

INVESTMENTS & WEALTH MONITOR

A reprinted article from July/August 2019

INVESTING IN PRIVATE MARKETS

A Guide for High-Net-Worth Individuals

*By Thomas P. Keck, Michael M. Venne, CAIA®, Jason Ment, JD,
and Christable Yau*



INVESTMENTS & WEALTH INSTITUTE
formerly **IMCA**

INVESTING IN PRIVATE MARKETS

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By Thomas P. Keck, Michael M. Venne, CAIA®, Jason Ment, JD, and Christable Yau

Increasing exposure to private markets has been a long-term trend in the institutional space. As shown in figure 1, institutional allocations to alternative assets—including semi-liquid strategies such as hedge funds—have grown from just 6 percent in 1999 to 25 percent in 2017. This increase has come at the expense of listed equities. Bonds benefitted while interest rates were decreasing from 4.7 percent in 1999 to below 3 percent today. But since 2014, in response to a sense that the decline in interest rates had run its course, institutions have moved from bonds back to listed equities.

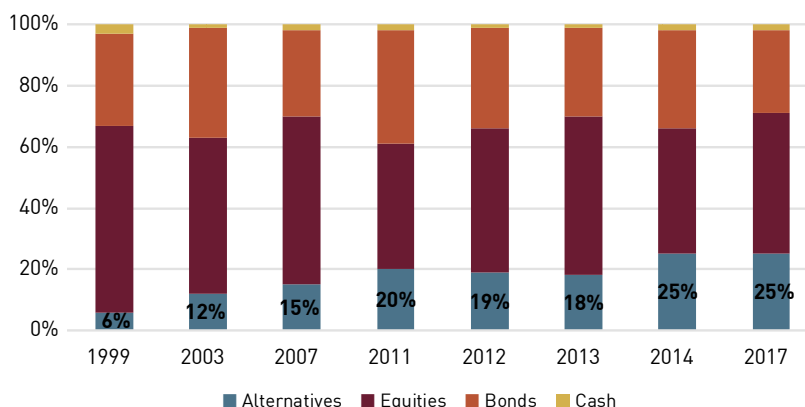
Despite this strategic shift, private markets are still relatively small, making up less than 10 percent of global capital markets (see figure 2). This suggests there is still substantial room for additional capital to flow into this sector without significantly diluting returns.

Private markets have performed well. Higher returns with lower observed volatility explain a significant increase in appetite for private markets among larger institutions. Private markets arbitrage several inefficiencies to produce outperformance. The persistence of these inefficiencies has allowed a subset of managers to outperform the public markets over many years. Large institutions have found that adding private markets to their portfolios greatly enhances overall efficiency.

However, for smaller investors, the difficulty of accessing quality opportunities,

Figure 1

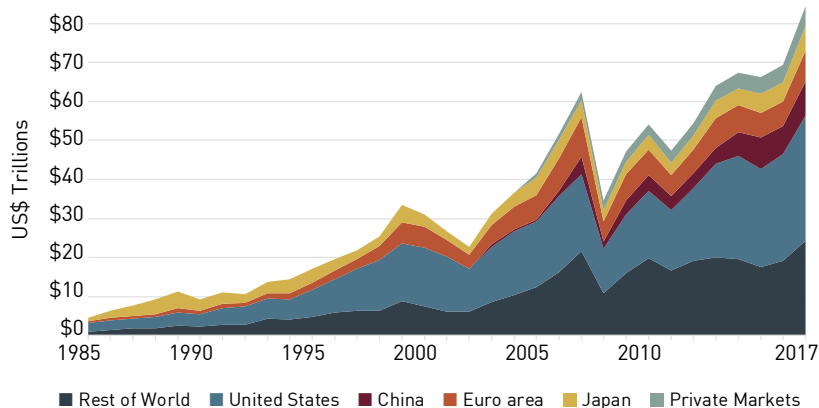
INSTITUTIONS SHIFTING TOWARD ALTERNATIVE INVESTMENTS



Source: McKinsey (2018)

Figure 2

GLOBAL MARKET CAP OF LISTED COMPANIES AND PRIVATE MARKETS



Source: World Bank; Preqin (2019b)

and the high investment minimums of many funds, make building a quality private markets portfolio challenging. The spread between median and top-quartile managers often can mean the difference

between over- and underperformance; few investment managers can identify arbitrage opportunities consistently. As a result, academics have seen a decline in performance persistence in the past

15 years. You cannot simply invest with managers that outperformed in the past.

Two other issues present significant challenges: illiquidity and tax reporting. Many high-net-worth individuals (HNWI) are averse to holding a long-term asset that does not offer any liquidity mechanism; nor do they want the hassle of managing multiple K-1s. It is no wonder that HNWI often have found the benefits of private markets not to be worth the challenges they present.

