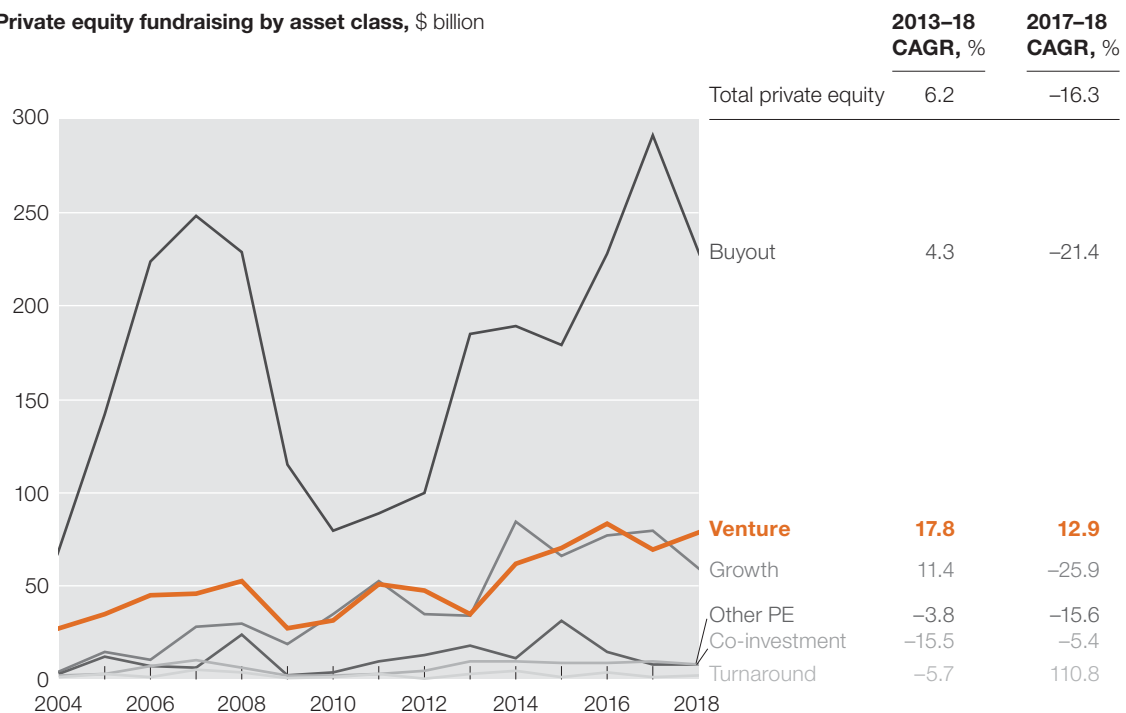
One of the drivers for these inflows to VC has been the potential of outsize returns. As measured by pooled returns, VC outperformed buyouts in every vintage from 2005 to 2015 (Exhibit B), though pooled returns are disproportionately affected by a few stellar deals. At the same time, the wider dispersion

within VC means that the median VC fund has underperformed the median buyout fund in almost every vintage since 2005. Therefore, investors able to secure access to top VC firms find the asset class highly attractive, while those with limited access or middling manager selection capabilities often find it less rewarding.

Persistency of outperformance has long been observed in VC: top funds tend to beget top-performing successors, due to privileged deal flow and years of experience picking and growing winners. As a consequence, accessing the best "brand-name" funds has long been challenging, and is even more difficult than in buyout as fund

Exhibit A Venture has grown faster than other PE segments over the past 5 years.

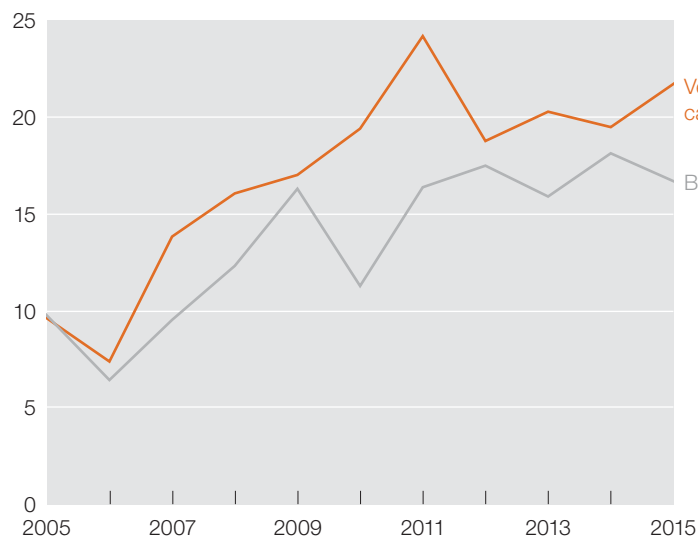
Private equity fundraising by asset class, \$ billion



Data source: Preqin

Exhibit B Measured by pooled returns, venture capital outperformed private equity buyout funds.

Pooled IRR for global venture capital and buyout funds per vintage,¹ %



	Pooled IRR 2005–15, %	Median IRR 2005–15, %	Dispersion between top and bottom quartile, 2005–15, percentage points
Venture capital	14.2	11.2	17.4
Buyout	10.5	12.8	12.7

¹ Pooled IRR, as of September 30, 2018, for 2005–2015 vintage funds.
Data source: Burgiss

sizes for top VC firms’ flagships have scaled less rapidly.

Instead of expanding flagships, top firms are raising more frequently—some almost every year. These top VC firms have also added strategies (such as sector and country funds) to expand their platforms and asset bases.

A large proportion of the segment’s growth has come from newer firms. Since 2010, over 2,000 new VC firms have been founded. To put this into context, in 2010 there were only about 800 managers in the entire VC industry. The newcomers have gained significant share: over 20 percent of this group raised in 2018, claiming 47 percent of total VC

fundraising. These upstarts bear watching, especially as they seek to compete with the long-time leaders.

Capital deployment in VC mirrors and even exceeds the surge in fundraising, up an average of 17 percent per annum since 2015, capped by a 53 percent increase in 2018, when the industry invested \$251 billion. Supersized venture rounds in which start-ups attract \$1 billion or more from VC firms emerged in 2015. In 2018, 25 supersized rounds represented over 25 percent of all VC deal volume (Exhibit C).

These giant investments blur the lines among VC, growth, and buyout. Some rounds, such as a recent

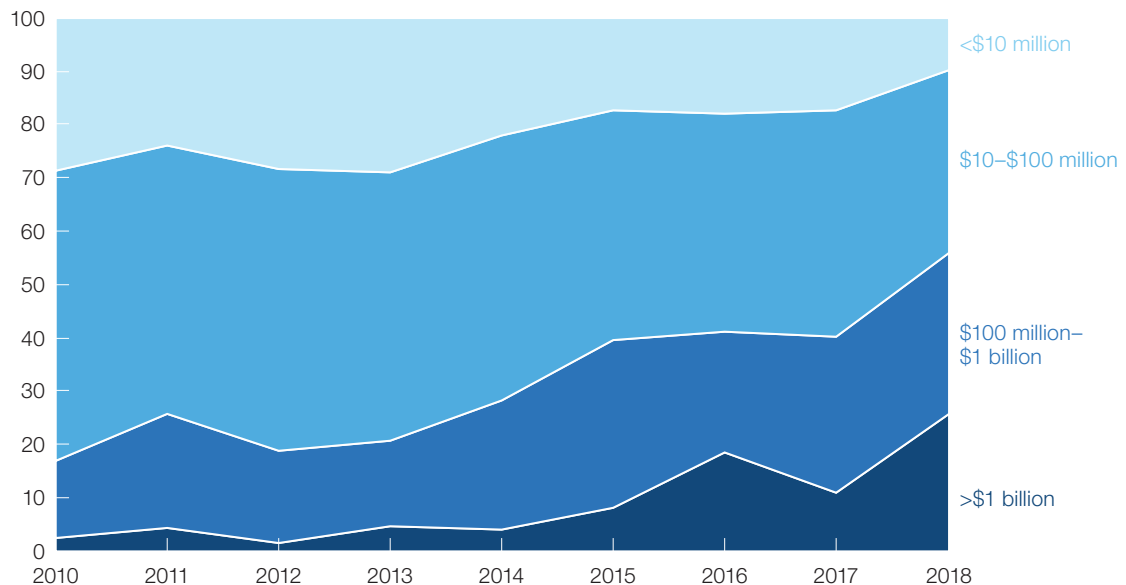
\$10 billion-plus series C, are bigger than many large buyouts. Yet these investments are still made on a VC thesis that accepts higher risk in exchange for outsize growth potential of companies that may have minimal or negative cash flows.

