

Extracting returns in private markets

Opportunities in private equity, credit and real assets



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Valuations have risen across asset classes. This isn't exclusive to public markets. An influx of capital in search of higher returns has compressed the future return potential of many private market assets, too. This means investors have to look harder for opportunities to gain a potential return edge over comparable public market assets and to extract the diversification benefits on offer.

We gathered BlackRock experts to explore the prospects and the risks in private markets today. We identify our favourite spots in private equity, private credit and real assets - and explain how to deal with illiquidity risk in portfolios.

We recognise investors have varying degrees of familiarity with private markets and suggest those with ample experience go straight to the opportunities section.

Summary

Institutional investors are raising allocations to private markets in a world of low returns across asset classes. This has caused valuations of many private assets to surge. Yet we believe private markets still have plenty to offer patient investors who are able to find and unlock returns in less-exploited areas.

We believe adding private markets to a portfolio can help broaden the opportunity set, increase return potential and enhance portfolio diversification, while in some cases adding a dose of inflation protection. Investors must be willing to deal with illiquidity and complexity. We show how private markets have a far greater variability of returns than public ones, so manager selection is critical.

Valuations are stretched for many large, auctioned private assets. We prefer less-explored markets. Among our top choices today: in private equity and real estate, firms and assets levered to technological disruption and e-commerce; in private credit, opportunistic credit and middle-market credit in developed markets and Asia; and in infrastructure, growth areas such as renewable power.

An outcome-oriented approach to investing in private markets is key. This means starting from the investment objectives and casting a wide net across regions, asset classes and capital structures in search of the best allocation mix to meet them. We show how allocations to private assets can potentially help meet a portfolio's risk and return objectives while maintaining a buffer of liquidity to cover liabilities.

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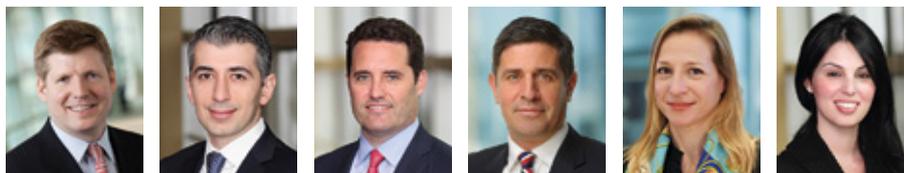
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LEFT TO RIGHT

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Surveying the private markets terrain

We show how the private market opportunity set is broadening, detail how we use factors to measure underlying risks and illustrate the huge return dispersion in private markets.

Years of easy-money policies have inflated valuations across capital markets. The result: return expectations have been steadily compressing, as illustrated in BlackRock's [Capital Market Assumptions](#). Yet many institutional investors still target returns well above today's environment. A large number are opting to raise allocations to private markets in search of a performance edge, as a reward for taking on illiquidity and complexity.

A BlackRock global survey of institutional clients with \$8 trillion in assets in December 2016 showed half or more intended to raise allocations to real assets and private equity. A similar share intended to shift fixed income allocations towards private credit. A BlackRock [Annual survey of global insurers](#) in July told a similar story.

The challenge: investment opportunities in some private assets are in short supply, reflected in rising valuations. An influx of new capital to private markets, coupled with the fact that distributions have been outpacing capital calls, has resulted in record levels of dry powder. This amounts to roughly \$1 trillion in private equity alone. See the *Count me in* chart. More capital chasing fewer deals has resulted in lofty valuations. Prudent capital deployment is key in such an environment, we believe. This means not overpaying for deals and exiting at the right time.

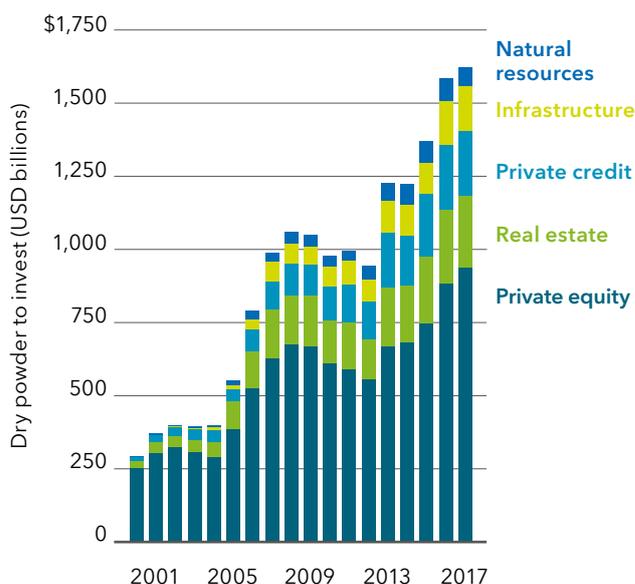
We still see many private assets offering a premium over their public market counterparts. This return premium is especially valuable in a world in which we see growth and interest rates staying persistently lower than in the past due to factors such as aging societies. The key to successful private market allocations at this point in the cycle? Identifying pockets that are less exploited and still have the ability to deliver either meaningful total returns or steady income. In order to do so, we believe it is necessary to expand the field of vision, looking across all geographies, strategies, deal sizes and positions in the capital structure.