But new investment vehicles are changing the way HNWI view this asset class. Auction funds and listed holding companies (LHCs) can solve the liquidity puzzle. They also are open to a wider range of investors and operate more efficiently as a result. For smaller investors who may not have the resources or expertise to solve the riddle of private markets, these alternative structures might be the way to access the opportunities private markets represent. Finally, auction funds and LHCs impose less burdensome tax and reporting requirements on investors.

We examine the data supporting the benefits of adding private markets to a traditional portfolio. We then look at the historical barriers to HNWI accessing private markets and summarize some of the innovations that promise to address these barriers.

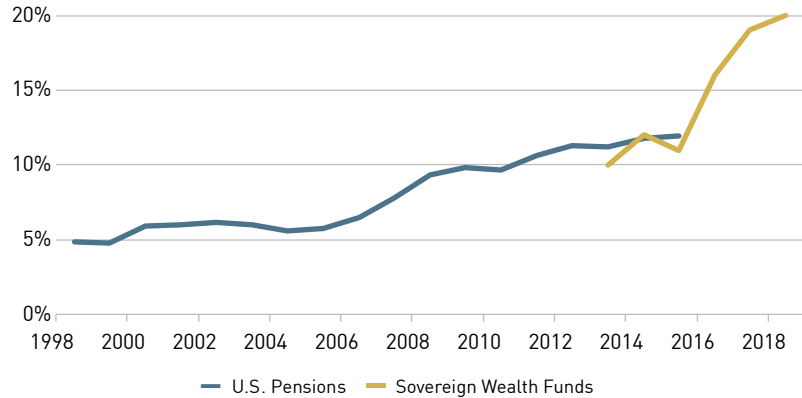
INSTITUTIONS HAVE LONG SOUGHT ALTERNATIVES

Sovereign wealth funds and U.S. pensions, for example, have more than doubled their allocations to private markets (see figure 3). There are several reasons why.

Early movers were attracted by the outperformance of the asset class—the alpha. Recent catalysts include low interest rates following the global financial crisis (GFC) and a belief that returns from traditional equities and fixed income would moderate. The maturity of private markets also has played a role.

Figure 3

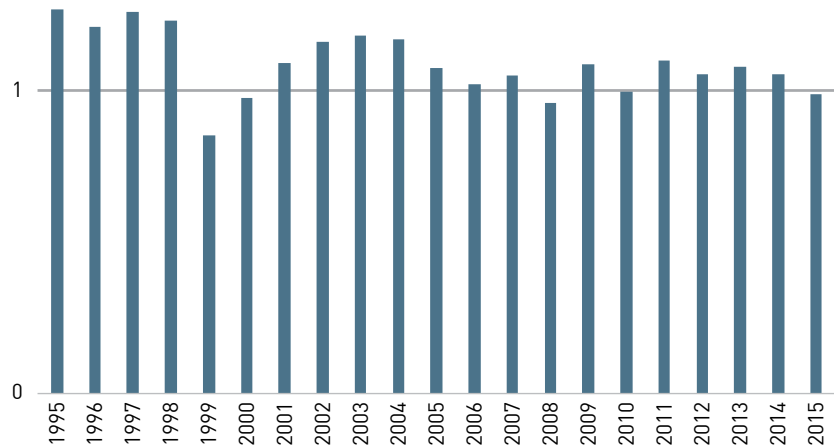
INSTITUTIONAL ALLOCATIONS TO PRIVATE MARKETS



Source: StepStone (2018b); Invesco (2018)

Figure 4

PME: MEDIAN PRIVATE EQUITY VS. MSCI WORLD (TR)



Source: The Burgiss Group

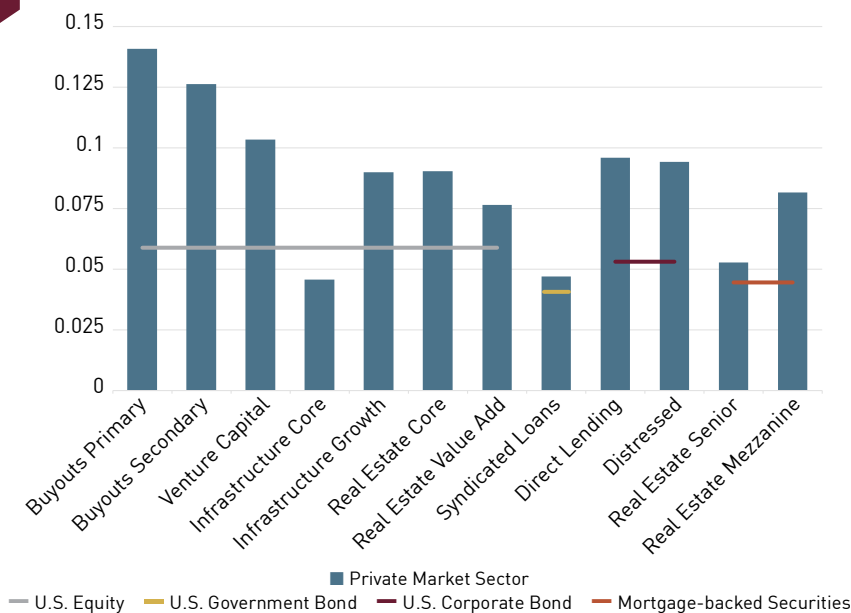
In the past, opportunities in private markets consisted mainly of generalist managers and one-size-fits-all funds of funds. In the past 20 years, many new strategies have emerged including sector-focused funds, co-investments, and separate accounts. These products provide investors with greater control over the exposures in their portfolios, reducing the opacity that made many chief investment officers uncomfortable. Private markets can provide the optimal structure to gain access to certain asset classes—especially real estate, infrastructure, and direct lending—meaning that institutions would want these strategies in their portfolios regardless of any expectation of alpha.