That said, the main investors in supersized rounds tend not to be Silicon Valley stalwarts. Rather, these rounds are generally backed by different types of investor, including corporate VC arms, buyout funds, and large sovereign-wealth fund (SWF)-backed funds, which were less common in VC investing before 2015.

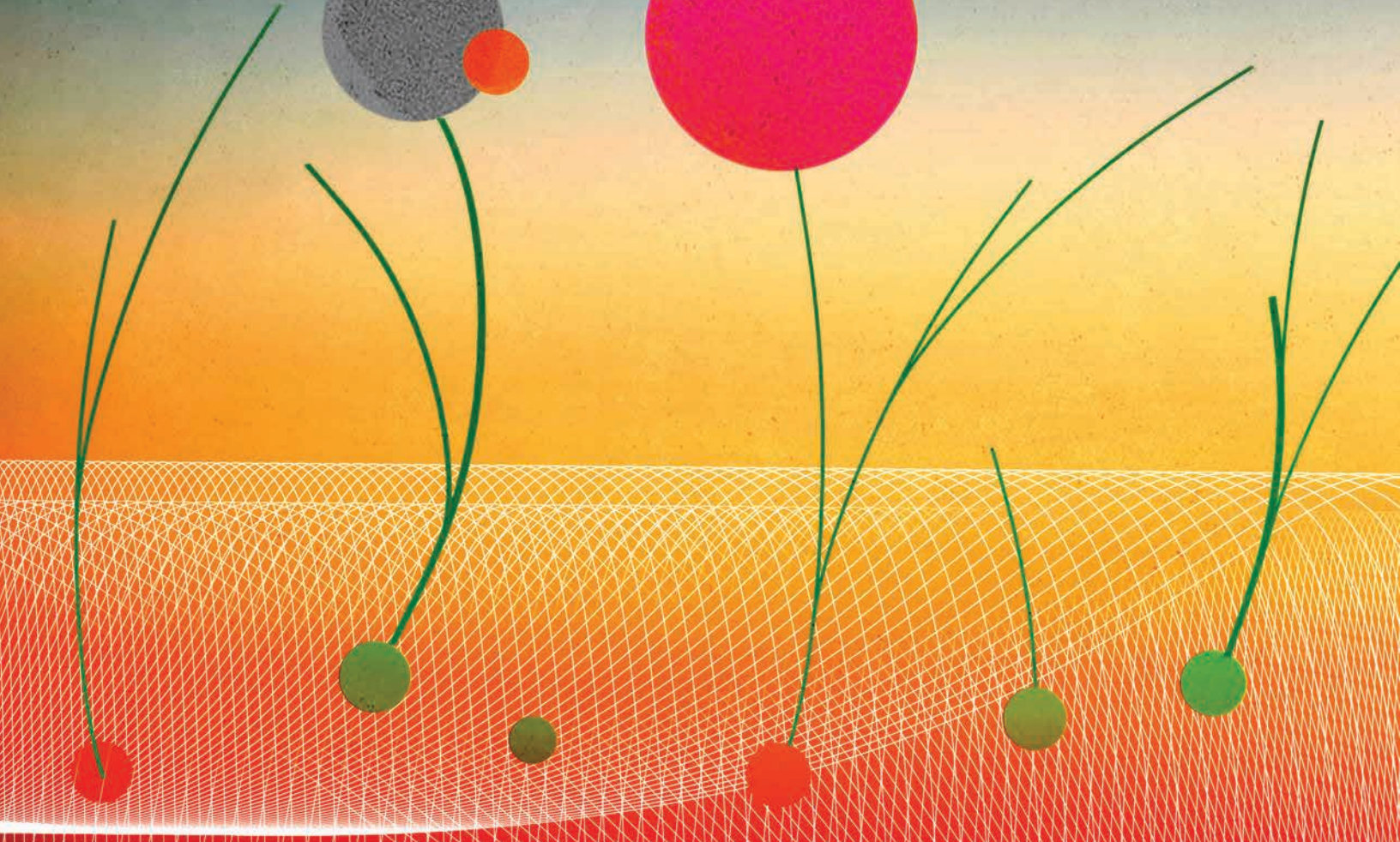
No review of venture capital's recent history would be complete without noting the birth of the ultra-fund, much larger than even top buyout funds. Implications for the industry remain to be seen: Will other funds of similar scale follow, either in VC or other private market asset classes? Is "very, very big" a different family of investment or merely an unusually large cousin? How will a war chest this large affect deal pricing? Only time will tell.

Exhibit C Rounds over \$1 billion have quickly grown since 2015 to ~25% of VC capital deployed.

Share of total in-year VC capital deployed by round size, %



Data source: Pitchbook



2 Ticking higher

The headlines on capital deployment in 2018 were much the same as in previous years. Deal volume continued to rise, deal count remained relatively flat, and multiples ticked higher. Looking more closely, however, reveals that an intriguing story is developing. Deal volume set a new high and has surpassed 2007 levels. Dry powder also reached a new high, and relative to deal activity, inventories of dry powder crept noticeably higher. Our research suggests that today's record levels of dry powder may not be the problem some suggest, but if private multiples contract, this sizable war chest may place pressure on fundraising. Exits were essentially flat year on year, but GPs appear to be close to selling off the last of their pre-crisis assets.

Deal activity: Highest volume since 2007

In 2018, PE deal volume⁸ reached \$1.4 trillion invested globally, finally surpassing the previous peak in

2007 (Exhibit 8). Activity was most robust in North America, where capital invested rose by 20 percent, or \$133 billion, from 2017 to 2018. Since 2015, North American deal activity is up by 32 percent in total. European deal activity hit a record as well, with \$495 billion invested in 2018, up 5 percent from the prior year and 13 percent total since 2015. In both regions, year-on-year growth owes some measure of its strength to megadeals. Nineteen deals worth more than \$5 billion in 2018 were struck in North America and Europe, into companies operating in the healthcare, financial services, real estate services, IT, and food and beverage industries. This compares with 15 such megadeals in 2017 and nine in 2016.

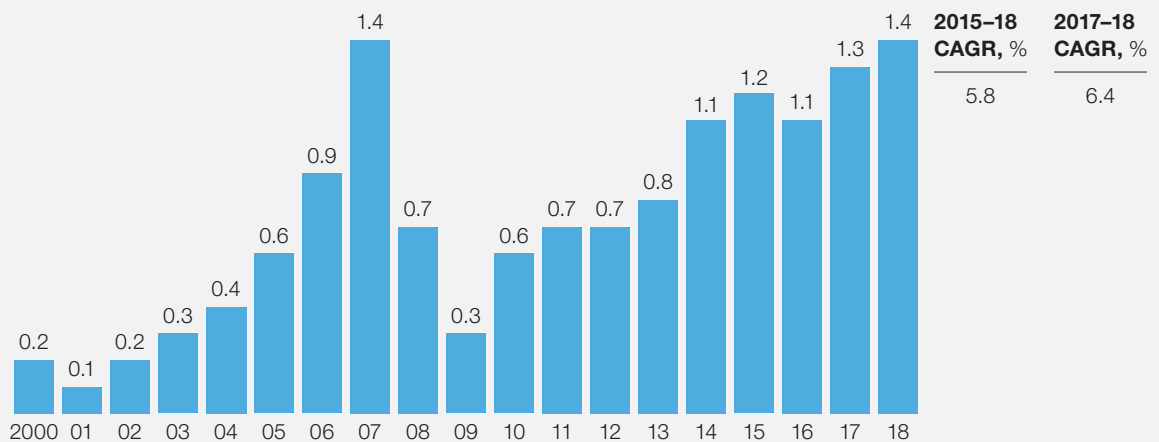
In contrast, deal volume in Asia dropped sharply, by 42 percent from 2017 to 2018, pulled down by China and India, which together declined by approximately 60 percent. The tightening of asset management

regulations for nonfinancial entities in China has stemmed deal flows. More developed Asian markets fared somewhat better; Japan and Korea witnessed growth in deal activity focused on technology and consumer companies, respectively.