In private credit, for example, traditional syndicated loans look expensive. We prefer to focus on opportunistic credit and middle-market credit in developed markets and Asia. See [page 8](#) for details. Similarly, in private equity we are selective in our participation in competitive auctions and prefer pre-bid opportunities focused on roll-ups, corporate carve-outs and, in select cases, minority investments ([page 7](#)). In infrastructure, we steer clear of core assets and like to wade into less-explored areas such as high yield debt. See [Deconstructing infrastructure debt](#) of November 2017.

We recognise investors have differing levels of experience in private assets. Some are just starting to consider an allocation, with new pooled investment vehicles broadening the investor base in certain regions. Others already hold up to half their portfolio in illiquid assets. The following three pages are aimed at investors relatively new to the space. Experienced readers may consider skipping to [page 7](#), where we detail our favourite spots.

Count me in

Global private market dry powder, 2000-2017



Sources: BlackRock Investment Institute, with data from Preqin, October 2017. Notes: bars show dry powder, or the sum of uncalled capital commitments available to invest in Preqin's global private fund universe. 2017 figures are annualised as at June.

A diverse landscape

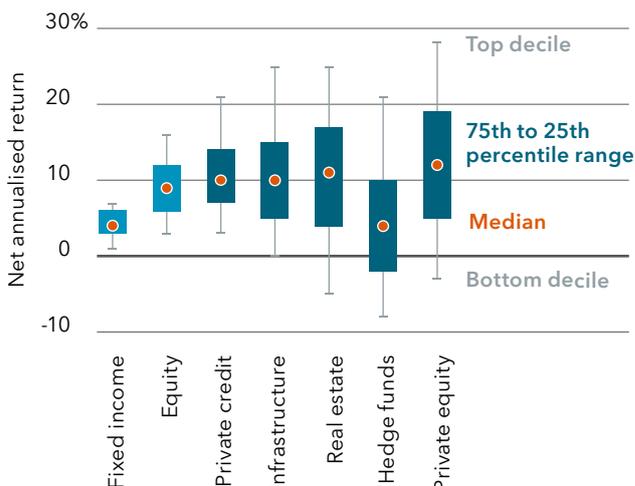
Private market assets come in different flavours, with varying degrees of illiquidity. Secondary markets are deepening for many private market assets, with increasing ability to refinance private debt to achieve exits - or to sell real estate or private equity stakes to other investors.

The *Helicopter view* table summarises some other key characteristics, including the stability of cash flows, returns and diversification potential. For example, infrastructure debt stands out for the stability of its cash flows, while private equity sits on the other end of the spectrum for cash-flow stability, but offers greater return potential.

Note that these are broad categories that mask big differences. Within private equity, for example, venture capital and buyout funds offer different risk/return characteristics and cash-flow profiles. Private market assets have historically offered a return premium over comparable public assets. This compensates investors for their complexity, illiquidity and lack of transparency. We believe this return premium persists for many private market assets, even as overall return expectations have come down. More importantly, private markets offer much greater return dispersion than public markets, reflected in the deviation around the median manager's performance. See the *Different dispersion* chart on the right.

Different dispersion

Dispersion of fund performance, 2004–2016



Sources: BlackRock Investment Institute, with data from Morningstar, Thomson Reuters and Preqin, October 2017. Notes: the chart shows the distribution of historical returns net of fees for each actively managed fund category relative to its median performance. Bond and equity funds are represented by all US-domiciled funds tracked by Morningstar, and hedge funds by the Thomson Reuters Lipper TASS global universe. Preqin's global universe is used for private equity, real assets and private credit. Preqin data are internal rates of return.

High dispersion means investors who are able to identify and access top managers can improve the risk-adjusted return potential of their portfolios. Yet greater dispersion also points to more downside risk. Consider that the top decile of private credit funds has delivered an average annual return of 21% since 2004, while the bottom decile average is 3%, our analysis of Preqin data shows.

Helicopter view

Key characteristics of selected private market assets

| Asset class | Primary risk driver | Average holding period (years) | Return potential | Cash-flow stability | Diversification potential | Inflation linkage | Holding transparency |
|----------------------------|---------------------|--------------------------------|------------------|---------------------|---------------------------|-------------------|----------------------|
| Private credit | Credit | 3-5 | 3 | 4 | 4 | 2 | 3 |
| Real estate mezzanine debt | Real estate | 4-6 | 4 | 4 | 3 | 1 | 3 |
| Real estate equity | Real estate | 4-7 | 2 | 2 | 3 | 4 | 4 |
| Private equity | Equity | 6-8 | 5 | 1 | 2 | 3 | 4 |
| Infrastructure equity | Equity / regulatory | 6-8 | 5 | 3 | 2 | 4 | 3 |
| Infrastructure debt | Credit / regulatory | 8-10 | 2 | 5 | 4 | 1 | 4 |

1 = very low; 2 = low; 3 = neutral; 4 = high; 5 = very high

Source: BlackRock Investment Institute, with data from Preqin, November 2017. Notes: all scores are quintile-based BlackRock assessments and are for illustrative purposes only. Return potential is based on BlackRock's expected long-term returns. Diversification potential assesses the correlation of the asset class with a portfolio comprising 50% global equities and 50% global government bonds. Holding transparency refers to the degree of transparency through to the underlying assets. Inflation linkage measures the strength of the linkage between asset returns and the inflation rate.