PRIVATE MARKET ALPHA

That private markets provide alpha has been well substantiated. Top-quartile private equity has outperformed the MSCI All World Index in every vintage year for which returns are meaningful. Even median private equity rarely does worse than the global listed markets. As shown in figure 4, median private equity failed to produce a public market equivalent (PME) score of at least 1.0 in only four years. This implies an 80-percent probability that median performance will beat the MSCI World Index. Private equity has the most data to illustrate alpha, but this concept of higher returns is also evident across other asset classes (see figure 5).

Figure 5

HISTORICAL PRIVATE VS. PUBLIC MARKET RETURNS



Source: The Burgiss Group, StepStone Analysis

where the competition that motivates companies to improve does not exist.

ACTIVE SHAREHOLDER

Private markets may not offer the same volume of information that public markets do, but the data that are available can be powerful. When vetting a potential investment, for example, private market investors receive access to proprietary information about the target companies' financial health, culture, and management practices; public market investors, on the other hand, must rely on 10-Ks and other public filings.

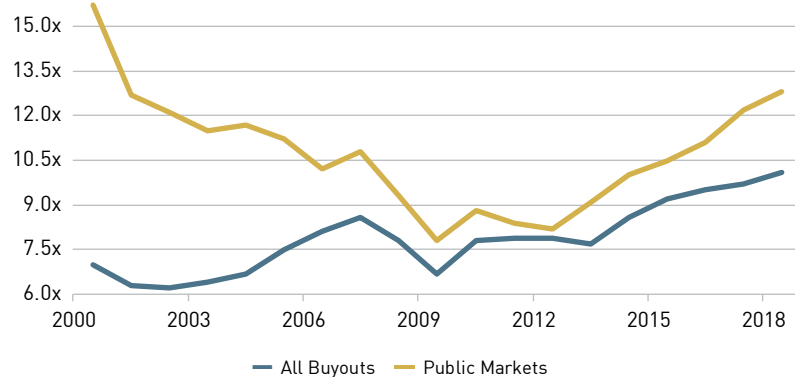
Armed with this intimate knowledge, private market investors are positioned to change how their portfolio companies are built. They can exert significant influence on a company's board—installing champions of operational improvements that are necessary to make the company more profitable.

Private investors also can optimize a portfolio company's capital structure. For example, enterprise software companies often have very high degrees of recurring revenue and gross margins, with very low capital expenditure requirements. They are the quintessential cash cows, often operating in low-growth, stable market segments. Listed companies in this space typically carry net cash on their balance sheets. But for a business that has more cash than good investment opportunities, this is capital inefficient. Instead, these businesses should carry significant leverage, using the cash they produce to pay down low-cost debt. The private equity managers that buy these companies typically do just that. They can significantly increase the return on equity without significantly increasing the riskiness of the equity. This capital structure arbitrage exists because of the agency costs often borne by public shareholders (Jensen 1986).

Finally, private market general partners (GPs) often have the expertise and network to recruit best-in-class senior management. As companies change, so

Figure 6

PURCHASE PRICE MULTIPLES



Source: SPI (2018); S&P Global Market Intelligence

Although core infrastructure may not offer the same relative performance, it can enhance a portfolio in other ways—such as providing inflation protection with current income and low volatility.

PRIVATE MARKET TECHNIQUES AND ADVANTAGES

Investors in private markets employ several techniques, including arbitraging inefficiencies and active shareholding, to capture value in illiquid assets. Investors also enjoy structural advantages, somewhat lower volatility, and benefits from diversification.

ARBITRAGE

As shown in figure 6, purchase price multiples often are significantly lower in private markets. Sometimes this is driven by size, but it also can be driven by company-specific situations that require some transformation in an asset to increase growth or profitability or to reduce risk or complexity. For example, private equity investors often look for “misunderstood” companies—public companies that are underperforming even as listed markets expand. Alternatively, infrastructure investors often invest in monopolistic industries

do the requirements of the management of those companies. Private market GPs have the ability to influence and replace management to ensure that they have the right mix of skills and incentives. The private market GP then will support senior management with appropriate growth and acquisition capital to capture the value of options that often are embedded in the assets they control.