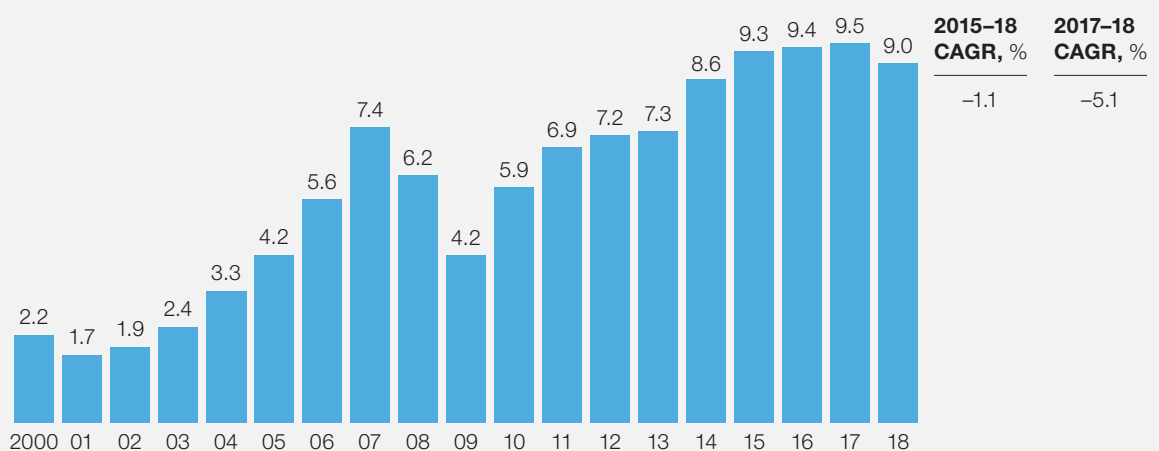
In historical context, Asia's 2018 drop does not appear quite so stark. For one thing, 2017 was a remarkable year for deal activity in most countries in the region, especially China, so the fallback in 2018 may in retrospect appear as merely a breather after

Exhibit 8 PE deal volume has continued to increase, while deal count has plateaued since 2015.

Global private equity deal volume, 2000–18,¹ \$ trillion



Global private equity deal count 2000–18,¹ thousands



¹Include completed and announced deals for 2018, as well as portfolio add-ons. PE deal activity for all years exclude VC.
Data source: PitchBook

a rapid run-up. Taking a slightly longer view, Asian deal volume ended 2018 at \$76 billion, roughly the same level as 2015—still robust, though a clear step back from 2017’s heights.

Whereas global deal volume reached a record in 2018, deal count fell by 5 percent to about 9,000 transactions, down from 9,500 deals in 2017. After a 15-year period of cyclical volatility, deal count has not changed markedly since 2014.

The record deal volume of 2018, then, was propelled by growth in deal size. The average PE transaction in 2018 was \$157 million, up 22 percent since 2015, capped by 12 percent growth last year (Exhibit 9). This growth has been fairly broad based, not merely inflation at the top: even when excluding outliers (deals of \$10 billion

or more), year-on-year growth in deal size still amounted to 9 percent.

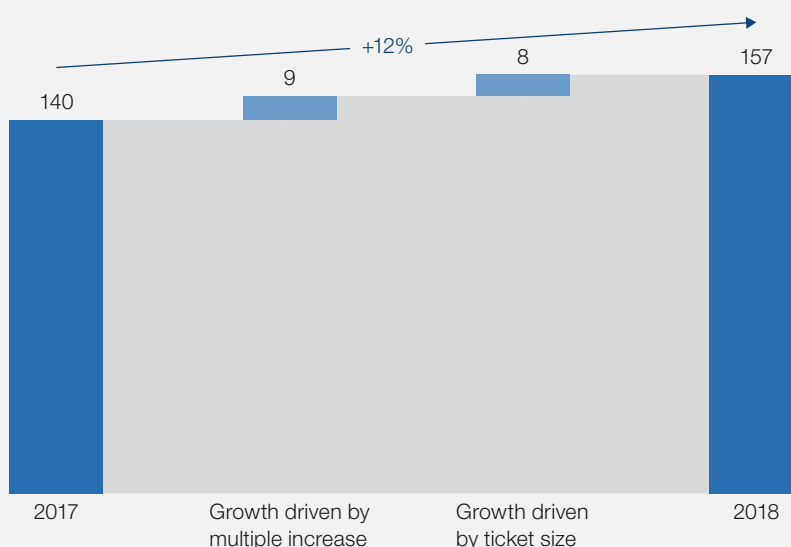
Growing EBITDA multiples explain roughly 50 percent of the increase in deal size. The remaining half might be said to be organic, as GPs acquired larger targets that generate higher EBITDA, an outcome that in the United States was influenced in part by changing tax policy.

Multiples are still on the rise, growing from 9.6 times in 2015 to 10.4 in 2017 and 11.1 in 2018, inching closer to the 2007 peak of 11.3 (Exhibit 10). The rise can be attributed to a couple of factors.

First, robust fundraising has placed more capital in the industry’s hands. And there are more of those hands available to put money to work: the number

Exhibit 9 Average deal size increased 12 percent.

Global private equity average deal size, 2017–18,¹ \$ million

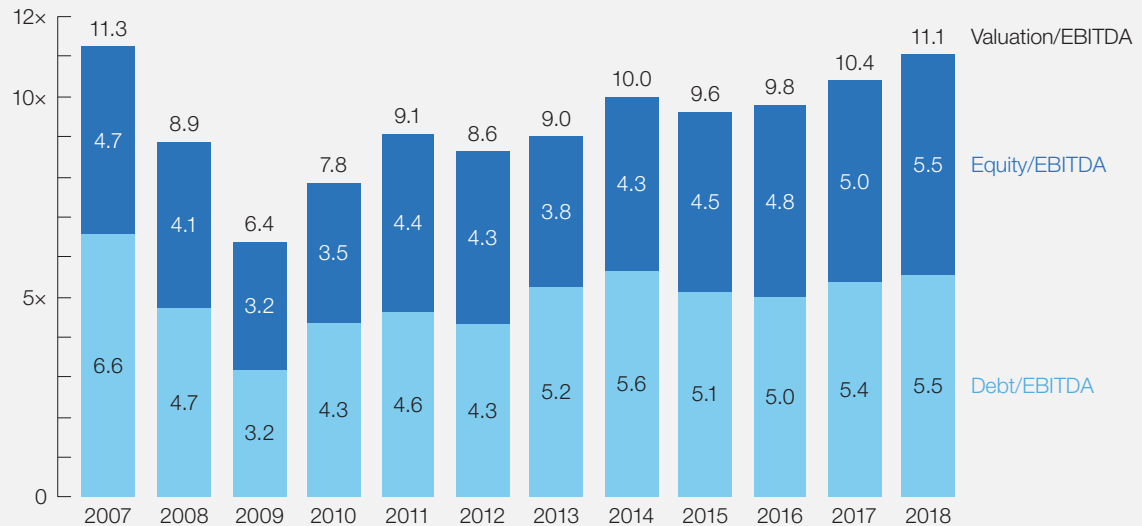


¹ Includes PE buyout/LBO (acquisition financing, asset acquisition, add-ons, carve-outs, corporate divestiture, debt conversion, distressed acquisition, management buyout, management buy-in, privatization, recapitalization, public-to-private, secondary buyout); leveraged recapitalization (debt refinancing, dividend, share repurchase); PE growth/expansion (acquisition financing, dividend recapitalization, leveraged recapitalization, recapitalization); platform creation.

Data source: PitchBook

Exhibit 10 Private equity deal multiples continue to rise.

Global median private equity multiples, 2007–18



Data source: PitchBook

of active private market firms has risen 7 percent annually since 2013, from 6,300 firms to close to 9,000 in 2018, mostly in North America. Growing competition engenders higher prices.

Second, public market multiples have grown substantially over the past few years. (The exception was Q4 2018, when multiples fell to 21 times, down from 25 times for the same period last year. Public multiples are again rising in 2019.) Private market pricing has lifted as well.

Third, some GPs are saying that they're buying what they see as higher-quality assets, and as a result they're willing to pay higher multiples to own them, as they believe these companies will prove more resilient in an economic downturn.

Dry powder: Barreling on

Stocks of dry powder continued to rise, reaching a record high of \$2.1 trillion in H1 2018,⁹ up from

\$1.8 trillion in 2017 (Exhibit 11). Dry powder has grown at a rate of 14 percent since 2012, driven mainly by PE.