Factoring in greater diversification

Private market assets can play a useful role as portfolio diversifiers. This is because of their higher potential for generating alpha, or above-market returns. Alpha, by definition, is uncorrelated to broad market swings. Private market assets typically embed exposures to a broad set of risk factors, or persistent drivers of return.

Most public market assets are exposed to a few macro risk factors: primarily economic growth in the case of equities, and real interest rates and inflation in the case of government bonds. See the *Factor lens* chart. Private assets come with macro risk factors, too: the largest macro risk driver for private equity is also economic growth, and for infrastructure debt it's real rates.

But private market assets tend to have a greater exposure to idiosyncratic risks. Examples are company-level risk in private equity or middle-market credit, and project-related risk in real estate, all of which fall in the chart's 'other' category. A broader range of risk exposures can help diversify portfolios. This is because many individual risk factors historically have had relatively low correlations with one another - and are rewarded well in different parts of the economic cycle, our analysis suggests.

Measuring true volatility

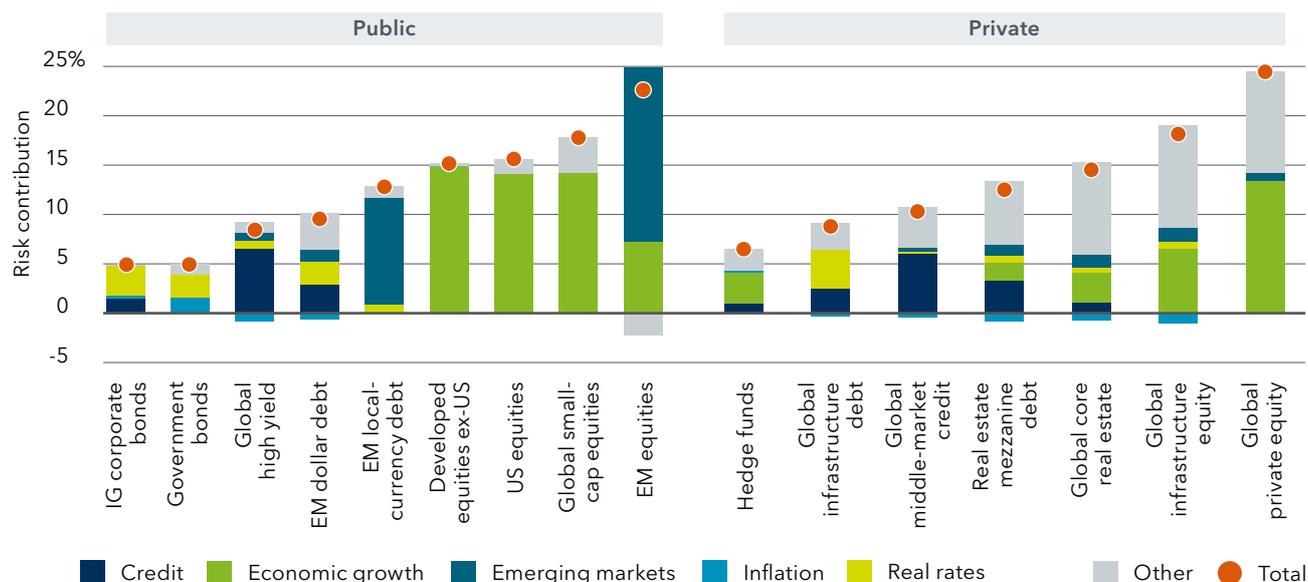
Private market valuations are typically based on appraisals, come with a lag and, therefore, are less susceptible to market swings. This means the reported volatility of illiquid assets is often much lower than that of their public counterparts. The annualised volatility of global private equity was 10.8% over the past decade, our analysis of Preqin data shows, roughly half that of unhedged global public equities.

This lower reported volatility can be an attraction for some investors. This is because even long-term investors may not tolerate outsized losses in a given year. Adding private assets to a portfolio can aim to reduce its reported volatility while enhancing return potential.

Yet the lower volatility of private market assets is somewhat of an illusion. In the *Factor lens* chart, we measure the underlying economic volatility of various private market assets and hedge funds. This provides a mark-to-market view of their true economic risk and enables more meaningful comparisons across public and private market assets. On this measure, the volatility of private market assets looks closer to that of comparable public assets, and in some cases higher.

Factor lens

Macro risk factor decomposition: public vs. private market assets, 2017



Source: BlackRock Investment Institute, November 2017. Notes: risk estimates are calculated based on 201 constantly weighted monthly observations as at May 2017 and from a US-dollar perspective. Developed market foreign assets are hedged into US dollars, with the exceptions of direct real estate, private equity and infrastructure. The 'other' category includes commodities and currency risk as well as idiosyncratic risks such as company- or project-specific risk. See BlackRock's Capital Market Assumptions site for details on the indexes used: <https://www.blackrock.com/institutions/en-us/insights/portfolio-design/capital-market-assumptions>. It is not possible to invest directly in an index.