STRUCTURAL ADVANTAGES

Whereas public companies are pressed to meet short-term earnings goals, private markets tend to be focused on the long term. Because the private market GPs control the timing of exit, they exercise greater discretion when it comes to sell decisions. When multiples are too low, they can hold on to an asset until markets improve. Conversely, they can accelerate an exit when demand is strong and multiples are high. Having a longer time horizon allows them to avoid crystallizing losses driven by market corrections, which are intrinsic in listed market volatility.

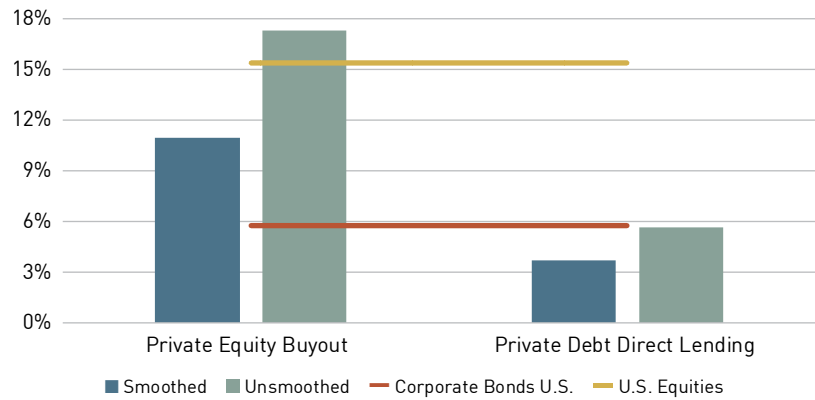
LOWER VOLATILITY

Because private markets are more illiquid and transact less frequently than traditional asset classes, often the only way to evaluate an opportunity is to use data from previous transactions. This leads to serial correlation and smoothing, which often results in lower observed volatility. Some chief investment officers worry that using this observed volatility in allocation decisions may result in a portfolio that is tilted toward investments that are riskier than they appear.

Our analysis suggests that correcting for smoothing does not show private markets to be that much more volatile than public markets (see figure 7). Academics may argue about the best way to estimate true volatility, but it is smoothed performance that appears on your profit-and-loss statement. Because of this, we have found that a private market portfolio can act as a calming influence during turbulent economic periods,

Figure 7

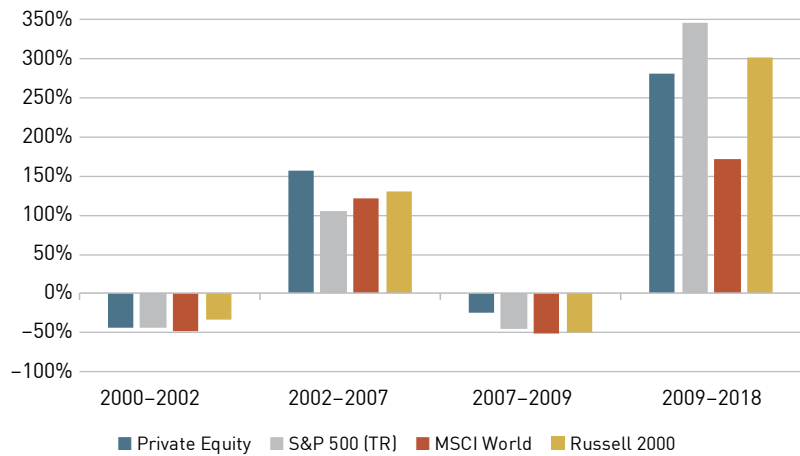
PRIVATE VS. PUBLIC MARKET VOLATILITY



Source: The Burgiss Group, StepStone Analysis

Figure 8

BEAR AND BULL MARKET PERFORMANCE



Source: The Burgiss Group, StepStone Analysis

provided the underlying GPs have defensible capital structures that allow them to hold their investments through the dislocation.

Figure 8 shows an analysis of the past two cycles in the capital markets. Using private equity as a proxy for all private markets, we see that illiquid portfolios declined in value by an average of 34 percent in the dot-com and GFC crashes, and public markets declined more than 40 percent. This implies that private equity captured about 80 percent of the downside experienced in listed markets. In the subsequent recoveries, however, private equity appreciation has been equivalent on a percentage basis.