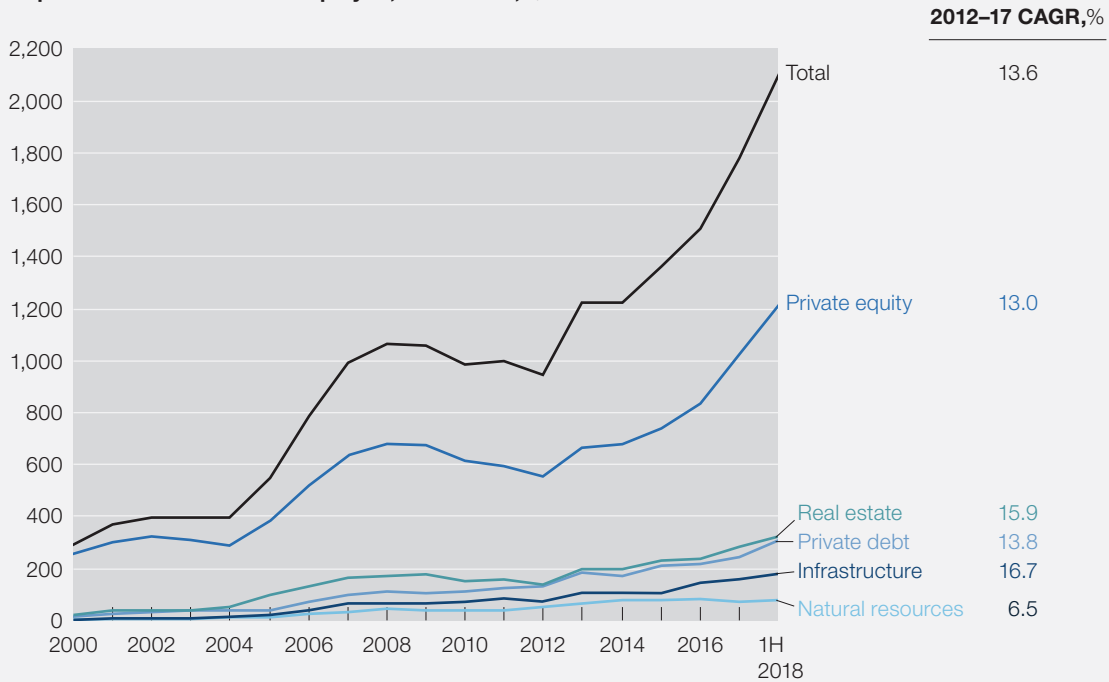
Dry powder growth is modestly outpacing deal volume (Exhibit 12). Viewed as a multiple of annual equity investments over the prior three years, dry-powder stocks have crept noticeably higher, growing 22 percent since 2016. If growth in dry powder continues to outstrip deal volume in a strong market, this may provide a tailwind for multiples. But if the market slows (say, if multiples contract or deal activity slows), then this sizable war chest may contribute at least for a period to downward pressure on fundraising.

Exits: Crisis-era purchases finally coming off the books

Global PE-backed exit volume has been essentially flat for four years, down 2 percent in total since 2015. Exit volume in 2018 was \$911 billion. Exit count,

Exhibit 11 General partners' stocks of dry powder reached a new high.

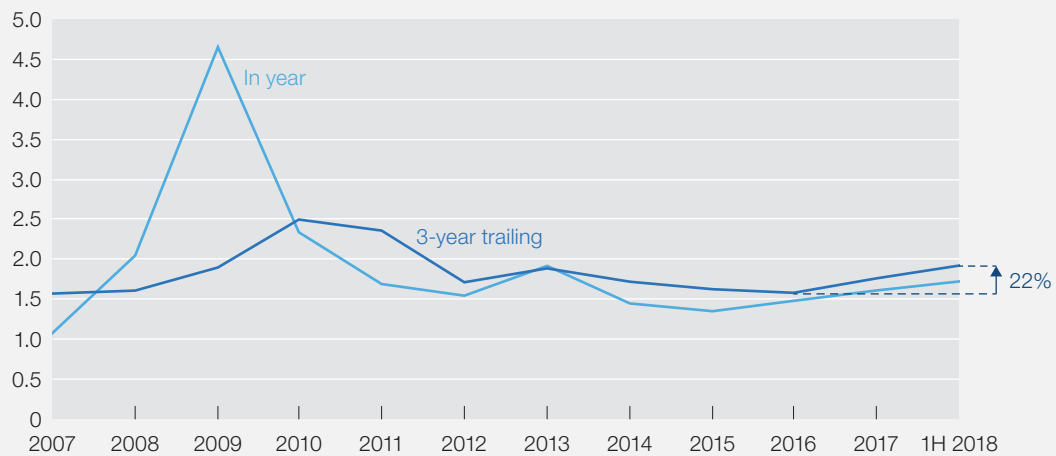
Capital committed and not deployed, 2000–1H18,¹ \$ billion



¹ Data not available for full 2018 year.
Data source: Preqin

Exhibit 12 Inventories of dry powder show uptick since 2016.

Years of private equity inventory on hand,¹ turns



¹ Capital committed but not deployed, divided by equity deal volume.
Data source: PitchBook; Preqin

in contrast, has been decreasing slowly, from 3,226 in 2015 to 2,581 in 2018, returning to a level typical of the pre-crisis years. We see two reasons for the drop.

First, add-on investments, in which firms use a portfolio company as a platform for growth in a given market, have steadily increased over the past decade. Add-on investments accounted for 34 percent of all PE transactions in 2009 and reached a high of 45 percent in 2018. Because of these platform transactions, portfolio companies have become bigger and the number of exits has consolidated over time.

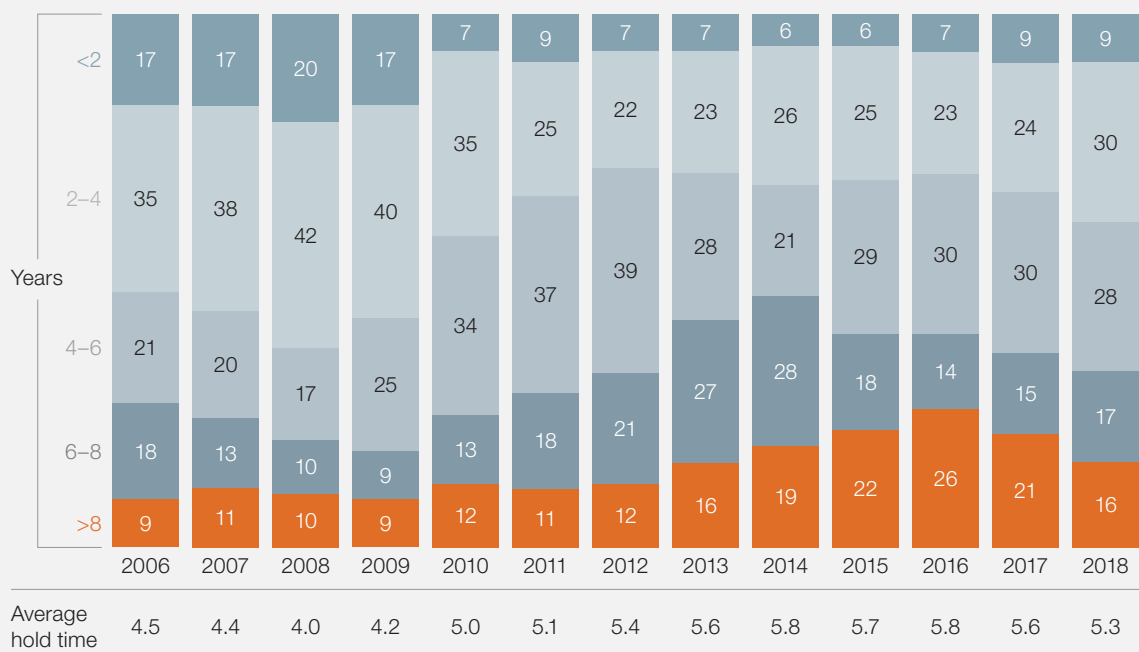
A second factor relates to the shedding of pre-crisis assets. During the crisis, as PE firms put off

sales until public markets stabilized, the number of portfolio companies swelled. Many long-in-the-tooth transactions consummated just before the global financial crisis are finally winding off GPs' books. The share of sales that were PE-backed companies held for more than eight years declined from 22 percent in 2015 to 16 percent in 2018 (Exhibit 13).

With this backlog largely released in 2015 (when exit count peaked), the industry seems to have returned to a normal exit pattern. Similarly, holding periods are returning to levels last seen several years ago. Our latest findings show that average holding periods fell from 5.7 years in 2015 to 5.3 years in 2018. In addition to sales of crisis-era assets,

Exhibit 13 Average PE holding period declined recently, as crisis-era purchases exited the portfolio.

Holding times of portfolio companies exited in years,¹ % of total exits



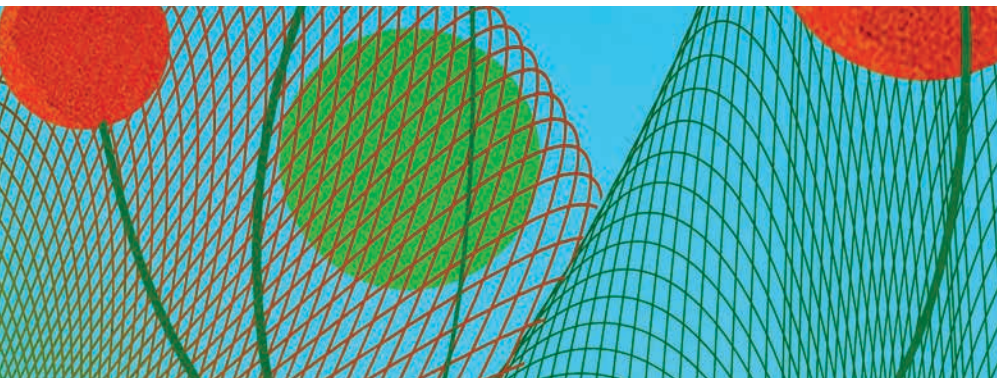
¹Includes PE buyout full exits, partial exits not included. Excludes all hold times less than 0.5 years.