Shrinking public markets

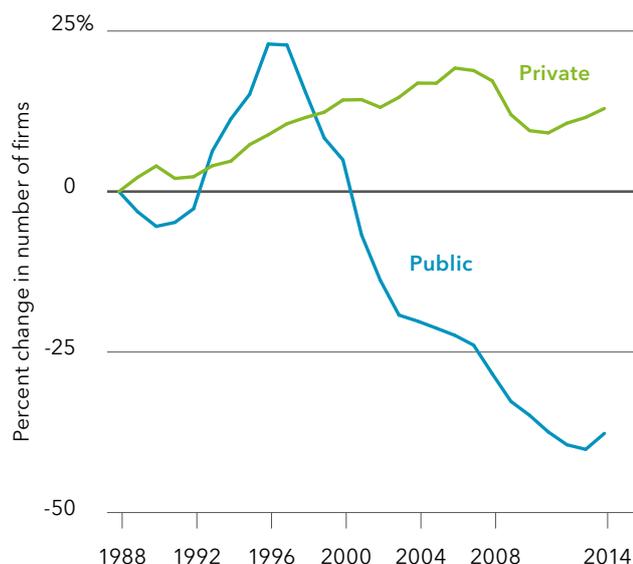
Public equity markets are shrinking. The number of listed firms in the US has fallen sharply, while private firms have steadily increased. See the *Going private* chart. The trend is similar elsewhere, including in Europe. Robust merger-and-acquisition activity - including leveraged buyouts - has led many firms to be gobbled up. Other reasons include a rising regulatory burden on publicly listed companies and the availability of private capital.

In the past, many companies had to go public or tap public debt markets to access financing after initial seed capital. But private funds now serve as meaningful sources of capital. The result: many companies are electing to stay private for longer. Some are leaders in their industry, have strong cash flows and limited capex requirements. And a secondary market is growing, whereby eligible private investors can sell their ownership stakes to others.

Another recent trend is public firms creating venture capital arms to take minority stakes in startups with a technological focus similar to the parent. This highlights the importance of privately owned firms not just to private investors, but to public companies, which are increasingly using them to import innovation and growth.

Going private

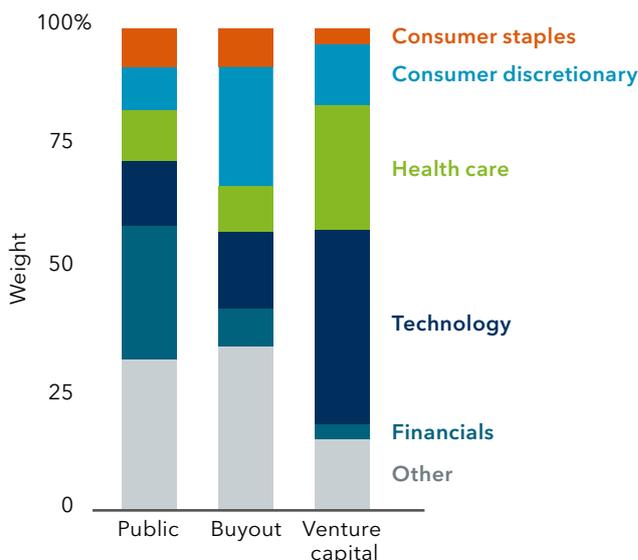
Growth in number of US private and public firms, 1988-2014



Sources: BlackRock Investment Institute, with data from US Census Bureau - Statistics of US Businesses; Doidge, Karolyi and Stulz (1988-2012), and Wilshire Associates (2013-2014), October 2017. Notes: lines show the percentage change in the number of private and public firms in the US since 1988.

Growth mix

Public vs. private market sector breakdown, 2000-2016



Sources: BlackRock Investment Institute, with data from Thomson Reuters and MSCI, October 2017. Notes: bars show the average asset-weighted sector breakdowns for public markets (based on the MSCI All-Country World Index), buyout deals and venture capital (both based on Thomson Reuters deal universe) from 2000 to 2016.

Private equity offers a different sector mix than the public markets. Buyouts, which form the bulk of the PE universe, have historically offered outsized exposure to the consumer discretionary sector, for example. See the *Growth mix* chart. Similarly, technology and health care have made up roughly two-thirds of the venture capital universe, versus just 25% of the public equity markets.

In credit markets, post-crisis regulation has caused a shift. New capital rules are forcing banks to deleverage, making it more costly to hold illiquid paper and to make 'middle-market' loans. The result is a much broader opportunity set for private investors. See [page 8](#) for details and [A deeper view of credit](#) of September 2017. At the same time, the public credit markets are shrinking. Outstanding US high yield issuance fell in 2016 for the first time in 12 years and is set to shrink further in 2017, according to Credit Suisse.



"We see European middle-market private debt gathering even more steam with pick-ups in the economy, M&A and fund-raising."