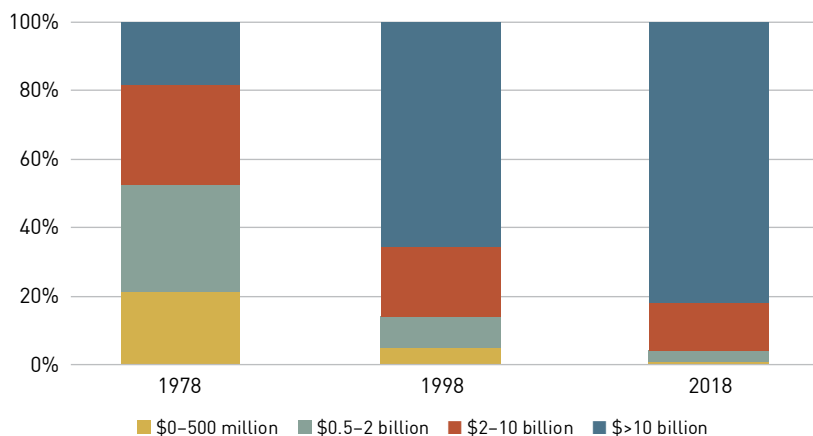
This analysis indicates that the lower volatility of private markets is not just the result of accounting tricks or GPs systematically overstating their valuations. Private markets are not immune to those issues—nor, for that matter, are listed markets—but the lower volatility is not an optical illusion.

DIVERSIFICATION

Adding private markets to a traditional portfolio provides exposure to factors and assets that may be underrepresented in the listed markets. Over the past 40 years, the composition of listed markets has changed markedly. As shown in figure 9, large and mega-cap companies make up the lion's share of U.S. stock markets. As a result, investors in public

Figure 9

U.S. STOCK MARKET COMPOSITION BY TOTAL ENTERPRISE VALUE



Source: S&P Global Market Intelligence

markets have a harder time accessing value, growth, and size factors.⁴

To access these factors, as well as others, investors have turned increasingly to private markets.

Infrastructure has continued its rise in prominence, with GPs raising a record \$90 billion in 2018 (Preqin 2019a). Because infrastructure evolves to encompass new types of assets (e.g., data storage centers), this trend seems likely to persist. Investors have long turned to infrastructure and real assets for their defensive qualities—diversification and protection from inflation chief among them.

Some real assets—such as farmland—are largely unlevered, which dissociates real assets from financial markets and reinforces their ability to add diversification to a portfolio. This lower beta (β) means real assets have proven to be less responsive to listed market volatility. For example, between 2000 and 2014, timber’s return β to world equities and global bonds was 0.08 and 0.10, respectively (Chambers et al. 2015, 249).

Beyond diversification, real assets are particularly desirable for their ability to hedge against inflation. The most intuitive explanation is that commodity prices are determinants of the price indexes that economists use to measure price

inflation. In other words, they are positively correlated. Second, commodity prices adjust quickly to the local currency: Even if an oil-producing country’s currency experiences hyperinflation (e.g., Venezuela), the price of oil in other countries should remain unaffected. Finally, unlike securities, the supply of some real assets is price-inelastic; a 50-percent increase in the price of wheat will not drive a commensurate increase in the supply of farmland.

Commodity prices adjust quickly to the local currency: Even if an oil-producing country’s currency experiences hyperinflation, the price of oil in other countries should remain unaffected.

Once viewed as a consistent source of alpha, real estate’s role in a portfolio has changed over the past few years. Multiple expansion used to be a regular contributor to total returns but has diminished since 2016. After the GFC, greater discipline (i.e., less leverage) resulted in lower return multiples. Income growth and yield, however, have

persisted. With yields from traditional investments languishing, investors have turned to real estate for its ability to generate stable income (StepStone 2019).

Other alternative investments can protect investors from interest-rate swings. Loans in the direct lending market are floating-rate instruments that often employ a floor, which limits how far the reference rate can fall, thereby protecting investors from very low interest rates. Conversely, there is no rate ceiling. This ensures that the coupon on the loan adjusts as interest rates increase.

Due to these factors, adding private markets to a traditional portfolio is an effective way to make an overall portfolio more efficient. Figure 10 shows a range of expected outcomes from adding private equity, private debt, infrastructure and real assets, and real estate to three different public portfolios—Low Risk, Neutral, and High Risk.⁵

At a 100-percent allocation to public markets, moving from the high-risk to the low-risk portfolio within listed markets reduces expected volatility by about 500 basis points (bps) and expected returns by about 200 bps. You could achieve the same expected return as the high risk-listed market portfolio by adding a 25-percent allocation to private markets to the “neutral” listed market portfolio (1 in figure 10). The resulting portfolio achieves the 8-percent expected return with a 400-bps reduction in expected volatility. By replacing 30 percent of a low-risk portfolio with private markets, you could achieve an expected return that is only 39 bps lower than the high-risk-listed market portfolio, but with more than 600 bps of reduction in expected volatility (2 in figure 10). The Sharpe ratio improves from 0.395 in the high risk-listed market portfolio to 0.681 in the 70/30 low-risk portfolio.⁶

HISTORICAL IMPEDIMENTS

Historically, three barriers have made it difficult for HNWI to access private

markets: illiquidity, structure, and manager selection. Of these, illiquidity is the most problematic.