Data source: Preqin

another contributor to shorter holding periods may be the desire voiced by many GPs to take full advantage of a buoyant market.

With essentially flat exit volumes and falling exit count, the median exit size has increased across all types (IPO, strategic, and financial acquisitions) since 2013, with only minor fluctuations from

year to year. Sales to strategic investors accounted for the highest proportion of PE-backed exits globally, a consistent trend of the past ten years, and accounted for 44 percent of volume in 2018. ■





3 Firms of the future

Private markets have gone from alternative to mainstream, becoming essential vehicles for investors to achieve exposure to various pockets of economic growth. Capital has poured in, and the industry has grown significantly. Global PE net asset value has grown 7.5 times since 2002, more than twice as fast as public market capitalization, which has grown approximately 3.5 times over the same period (Exhibit 14). There are also now more GPs than ever before in PE—as well as more LPs adopting the GP playbook—and more companies being taken and kept private. The number of US-private-equity backed companies increased by 106 percent from about 4,000 in 2006 to about 8,000 in 2017, while publicly traded firms fell by 16 percent from 5,100 to 4,300 (and by 46 percent since 1996).

Against this backdrop of heady growth, private markets have started to show more signs of a

maturing industry. GPs have professionalized many internal functions and navigated tricky management successions as founders have given way to a next generation of leadership. Firms have even begun to take their own medicine, applying to themselves more of the same operational principles they have long advocated in their portfolios, with an early handful moving toward digitization.

Another indicator is the industry's growing depth, with new products and services proliferating to match LPs' rising demand and increasing sophistication. Plain-vanilla 2-and-20 commingled PE structures remain prevalent, but others are on the rise, including secondaries and co-investment. With these tools, LPs and GPs alike can now much more readily tailor their exposures—not only by asset class and scale but also by duration, price, risk profile, degree of discretion, and many other

factors. And all this is happening while more established LPs continue to seek larger, more strategic relationships with a smaller number of trusted managers.

Today, a more mature industry with more tools is shaping a bright future for itself, with both an agenda for growth and better defenses against the inevitable downturn, whenever it may come.

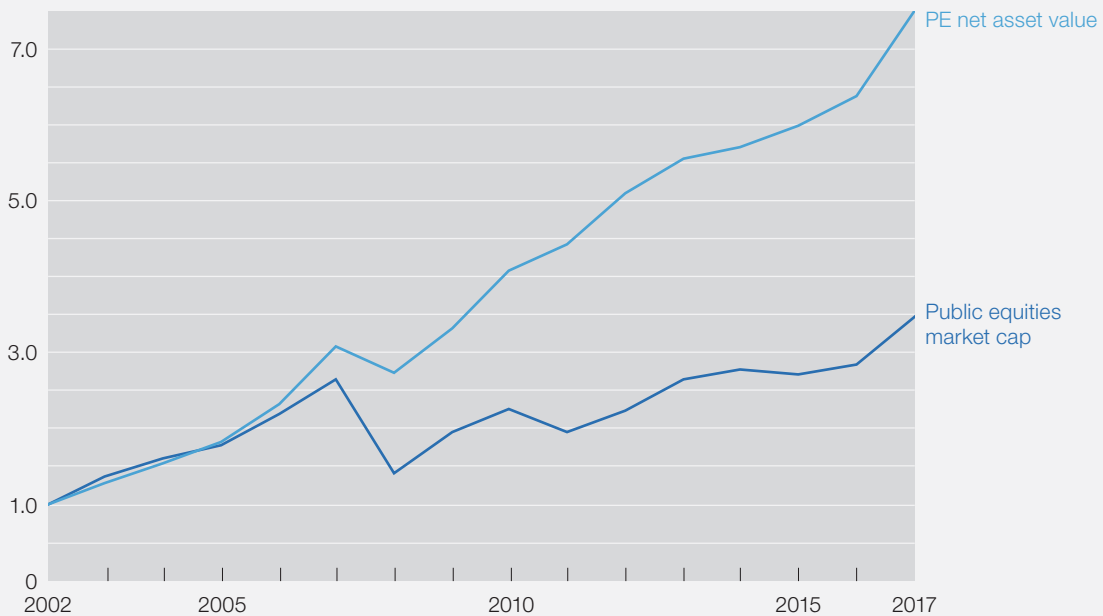
An industry moving forward

Historically, as GPs have scaled, they have tended to tackle operational problems by adding people. High profit margins meant that few GPs focused much on their own internal efficiency or costs.

For some GPs, this has led to diseconomies of scale. Our research suggests that some of the largest firms are meaningfully less efficient than their smaller peers in several functions.¹⁰ Creating bespoke solutions for an ever more diverse client base, while responding to LPs' demand for new strategies, custom vehicles, access to co-investment, strategic relationships, and so on, has added extraordinary complexity to the operational systems and functions of the larger GPs. This not only adds cost but also inhibits scalability. Private market firms have therefore begun looking to operational efficiency in general—and digital levers in particular—as a relatively untapped means of maintaining profitable growth.

Exhibit 14 Global PE net asset value has grown more than sevenfold since 2002, outpacing public market equities.

Global private equity NAV¹ and public equities market capitalization,² 2002–17, indexed to 2002



¹ Net asset value (NAV) = AUM less dry powder.

² Total market cap of companies listed globally.

Data source: World Bank; Preqin

A generational transition has accompanied these changes. Many PE GPs, especially in the United States, have been founder-centric institutions. It is thus notable that several prominent firms have successfully moved past founder-led branding, fundraising, and investment decision making toward the organizational and operational approaches characteristic of traditional institutional asset management.

New focus on digitizing internal and portfolio management processes

GPs (and some LPs) are finding new ways to serve their clients, source and diligence opportunities, and create value within their portfolios. Those at the forefront are investing in digital capabilities across the value chain; the potential of digital to take already maturing processes to new heights strikes many investors as enormous.

Advances in digitization may represent the next wave in innovation and competition among private market investors, as has happened in traditional asset management and in private market portfolios. In this evolving landscape, we highlight six efforts we've seen that have the power to reshape the playing field:

Redesigning LP client journeys. As LPs have grown more sophisticated and demanding over time, private market firms' client service and capital-raising capabilities have expanded tremendously. Stewardship of client relationships has shifted gradually from investment professionals to investor relations (IR), a broadly positive development for GP profitability and LP experience alike. In a clear sign of this evolution, the head of IR is now a partner-track function.

Today, leading firms are looking at client service through a new lens: the client journey, a progression of touchpoints (personal, digital, paper, events, and so on) that together constitute the LP's experi-

ence of its GP. Seeing the world as LPs do and reshaping interactions into sequences of activities that cut across traditional functions can help GPs organize and mobilize their employees around their clients' needs. Some firms, for example, have improved the client experience and their internal productivity by redesigning the way they deliver investment and market insights to LPs. A handful of institutions are beginning to use advanced analytics to provide the intelligence needed to improve the speed and quality of decision making across middle- and back-office functions.

Digitizing deal sourcing. Three digital developments bear mention. First, many firms are digitizing contact management, replacing the Rolodex files or index-card equivalents that a surprising number of investment managers still use to keep track of their networks. An up-to-date customer-relationship-management (CRM) system, which combines modern contact- and knowledge-management functions and collaboration tools with data sourced externally (for example, from LinkedIn), can immediately improve the visibility and consistency of GPs' relationships with deal sources.

A second digital move is to use alternative data to generate new deal theses. One European VC firm has built a machine-learning model to analyze a database of over 400 characteristics of more than 30,000 deals, identifying about 20 drivers of success for various deal profiles. These often turn out to be unusual combinations of characteristics that no one would otherwise have suspected had much bearing on performance.

Finally, natural-language processing (NLP) and textual-analysis algorithms have applications to deal origination. An LP with internal direct-investing capabilities is using this technology to get a jump on emerging deals, before sales are brought to auction. It built tools to scrape unstructured textual data from sources as disparate as public filings,

social media, macroeconomic reports such as the Federal Reserve's Beige Book, and transaction databases. The technique is proving useful at finding hidden signals of emerging themes and sectors that the LP's analysts can further investigate.