Stephan Caron - Head of European Middle Market Private Debt

Where the opportunities reside

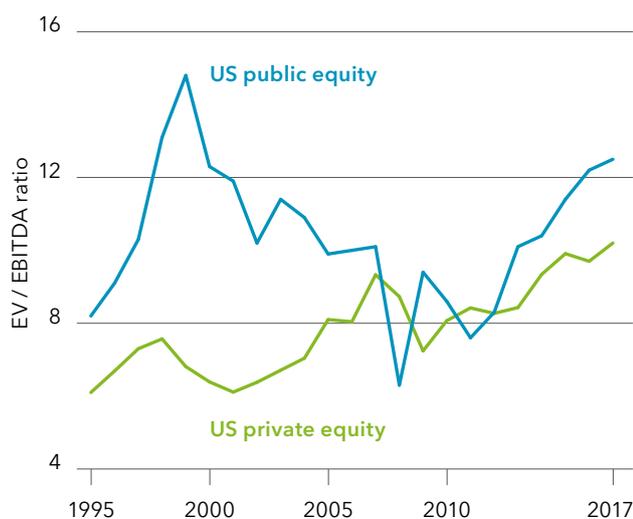
Finding excess returns in private markets today means digging deeper. We scope out niche opportunities for investors seeking capital growth, enhanced income and stable income.

Is the more than \$1 trillion in dry powder leading to excessive valuations in private equity? It is true the average multiple on leveraged buyout deals (LBOs) has been ticking higher. But private equity has been trading at an increasing discount to public equity markets in recent years, as the *Growth at a discount?* chart shows. Our analysis also reveals no worrisome disconnect between the amount of dry powder and the volume of opportunities. Valuations, however, do appear stretched in growth sectors such as technology and some parts of health care.

Elevated valuations make it important to avoid competitive bidding processes, in our view. Instead, we favour: roll-ups (buying up small companies in fragmented – and often unloved – industries to realise economies of scale); minority investments (including private investments in public equity, or PIPE, deals); and carve-outs (corporate divestitures of non-core businesses).

Growth at a discount?

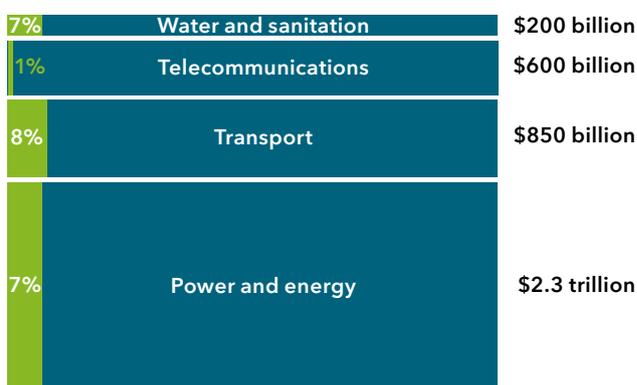
Valuations of US public vs. private equities, 1995–2017



Sources: BlackRock Investment Institute, with data from S&P Capital IQ and Goldman Sachs, October 2017. Notes: US public equity valuations exclude financials and are based on the Capital IQ database of US stocks. Private equity valuations are based on an annual average of leveraged buyout purchase prices and are net of fees. EV/EBITDA is a valuation metric determined by dividing a company's enterprise value (EV) by its earnings before interest, taxes, depreciation and amortization (EBITDA).

Where the money goes

Projected global infrastructure spending needs, 2016–2030



Private fund spending as share of total funding gap

Sources: BlackRock Investment Institute, with data from Preqin and McKinsey, 2017. Notes: the height of each bar shows the magnitude of the spending need for that sector. The green portion shows private fund spending as a share of the total funding gap.

Picking your spot

Private equity firms are helping transform some old-economy sectors. Think logistics, where rising e-commerce transactions create opportunities for companies shipping goods. Other attractive sectors, in our view, are health care (rising costs create demand for efficiency and value-based care), and consumer discretionary (baby boomer retirements in the US and a growing middle class in Asia mean more time and money for travel and leisure).

Technological disruption is a theme that cuts across sectors. We see investment opportunities in the disruptors (private equity) and warehouse and distribution assets (real estate).

Then there's infrastructure, which can offer an effective match for very long-dated liabilities. Private capital is lacking here, as shown in the *Where the money goes* chart, particularly in areas such as mobile infrastructure. The challenge: high valuations for core assets. This is why we see opportunities beyond core equity and debt. This includes high yield infrastructure debt, as well as senior lending, opportunistic credit and niche areas of real assets. See [pages 8-9](#) for details.

Enhancing income with private credit

Private equity is a long-established asset class, and we see private credit following in its footsteps. The driver is not just shrinking bank balance sheets. Buyers in the public debt markets have become less receptive to small-sized and low-rated issues. The result: a funding gap.