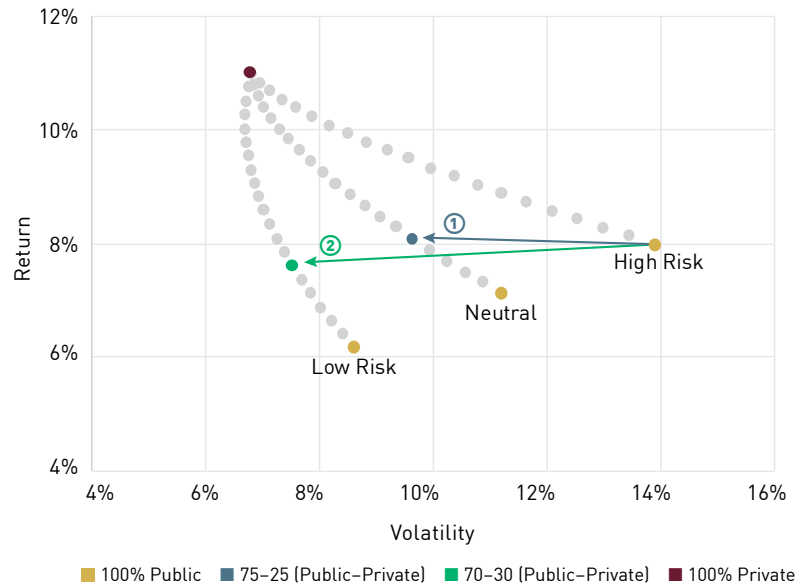
Unlike endowments or pensions, HNWI typically don't have predictable liability streams.⁷ Managing illiquid assets and balancing capital calls with distributions while ensuring that a portfolio is optimally structured can be challenging in benign market conditions, and an economic downturn makes things harder.

One way to think about maintaining flexibility for a market crisis is to use a drawdown analysis. In figure 11, the x-axis reflects the liquid market asset coverage of a portfolio's liability stream after a drawdown similar to what the U.S. market experienced in the GFC. A "4" means that after the drawdown the portfolio has liquid assets equal to four times the required cash flow for one year. If you had invested in the low risk-listed market portfolio from figure 10, you could allocate 28 percent of your portfolio to private markets without compromising flexibility. This type of analysis is an intuitive way to visualize your appetite for illiquid assets. To maintain their target private-markets allocation in a downturn, investors need to have enough liquid-asset exposure to fund outstanding commitments and the investor's cash needs, while also staying invested in the most attractive segments of the listed markets.

Private market structures historically have been problematic for HNWI

Figure 10

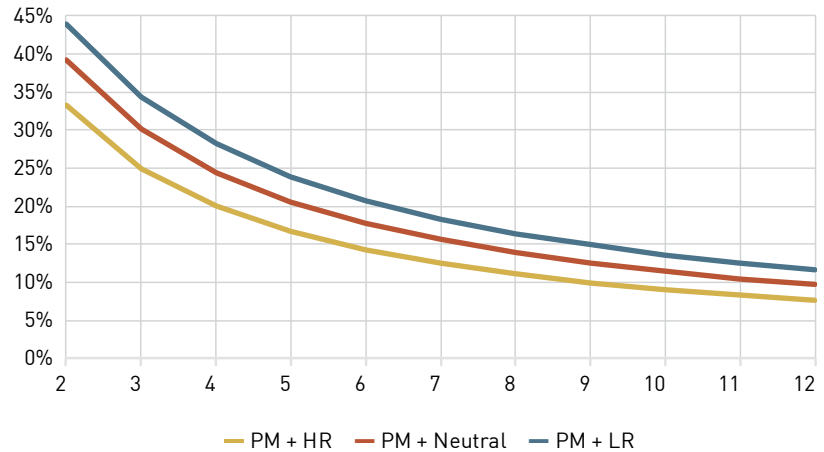
EFFECT OF PRIVATE MARKETS ON TRADITIONAL PORTFOLIOS



Source: S&P Global Market Intelligence

Figure 11

GFC DRAWDOWN ANALYSIS



For illustrative purposes only

Table 1

PATHWAYS TO PRIVATE MARKETS

	Single Fund Classic LP	Single Fund Feeder	Private Fund of Funds	Interval Fund—No Tax Election	Interval Fund—RIC Tax Election	Auction Funds	Listed Holding Companies
Capital Calls	Yes	Yes	Yes	No	No	No	No
Minimums	Large	Medium	Medium	Small	Small	Small	Small
Tax Reporting	K-1	K-1	K-1	K-1	1099	1099	1099
IRA Eligible	No	No	No	No	Yes	Yes	Yes
Typical Investors	QPs	QPs	QPs	Accredited	Accredited	Accredited	Retail
Liquidity	None	None	None	Quarterly (Internal)	Quarterly (Internal)	Monthly (Market)	Daily