Using analytics for portfolio value creation. Digital is an emerging area of focus for some firms. As the result of their large pipelines of potential deals and their insistence on frequent reporting, many GPs now have mountains of data on companies both within and beyond their portfolios. Most do not govern or aggregate these data in ways that enable advanced analytics, but some are gaining insights into value creation and exit timing. In one recent example, a technology vendor built a model that uses natural-language understanding, an AI technology related to NLP. The tool

scrapes web documents and company information to find and analyze correlations between world events and financial-market movements. Private market investors and managers can use the tool to prepare their portfolio companies for rapidly unfolding scenarios.

Digitizing due diligence. Similarly, very few private market firms today have digitized their investment decision-making processes, but many are intrigued by the significant potential to make due diligence faster, more accurate, more insightful, and more efficient. NLP, for example, can scan the tens of thousands of pages of documents in a typical due-diligence data room and emerge with sharper answers, faster. These technologies have proven especially helpful in banking, retail, and other sectors where many companies structure their data in the same way, which makes deploying an automated analysis simpler.

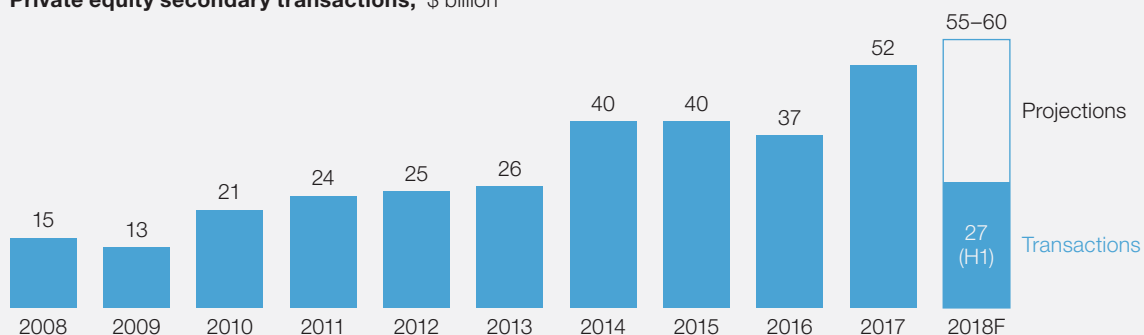
One PE firm wanted to validate its revenue forecast for a banking product. It used NLP to analyze the public-complaints database published by the US Consumer Financial Protection Bureau. The tool found a spike in customer complaints about a similar product at a rival bank and the firm discounted its revenue projection accordingly. Another adviser has gone a step further and digitized several of its due-diligence processes. It uses web-scraping tools to monitor changes in market sentiment for its retail clients. Geospatial analyses help it evaluate the strength of its footprint. HR analytics help it evaluate management's capabilities.

Outsourcing and automating business processes. Outsourcing to third parties allows firms to focus on their core value-adding work while enabling scale and supplementing in-house capabilities. While this is old hat for public market managers, many PE firms find that business process outsourcing can help break the linear relationship between costs and scale, although ease and efficiency often



Exhibit 15 Secondary transaction volume has continued rising.

Private equity secondary transactions,¹ \$ billion



¹ Based on market consensus. 2018 forecast is presented for illustrative purposes only; actual market volumes can differ materially from predictions.

Data source: Collier Capital

dip initially as functions are outsourced. This change has been enabled by the transparency into providers that digital and workflow tools make possible and by the growing capabilities of companies that provide PE services. Firms can also find significant efficiencies by investing in robotics to perform common, repetitive, and low-value tasks—for instance, using advanced optical character recognition to scan the reporting packages of portfolio companies and bots to upload them to a portfolio-management system. This kind of intelligent process automation frees valued employees from burdensome work, so they can focus on value-adding activities. That helps firms retain top talent and scale more efficiently.

More tools for GPs and LPs

Another place where private markets' maturation is becoming evident is in the proliferation of products and financing structures that (in a manner somewhat akin to how derivatives transformed public equities) are starting to offer investors greater ability to pick specific types of exposures. Prominent examples include the rapid recent growth in secondary funds, the advent of longer-term vehicles, and rising use of capital call lines of credit.

Secondaries

Secondary funds are becoming a more reliable way for LPs to seek differentiated exposure, skirt the J-curve, and produce differentiated returns. Transaction volumes reached a record \$52 billion in 2017 and are projected to reach another all-time high of \$55 billion to \$60 billion in 2018, according to Collier Capital (Exhibit 15).¹¹ Fundraising shows no signs of slowing down; there are at least five sizable firms currently raising funds with a collective target of \$48 billion. Several smaller firms aim to raise another \$17 billion. If these managers meet their targets, 2019 will be a record year in fundraising, and it won't be close. Should things go according to plan, 2019 will place secondaries not far from the \$79 billion that VC raised in 2018.

As it has grown, the secondaries market has deepened and matured. Nine at-scale firms have raised more than \$9 billion apiece since 2008. That group raised nine megafunds from 2014 to 2018, versus just five in the five years before that. Five more megafunds are currently in the market.

The rise in secondaries is not just about returns. These funds are injecting liquidity and creativity

into the marketplace, helping LPs shift strategies and manager lineups more quickly, and more than ever, helping GPs restructure and extend legacy funds. They also offer increasing flexibility for investors to diversify and manage portfolio construction risk, including through the use of options on investment stage, geography, industry sector, and fund manager. Yet another benefit is the ability to adjust vintage-year exposure, which is particularly valuable for new PE investors to backfill a portfolio with a range of historic vintages to manage their risk and returns.

As crisis-era funds reach the ten-year mark, GP-led secondaries are booming. Greenhill reports that GP-led transactions drove about 32 percent of deal volume in 2018 and accounted for about 60 percent of year-over-year growth.¹² With multiple large deals announced in recent weeks, this trend shows little sign of stopping.

Long-duration funds

Industry participants have long talked about creating products to better match investment vehicles to the duration of LP liabilities. At the same time, it has become a common refrain among LPs that they would rather see longer hold times than pay the incremental transaction fees that result when one of their external managers sells a portfolio asset to another. The emergence of long-duration (LD)

funds is a step in this direction, reflecting increased pressure among GPs to meet LP needs as well as a desire to capitalize on their historic success with brand extensions.

While several firms have raised LD funds, exciting much commentary, it remains unclear whether the structure will become commonplace. In a sense, LD funds attract LPs for precisely the opposite reason that secondaries do. Whereas secondaries enable LPs to sell a fund stake early, increasing the liquidity of the asset class, LD funds seek the opposite result by prolonging the holding period beyond the traditional eight to ten years. But a deeper secondaries market also makes it easier for LPs to make such a long commitment, by offering the potential of an exit ramp. Together, the two developments represent options for LPs on both ends of the spectrum—a broadening of how they can play the asset class.

Capital call lines of credit

Another rising trend that creates new flexibility for private market investors is GPs' use of capital committed by LPs as collateral for lines of credit. Growth in capital call lines of credit (also known as fund leverage) is at least partly responsible for compression of the J-curve. Median funds in vintages 2012–2015 broke even in their second year, rather than in the third, fourth, or fifth year

Secondaries help GPs to diversify and manage portfolio construction risk, giving them options on investment stage, geography, sector, investment manager, and vintage year.

typical of most prior vintages (Exhibit 16). Over time, smaller J-curves will generate bigger pay-outs for GPs and higher net IRRs for LPs, albeit slightly lower multiples given the cost of the credit line. Fund leverage also enables GPs to make private market allocations somewhat more user-friendly for LPs by reducing the “lumpiness” of capital calls and increasing the predictability, if not amount, of capital call timing.

With the first public failure of a capital call line of credit now in the books, LP scrutiny of this now-common practice has grown. At the very least, we expect the trend toward greater transparency in use of capital call lines to continue, with some firms already clearly disaggregating underlying returns from the effect of fund leverage.