Strong demand and narrowing yield spreads make us cautious of traditional syndicated loans. Instead, we focus on two broad areas: senior lending and opportunistic credit. In the former, we like to invest in first-lien loans alongside private equity capital targeting growth trends. In the latter, we focus on extending credit to troubled companies or those with complex financing needs. Here, direct negotiations with borrowers can allow for stronger creditor protections, and we see significantly higher return potential than in syndicated loans. Why today? A surge in high yield issuance in recent years has created a bigger pool of companies that may require specialist financing when growth disappoints or refinancing is unavailable. See [On opportunistic credit](#) of January 2017 for details.

We also like middle-market credit in Europe and Asia. In Europe, proposed leverage caps by the European Central Bank would further constrain banks' ability to provide credit. The result: a growing funding gap. Similarly, bank credit in Asia is not keeping pace with the funding needs of mid-sized corporations. Fundamentals are improving, reflected in few defaults and rising recovery rates. Economic reforms should drive risk premia down over time, a dynamic we believe has yet to be fully priced in. And Asian private credit offers yields that can be as much as 8-10 percentage points higher than Asian public high yield markets, based on our observation of recent deal flow.

Lastly, we see opportunities emerging in non-performing debt as banks in Europe and other regions, including India, step up the pace of offloading bad debts.



“Asian companies have traditionally relied on bank credit. This is changing, fostering growth in private credit markets and broadening the opportunity set for investors.”

Neeraj Seth - Head of Asian Credit

Beyond the beaten path

We see real estate debt as another attractive source of income that can play a number of roles: a fixed income substitute, a diversifier to real estate equity, or a complement to private credit allocations. With an estimated \$1.3 trillion in US commercial real estate debt set to mature by 2020, borrowers will have to tap the capital markets for refinancing. Banks and insurers have cut loan-to-value limits in the wake of the 2008 financial crisis, leaving many sponsors and developers with a hole in their capital structure. See the *Mind the gap* chart. The result: an estimated \$300 billion financing opportunity.

We prefer senior mezzanine loans. The investment case is buttressed by strong fundamentals, more conservative leverage levels post-crisis, and thus, larger equity cushions against losses. Further, many of these loans are floating rate, providing a hedge against rising rates or inflation.

We believe in casting a wide net for enhanced income, including areas such as insurance exposure. Yields on more liquid catastrophe bonds have fallen to record lows. We prefer less-liquid surplus notes issued by (re)insurers. Insurance exposure offers diversification benefits, we believe, given its low correlation with many assets.

Mind the gap

US commercial real estate debt maturities, 2017-2020



Sources: BlackRock Investment Institute, with data from Trepp, October 2017. Notes: bars show the total amount of commercial real estate debt maturing each year and the estimated funding gap.

Stable income in real assets

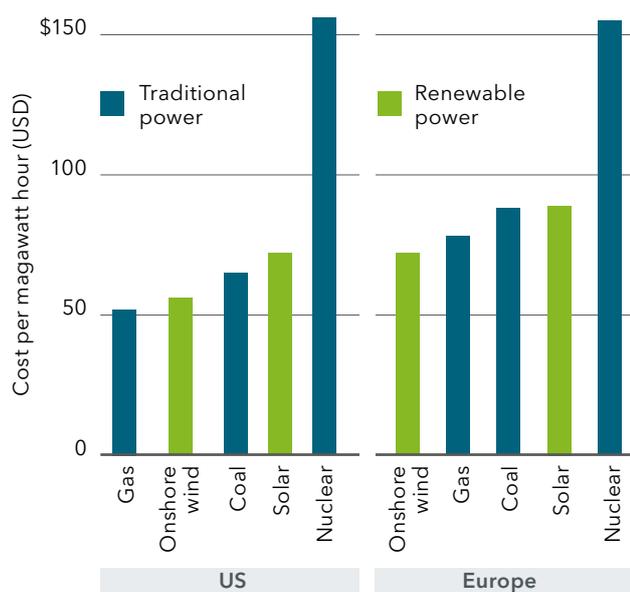
Stable income investing traditionally has been dominated by bank loans. But strong demand for syndicated senior credit has led to weaker protections. Over 70% of US syndicated loans issued in 2017 came in covenant-lite form, according to S&P LCD data as at late November. We find more appealing yields in real assets that benefit from demographic, corporate and/or regulatory tailwinds.

Some, such as renewable power assets, have the additional benefit of rising investor focus on environmental, social and corporate governance (ESG) goals. Deal flow is robust across the US and Europe as countries and companies implement renewable energy targets.

With renewables achieving cost competitiveness, long-term value is created in the underlying assets. See the *Powering down costs* chart. One example: the UK's aim to meet 15% of energy needs from renewable sources by 2020 propelled a shift into wind and solar. Many major corporations are developing their own wind and solar capabilities, and some offer project financing opportunities. We estimate yields can exceed other public stable income assets by 2%-5%, with the added benefit of negotiated provisions that seek to protect investors.

Powering down costs

Traditional vs. renewable power costs, 2017



Sources: BlackRock Investment Institute, with data from Bloomberg New Energy Finance, October 2017. Note: bars show the cost to generate one megawatt hour of electricity.