Table
2

ANNUALIZED TRAILING 10-YEAR RETURNS, JULY 1, 2008–JUNE 30, 2018 (%)

	U.S. Private Equity	U.S. Stock Funds	European Private Equity	European Stock Funds
Top Quartile	17.15	10.62	13.51	4.36
Median Quartile	8.17	9.52	5.63	2.82
Bottom Quartile	-1.92	8.38	-6.87	2.21
Top-Median Spread	8.98	1.10	7.88	1.54
Top-Bottom Spread	19.07	2.24	20.38	2.15

Source: Private IQ, Morningstar (2018)

because they were not designed with individuals’ needs in mind. As summarized in table 1, single fund, feeder fund, and fund-of-fund models have high investment thresholds, require that investors be prepared to fund capital calls, and offer liquidity only after several years; regulated investment company (RIC) structures are fee intense, which can erode returns and dissuade investors who wish to limit the gross-to-net spread.

Finally, selecting the right manager can be intimidating; investing with the right manager is critical to capturing the full benefits of private markets. Table 2 shows that private markets have outperformed public markets, and quantifies the reward for choosing the right manager: Top-median spreads are more than five times greater in private markets than in public markets.⁸ As alternative asset classes become more popular, accessing blue-chip GPs has become more difficult.

NEW APPROACHES

Several structures have emerged to address the illiquidity and pricing challenges that HNWI face when considering private markets. Each has limitations that can make it hard to achieve broad private markets exposure. For example, alternative mutual funds offer the liquidity that HNWI seek but cannot hold more than 15 percent in illiquid securities.

More recently, some promising new vehicles have emerged. Auction funds and listed holding companies have the potential to provide the outsized returns

and diversification benefits that private markets can provide.

AUCTION FUNDS

Auction funds were introduced to the private investment community by Nasdaq Private Market (NPM) as a way for institutional and individual investors alike to access private markets. Since its launch in 2013, NPM has hosted more than \$21 billion of transaction activity.

Because auction funds do not require capital calls, they do not present the same funding and liquidity challenges as traditional private equity or real estate partnerships.

These closed-ended, continuously offered, interval-like funds are registered under the Investment Company Act of 1940 (’40 Act). Because auction funds do not require capital calls, they do not present the same funding and liquidity challenges as traditional private equity or real estate partnerships.⁹ Moreover, auction funds are taxed as regulated investment companies, and as such, taxes are reported on Form 1099. Finally, auction funds are exempt from Employee Retirement Income Security Act rules and the number of accredited investors who can participate in an auction fund is unlimited.

Auction funds access the NPM as a platform to buy and sell limited partnership interests. They possess a distinctive liquidity mechanism that is superior to interval and other interval-like funds: monthly auctions and a commitment from several institutional investors to bid at each auction.

- Monthly auctions provide investors with a faster path to exit their position. In contrast, traditional interval or interval-like funds typically offer quarterly tenders. Moreover, interval and interval-like funds must hold sizeable cash positions within the vehicles to meet repurchase requests, resulting in a drag on returns to investors.
- The commitment from large sophisticated investors to bid at each auction makes the market for auction funds more efficient in helping to find a market-clearing price. NPM refers to these investors as secondary liquidity providers.

LISTED HOLDING COMPANIES

LHCs offer another way for HNWI to access private markets. LHCs conduct their businesses primarily through wholly and majority-owned subsidiaries, neither of which falls under the purview of the ’40 Act. This exclusion enables LHCs to avoid the investor qualification requirements and private placement rules that apply to limited partnerships. As a result, LHCs can be offered to retail investors.

Using an LHC structure, an investor can establish a holding company with

controlling interests in subsidiaries that hold different types of private market investments such that in aggregate, private market investments do not account for more than 40 percent of the holding company's total portfolio. Due to this limitation, LHCs may not be suitable for all investor profiles. Our belief is that these structures are most appropriate for investors for whom daily pricing and liquidity are more important than risk-adjusted returns. Listed structures that invest in private markets historically have exhibited greater volatility in price movements and generally have traded at a discount to net asset value (StepStone 2018a).

SUMMARY

A PwC report estimated that HNWI and mass-affluent investors will add more than \$80 trillion in assets to their portfolios between 2016 and 2025 (PricewaterhouseCoopers 2016). The proportion of HNWI who invest in private markets is expected to increase from 51 percent to 68 percent (Roubini Thoughtlab 2018). To meet this influx of demand, private market sponsors will be innovating new solutions to address the needs and concerns of this client base. A few products are available today in this nascent market, but it is a safe bet that as the demand for private markets continues to grow, GPs will continue to create more attractive variations on these themes to satisfy this demand. Forward-thinking financial advisors should make sure they have the resources to answer questions about private markets as their clients show greater interest and GPs continue to roll out new products. ●