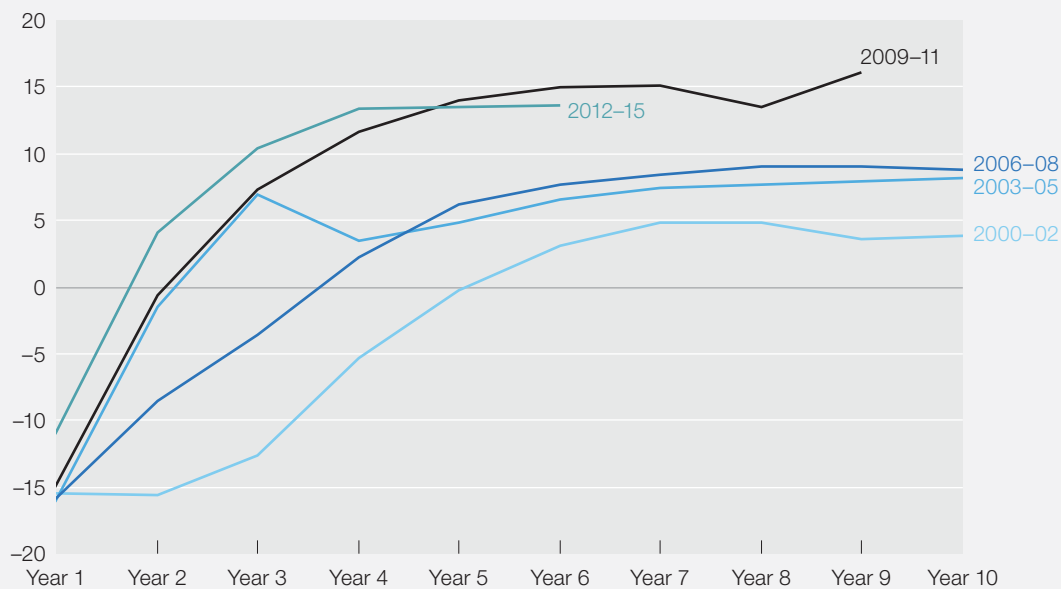
The changing dynamics of co-investment

The evolving GP-LP dynamic has been a big part of the industry’s maturation. Large LPs with increasing allocations to private markets are doing more to leverage their scale, with some seeking multi-asset-class strategic partnerships with preferable terms and greater transparency, discretion, and flexibility than traditional structures. And the biggest GPs, no longer confined to a single asset class, now increasingly have the multi-asset-class capabilities to meet this growing demand for capital deployment at scale.

Some LPs have sought to partner with their GPs and secondaries fund sponsors to restructure and extend funds, a growing strategy as crisis-era funds reach the end of the road yet still have meaningful

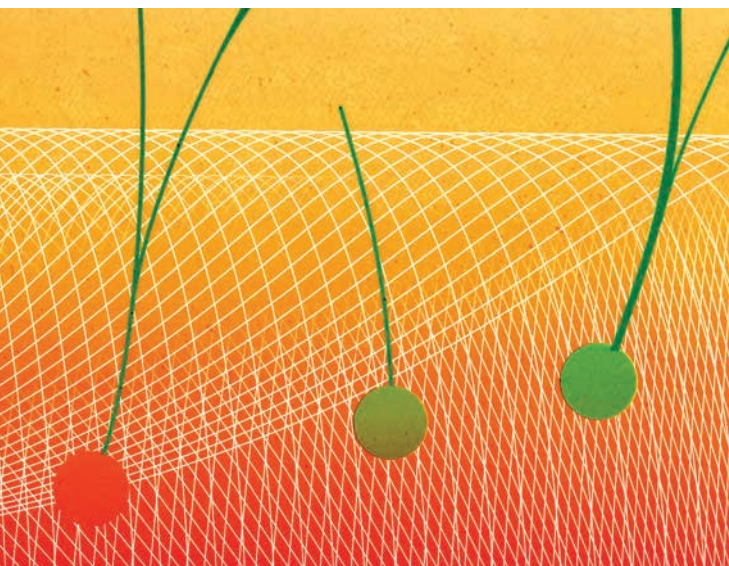
Exhibit 16 J-curve has been shortened for funds in later vintage years.

Median IRR per year for global private equity funds from first full year of cash flows, 2000–15 vintage funds,¹ %



¹ Fund performance assessed using median IRR and calculated by year after first fundraising.

Data source: Burgiss



value-creation potential. A few large institutions have even developed strategies focused on sourcing direct transactions from their GPs' portfolios. Done well, they can find quasi-proprietary deals in which to deploy large sums of capital while enabling GPs to eat their cake and have it too by recognizing gains while maintaining some degree of upside over time.

More generally, a growing number of LPs have been voicing their intention to build "direct" private market programs. Precisely what this means varies by asset class and by size, but the trend is apparent. At the forefront, a handful of institutional investors have built full-fledged private market teams that are hiring from GPs and in some cases competing with them for deal flow. This approach is often discussed but less often put into practice. Real estate is one sector where LPs have taken steps; several institutional investors have built direct-investing capabilities that are truly stand-alone. In PE, however, few LPs have made the attempt. The approach requires substantial investment in talent and adjustments to governance and investment processes.

More commonly, internal direct PE teams maintain a strong portfolio of leading external managers and lean on these to generate opportunities to co-underwrite deals that the GPs lead. A few LPs have built co-underwriting teams that enter early in the deal process, so the LP may end up with a sizable minority stake in transactions. This approach is more feasible for most LPs today than leading transactions themselves, but it still requires considerable commitment and, for most, some meaningful shift in governance, compensation, and organizational norms, as well as new capabilities in support functions.

Co-underwriting is distinct from syndicated co-investment, a burgeoning market into which LPs of all sizes and abilities are leaping headlong, hoping to reach their allocation targets and reduce average net fees. Co-investment demand continues to exceed supply by a considerable margin, but as often as not, LPs that profess a strong desire for co-investment deal flow tend not to have the right processes or capabilities to take advantage of it when offered.

Additionally, LPs may be worrying about the wrong risks in this approach. Many still speak ominously of "adverse selection" in co-investment, though the prevailing research finds scant evidence. Other, more salient risks await those that consider taking the plunge (see sidebar "Focus on co-investments").

Preparing for a downturn

Bull markets don't last forever, and the recent volatility in public equities has only increased speculation on when this decade-long private market expansion may lose steam. Several attributes of private markets today resemble 2007, just before the global financial crisis: PE deal volume in 2018 surpassed previous heights, deal pricing is similar, and covenant-light debt is once again everywhere (Exhibit 17). At the same time, some key metrics are different: private markets are twice

as large, average leverage is down, and PE dry powder on hand is about twice as high as it was in 2007 (though only 21 percent higher as a multiple of annual deal volume).

Another important difference: both GPs and LPs claim to have learned valuable lessons from the last downturn that will influence their behavior the next time around. A more mature private market landscape means the next downturn will likely play out differently. Consider three key differences in today's environment that will influence how private markets fare in the next downturn:

Sellers have more options. Most notably, the secondaries market today is much deeper than it was in 2007, providing LPs and GPs with more options during the traditional lifetime of a fund. During the global financial crisis, LPs facing liquidity concerns (whether real or perceived) sold assets at deep discounts. In PE buyout funds, for instance, average

secondaries pricing fell to 59 percent of NAV in 2009 from 109 percent in 2007, according to Collier Capital.¹³ In June 2018, average secondaries pricing was 98 percent of NAV. With a more liquid market and more participants who have seen the wisdom of buying discounted stakes from fearful sellers, pricing might hold up better the next time for those requiring an exit. Even the knowledge of greater liquidity conferred by the emergence of a more mature secondaries market may give LPs the intestinal fortitude to hold positions through the depths of a downturn.

Investors are more committed to pacing plans.

Many LPs new to private markets in 2007 froze during that downturn; they shelved pacing plans in favor of a “cash is king” approach to dealing with the crisis. Many more didn't have pacing plans to begin with and could not get off the sidelines, often because governance bodies perceived private markets as a risky place to shelter in a storm. Of

Exhibit 17 Private markets in 2018 featured higher deal volume, similar prices, and less leverage than 2007—though dry powder ratios are higher.

	Metrics	2007	2018
PE deal environment and multiples	Deal volume, \$ billion	1,398	1,405
	Valuation/EBITDA	11.3x	11.1x
	Median debt, %	58.3%	50.0%
Private markets fundraising and dry powder	3-year trailing fundraising, \$ billion	1,480	2,459
	Total AUM, ¹ \$ billion	2,231	5,827 ²
	Total dry powder, \$ billion	992	2,099 ²
	PE inventory on hand, ³ 3-year trailing	1.58	1.91

¹ AUM = dry powder + unrealized value.

² 1H 2018.

³ Capital committed but not deployed, divided by equity deal volume.

Data source: Pitchbook; Preqin

Focus on co-investments

Co-investment is a popular theme today, and the trend shows no signs of slowing: 65 percent of respondents in a recent Private Equity International survey indicated that they plan to co-invest in the next 12 months.

But is this a wise course? And what does it take to succeed?

The archetypal LP is a public institution, beholden to a broad group of stakeholders and, by nature and design, fairly cautious. As such, it approaches co-investment (indeed any new structure) by dipping its toes, on the premise that less exposure means less risk. To be sure, most LPs are probably not taking undue risk by adding illiquid single-security positions; even a total write-off will not meaningfully impair the portfolio of a large institutional investor, assuming the investment is responsibly sized. But on a smaller scale, the asset-class portfolio, a few co-investment positions can be powerful drivers of short-term performance. And because employees' take-home pay is often linked to three-year asset-class performance, the longer-term health of the organization also is affected.