Stay awhile

Performance of UK real estate-related assets, 2005-2017

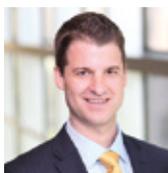


Past performance is not a reliable indicator of future results. It is not possible to invest directly in an index. Sources: BlackRock Investment Institute, with data from S&P, Thomson Reuters and IPD UK Quarterly Property Funds Digest, December 2016. Notes: lines show total return indexes, rebased to 100 at the start of 2005. Long lease and all property are derived from the AREF/IPD UK Property Fund Index. Leveraged loans are represented by the S&P Leveraged Loan Index.

Seeking returns in real estate

Another standout among real assets, in our view, is long-lease commercial real estate. Key advantages: highly predictable cash flow and potential to outperform other real estate in market downturns – times when secure income and stable returns are highly prized. The *Stay awhile* chart shows how this has played out in the UK. We see similar outcomes elsewhere. Our favourites: care homes, retirement living and private hospitals, which tend to be non-cyclical, benefit from ageing societies and face less competition than office, retail and industrial spaces.

We also see income opportunities in US core real estate equity. Given the relatively mature phase of the cycle, we prefer a defensive stance. This means focusing on higher-quality assets in primary markets where jobs growth is strong and new supply remains relatively muted.



“We believe it is all about predictability of income at this point in the cycle. So we like US core equity, high yield debt, and infrastructure strategies with contractual income streams.”

Steven Cornet - Head of US Research and Strategy for BlackRock Real Estate

Adding private assets to portfolios

We explain the importance of looking across asset classes for opportunities, shine a light on illiquidity risk, and illustrate risk/return trade-offs with a hypothetical 60/40 portfolio.

Focusing on outcomes

Private markets are increasingly becoming a part of investors' core strategic asset allocations. Yet many investors still adopt a siloed process that focuses on allocating *within* private market segments, rather than across them. We prefer an outcome-oriented approach. This means examining the risk and return characteristics of each potential investment, regardless of the asset class or position in the capital structure. For example, investors seeking capital growth can consider private equity, distressed credit and other growth assets. See the *What's your objective?* graphic. Stable income investors have myriad options, ranging from renewable power assets to long-lease real estate. Allocations can be tilted over time depending on where the best opportunities may lie.

The risk-factor lens introduced on [page 5](#) can help determine from where to fund private markets exposures. Private debt and infrastructure lending, for example, can provide exposure to the same credit factor that is found in public credit markets, but in some cases with an extra return kicker.

The return and diversification benefits of investing in private markets are best captured through a buy-and-hold approach, we believe. This is because selling illiquid private assets prematurely can erode returns and undermine portfolio goals. What's the optimal allocation? This depends on the investor's goals and liability profile, and requires careful modelling. We use stochastic analysis to simulate the outcomes of thousands of possible paths through time for a portfolio - incorporating uncertainty about return expectations and the pace of distributions. The cash-flow profile of each investment is a key input. For example, in private equity - which has a relatively long duration - this tends to follow a 'J-curve': negative returns and cash flows in the early years as contributions ramp up, with positive cash flows as fund distributions start to increase five to seven years after the initial investment.

The challenge: how to meet the portfolio's risk/return objective while staying capitalised enough to avoid any defaults on fund liabilities such as pension payouts - across market cycles. A buffer of liquid assets such as core bonds is key to meeting such liabilities.

How big of a buffer? The investor's risk appetite and liability profile are key. Illiquidity only matters if capital is needed to service current liabilities. And an investor's tolerance for illiquidity can vary over time. Example: as a pension fund matures it will become cash-flow negative, with outflows exceeding inflows. Its need for liquidity will rise. This means shifting private market allocations from longer-duration investments (think infrastructure or private equity) to shorter duration (private credit) - or shrinking the private assets allocation in favour of liquid assets. Improving cash-flow analytics can help model the portfolio and its ideal asset mix over time.

What's your objective?

Investor goals and private market investment options

| | Investment objective | Examples of private investments |
|---|----------------------|--|
| Higher returns/ risk ↑ ↓ Lower returns/ risk | Capital growth | <ul style="list-style-type: none"> • Private equity (buyouts and venture capital) • Infrastructure equity • Distressed credit • Opportunistic real estate (RE) equity |
| | Enhanced income | <ul style="list-style-type: none"> • Opportunistic credit solutions • Middle-market mezzanine financing • Senior mezzanine commercial RE debt; corporate mezzanine lending • Specialty insurance and reinsurance |
| | Stable income | <ul style="list-style-type: none"> • Corporate senior lending • Infrastructure debt; renewable power income • First mortgage commercial real estate debt • Core and long-lease real estate |

Source: BlackRock Investment Institute, November 2017. Note: this is for illustrative purposes and not an offer or recommendation of any investment.

Changing the mix

We illustrate our process with a thought experiment: consider an investor with an annual return target of 7%, roughly in line with the goal of many public pension funds today. The investor seeks to spend all of that return each year to fund liabilities. Using historical returns from the past two decades, our analysis suggests a traditional US 60/40 portfolio of equities and bonds would have a low probability of reaching this target. The portfolio's net asset value (NAV) would gradually shrink over time as the annual 7% payout exceeded portfolio returns. See the chart on the left below. This conservative multi-asset portfolio is actually quite risky given the investor's objectives.