Therefore, to exercise caution, LPs may choose to moderate the number of co-investments. But that may be a poor choice. Analysis by HarbourVest suggests that risk-adjusted return rises as an LP adds co-investment positions.¹ A portfolio with just three co-investments, for example, has a one-in-eight chance of losing money, an outcome seldom suffered by a diversified PE fund. But with a

portfolio of 12 positions, the odds of losing money fall to one in 50. LPs without considerable expertise in asset selection may actually *decrease* their risk by saying yes to co-investments more often.

For investors that have built a co-investment portfolio, new challenges may arise. The downside risk of co-investments has been obscured by a long bull market. How the LPs and their governing boards react to impaired individual positions will be something to watch when the next downturn happens.

And for those that seek to build their portfolio, a few cautions. Access to fee-free co-investment appears likely to grow even more difficult. Opinion among GPs on the topic diverges a bit. Some see co-investment as a useful tool for rewarding their best investors. Others have tired of giving away hard-earned value. Some oversubscribed funds have even begun to choose LPs based on their lack of interest in co-investing. Others have launched fee-bearing co-investment vehicles, which recapture value and massively streamline the co-investment allocation process.

With demand unlikely to subside and no supply to match, fee-bearing vehicles may become more prevalent. Beyond GPs' offerings, intermediaries including funds of funds, secondaries funds, and dedicated co-invest vehicles may also assume larger roles, easing the process for GPs and providing more sophisticated diversification and asset selection capabilities for LPs (though at a cost).

¹ "Rethinking risk: The myth of over-diversification," HarbourVest, November 2018, harbourvest.com.

course, the reality is that most of those that invested through the downturn were rewarded. For example, 2009 turned out to be a solid vintage year in PE. Certainly, investors are now talking the talk of greater discipline in their pacing plans to continue deploying capital through a downturn, but it's likely that at least some will stay the course. Similarly, more GPs today are attuned to portfolio construction and vintage risk, so the likelihood of over-deployment at the peak may be mitigated.

Co-investment has replaced the club deal. Club deals were largely synonymous with the boom that culminated in the global financial crisis. In the ensuing bust, LPs effectively moved away from them. In 2007, 27 percent of megadeals included more than one large global GP. By 2018, that number was 4 percent. Club deals were associated with several notable investment catastrophes and large-scale bankruptcies, no doubt contributing to investor panic in the last downturn. These problems came on top of LP complaints that club deals caused them to pay fees to multiple institutions for the same transactions. The structure will likely remain a memory, as the largest deals today happen either with LP co-investment or from supersized capital pools.

Will co-investments suffer the same fate in the next downturn? Remember, the large single-stock positions held by institutions many years ago disappeared with the emergence and ultimate ubiquity of the endowment model. Most institutional investors still prize diversification. Recently, however, idiosyncratic risk has crept back into

institutional portfolios in the form of direct private market positions, particularly for those with a limited number of direct holdings. How LPs and their boards govern through a period of materially impaired positions will be decisive, and it may take more grit and resilience than they have had to summon before.



Private markets have always been a complex and dynamic system, with remarkably little data to measure its pulses and flows. As this changing industry innovates for a better future, those dynamics have only multiplied. We hope this report sheds light on the industry's shifts and offers ideas to improve and sustain investment organizations. ■

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- ¹ We define private markets as closed-end funds investing in private equity, real estate, private debt, infrastructure, or natural resources, as well as related secondaries and funds of funds. We exclude hedge funds and, except where otherwise noted, publicly traded or open-end funds.
- ² Data cited in this report were produced by McKinsey and by Burgiss, Capital IQ, CEM Benchmarking, Collier Capital, HarbourVest, Morningstar, PitchBook, and Preqin.
- ³ Many funds had yet to report their results by the time of writing (February 2019); the totals may rise considerably in coming months.
- ⁴ For funds that have a target of more than \$1 billion, and have had at least one close but had not reached a final close by end of 2018.
- ⁵ For funds that have a target of more than \$1 billion, and have had at least one close but had not reached a final close by end of 2018.
- ⁶ Data do not reflect funds that have been raised but not yet closed at year-end, including some historically large funds.

- ⁷ See, for example, Michael Ewens and Matthew Rhodes-Kropf, "Is a VC partnership greater than the sum of its partners?," *Journal of Finance*, 2015, Volume 70, Number 3, pp. 1081–1113.
- ⁸ All deal volume, deal count, and exits include completed and announced deals for 2018 as well as portfolio add-ons, and exclude VC deal activity for all years.
- ⁹ Full-year 2018 data are not yet available.
- ¹⁰ Sudeep Doshi, Bryce Klempner, and Nikhil Sudan, "How private equity is tackling operational complexity," *McKinsey on Investing*, Winter 2018, McKinsey.com.
- ¹¹ *The Private Equity Secondary Market*, Collier Capital, 2018, collercapital.com.
- ¹² "Greenhill's secondary market analysis: Another record for transaction volume," Greenhill, January 31, 2019, greenhill.com.
- ¹³ *The Private Equity Secondary Market*, Collier Capital, 2018, collercapital.com.

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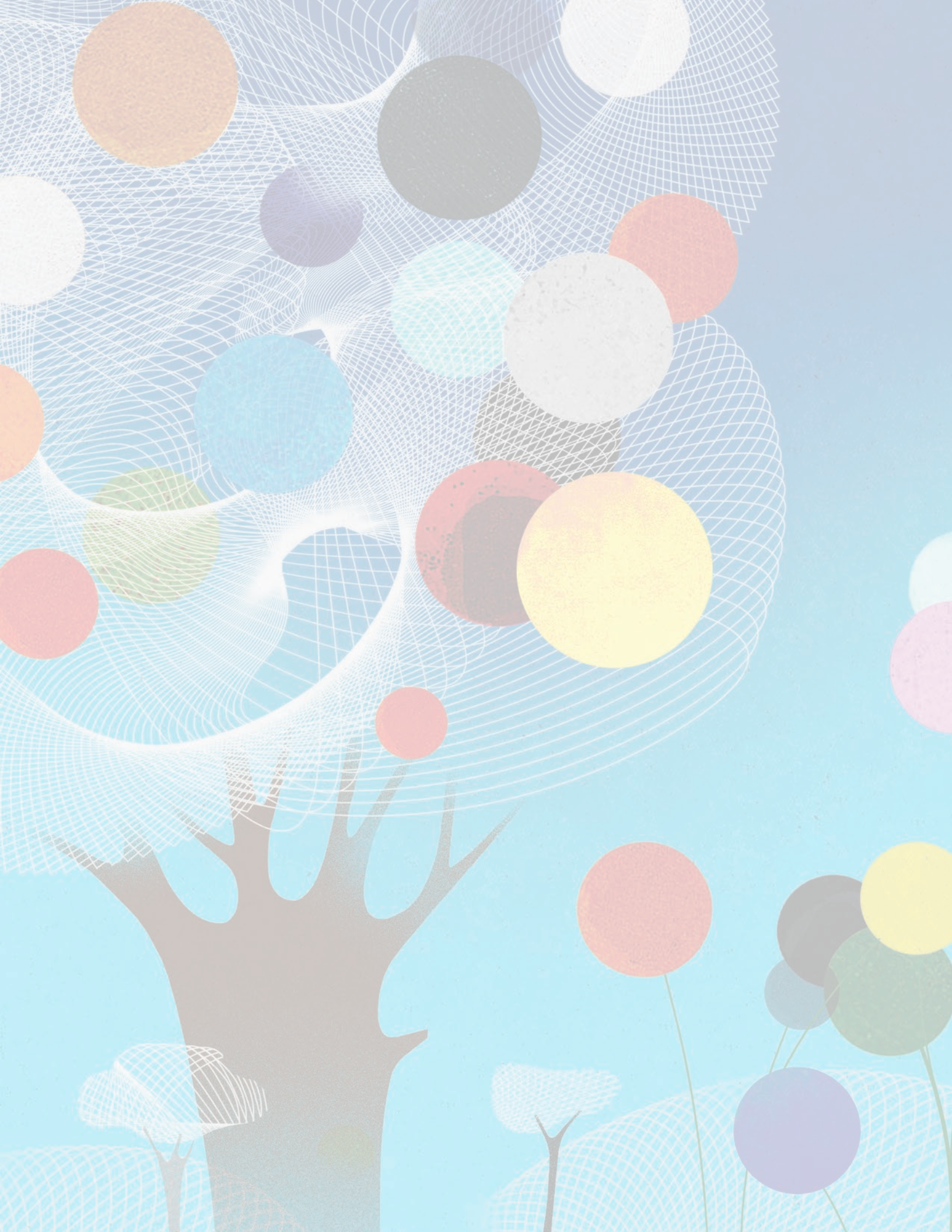
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