What if we added a moderate allocation of private assets to enhance the portfolio's return potential?

We allocated 10%, split between private equity and credit, and used historical returns and cash flows to simulate the growth of the portfolio. Each year for a decade the portfolio contributes 10% of the initial NAV to new-vintage private assets, funded from the 60/40 portfolio and recycled distributions. The results can be seen in the *Diverging outcomes* charts. The allocation to private assets ramps up over time, peaking at around 40%, as the private asset funds call capital. The allocation shrinks as the private funds make distributions.

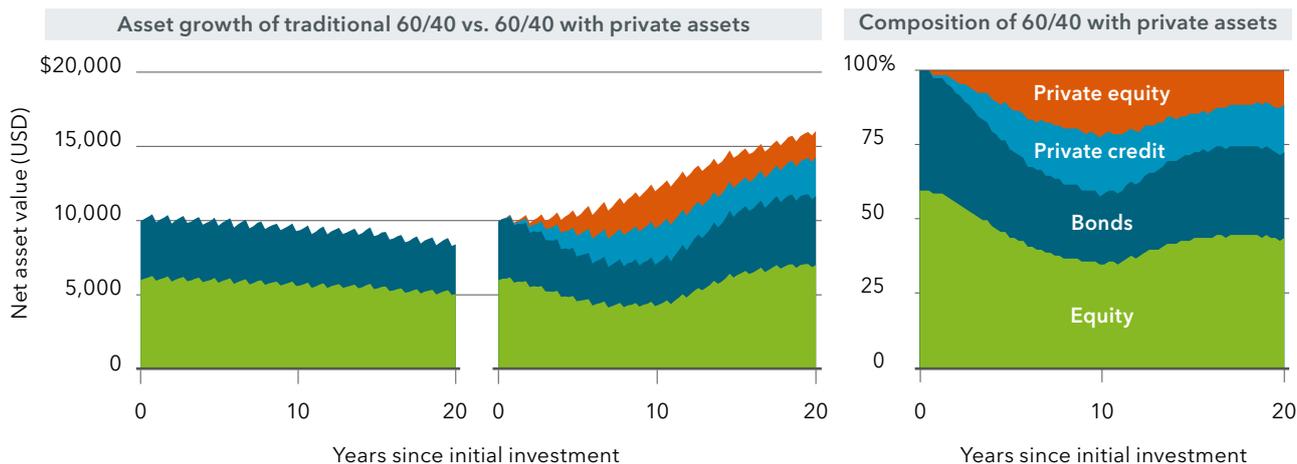
Too much of a good thing

Our example shows our hypothetical portfolio succeeds in its goal: growing the capital base, while maintaining enough liquidity to fund annual spending. The risk of running out of liquid assets within a decade to fund payouts is just 0.1% under this scenario, we calculate. But what if we raised the private markets allocation? We find a double-sized annual allocation (20% of NAV) results in the probability of such a liquidity event jumping to 15.5%.

This illustrates an important point. It takes a meaningful allocation to private assets to move the dial. Yet too aggressive an allocation - while lifting expected returns in the long run - can increase the risk of a liquidity crunch along the way. There are many nuances to this analysis. The allocation to illiquid assets is subject to sudden jumps in the case of sharp market drawdowns in public assets. Hence the need for careful modelling and cash-flow analysis. The allocation to private market assets needs to be customised for each investor. And importantly, future market returns are likely to be lower than over the past two decades. This increases the challenge of hitting return targets. The key conclusion, however, remains: an allocation to private assets can potentially enhance a portfolio's returns, with little increase in liquidity risk.

Diverging outcomes

Hypothetical asset growth and composition of a 60/40 portfolio with private assets



Sources: BlackRock Investment Institute and BlackRock's Risk and Quantitative Analysis Group, with data from Bloomberg and Preqin. Notes: the hypothetical portfolios have a starting value of \$10,000 with a 7% annual return target. The 7% return is spent each year to fund liabilities. This is funded from liquid assets and any prior distributions. Any distributions in excess of the annual spending requirement and capital calls are reinvested in bonds and equities and rebalanced quarterly. The traditional 60/40 portfolio is comprised of equities (S&P 500) and bonds (Barclays Bloomberg US Aggregate). The 60/40 portfolio with private assets allocates 10% of its initial NAV annually to private assets over a 10-year period, split equally between private equity and private credit. Average historical returns and volatility are used for each asset class, using quarterly data from 1 Jan. 1998, through 30 June 2017. The performance of private assets is based on fully invested private fund cash flows from Preqin historical data. The simulated risk and correlations of private equity and credit assets are benchmarked to the MSCI World Value Total Return Index and HFRI Event Driven Distressed/Restructuring Index. This is for illustrative purposes only and is not an investible product. The simulation is based on historical returns and is subject to significant limitations such as changing economic and market conditions. Past performance is not a reliable indicator of future results. BlackRock makes no representations or warranties as to the accuracy or completeness of any past, estimated or simulated performance results contained herein.

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