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ENDNOTES

1. See, for example, Phalippou [2018].
2. A PME greater than 1.0 indicates private market outperformance; less than 1.0 indicates public market outperformance.
3. "All PE" includes buyouts, venture capital, distressed, mezzanine, and oil and gas.
4. Perhaps the most famous factor model, the Fama-French three-factor model, links asset returns to market portfolio, a factor representing a value versus growth effect, and a factor representing a small-cap versus a large-cap effect (Fama and French 1993). The Fama-French-Carhart four-factor model adds to this framework a momentum factor, which considers whether an asset's price has recently risen or fallen (Carhart 1997).
5. Based on our net manager return assumptions and the historical covariance matrix from September 30, 2004, to March 31, 2017. Target returns are hypothetical and are neither guarantees nor predictions or projections of future performance. Future performance indications and financial market scenarios are no guarantee of current or future performance. There can be no assurance that such target internal rate of return (IRR) will be achieved or that the investment will be able to implement its investment strategy, achieve its investment objectives, or avoid substantial losses. Further information regarding target IRR calculation is available upon request. Gross return will ultimately be reduced by management fees, carried interest, taxes, and other fees and expenses.
6. Based upon an assumed risk-free rate of 2.5 percent. Sharpe ratio is the most popular measure of risk-adjusted performance for traditional investments. It is calculated as $(\text{Expected returns} - \text{Risk-free rate}) / \text{portfolio standard deviation}$. A Sharpe ratio of 0.70, for example, means that the portfolio beat the risk-free rate by 70 bps.
7. For this reason, defining an HNWI's minimum liability stream can be challenging.
8. Top-quartile and bottom-quartile private equity returns represent the pooled net of fees IRR of all funds in each respective quartile; the median private equity performance figures represent pooled net of fees average returns. "U.S. Stock Funds" comprise all U.S. stock mutual funds tracked by Morningstar Principia over the period July 1, 2008–June 30, 2018; "European Stock Funds" comprise all European stock mutual funds tracked by Morningstar Principia over the period July 1, 2008–June 30, 2018.
9. Open-ended structures are becoming more common in infrastructure.

REFERENCES

- Carhart, Mark M. 1997. On Persistence in Mutual Fund Performance. *Journal of Finance* 52, no. 1 (March): 57–82.
- Chambers, D. R., M. J. P. Anson, K. H. Black, and H. Kazemi. 2015. *Alternative Investments: CAIA Level I*. Hoboken, NJ: John Wiley & Sons, Inc.
- Fama, Eugene, and Kenneth French. 1993. Common Risk Factors in the Returns of Stocks and Bonds. *Journal of Financial Economics* 33, no. 1 (February): 3–56.
- Invesco. 2018. Invesco Global Sovereign Asset Management Study. <http://igsams.invesco.com/>.
- Jensen, Michael C. 1986. Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review* 76, no. 2 (May): 323–329.
- McKinsey & Company. 2018. The Rise and Rise of Private Markets: McKinsey Global Private Markets Review. McKinsey & Company. <https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/the-rise-and-rise-of-private-equity>.
- Phalippou, Ludovic. 2018. Big Picture – The Latest on Recent Performance of PE Funds – March 2018 (August 6). <http://pelaidbare.com/big-picture-the-latest-on-recent-performance-of-pe-funds-march-2018/>.
- Preqin. 2019a. 2019 Preqin Global Infrastructure Report. Preqin Ltd. <https://www.preqin.com/insights/global-alternatives-reports/2019-preqin-global-infrastructure-report/24900>.
- . 2019b. Historical Fundraising Statistics. www.preqin.com.
- PricewaterhouseCoopers. 2016. Asset & Wealth Management Revolution: Embracing Exponential Change. <https://www.pwc.com/gx/en/asset-management/asset-management-insights/assets/awm-revolution-full-report-final.pdf>.
- Roubini Thoughtlab. 2018. Wealth and Asset Management 2021: Preparing for Transformative Change. https://www.econsultsolutions.com/wp-content/uploads/RT_Executive-Summary_final.pdf.
- S&P Global Market Intelligence. n.d. Capital IQ. www.capitaliq.com.
- SPI. 2018. *StepStone Private Markets Intelligence*. <https://www.stepstoneglobal.com/market-intelligence/stepstone-private-markets-intelligence/>.
- StepStone Group. 2018a. Achieving Liquidity in Private Markets for Defined Contribution Plans. <https://www.stepstoneglobal.com/news-press/achieving-liquidity-in-private-markets-for-dc-pensions/>.
- . 2018b. Strategic Asset Allocation: Rethinking the Role of Private Markets. <https://www.stepstoneglobal.com/white-paper/strategic-asset-allocation-rethinking-role-private-markets/>.
- . 2019. The Hunt for Yield. <https://www.stepstoneglobal.com/news-press/the-hunt-for-yield/>.
- The Burgiss Group. n.d. *PrivateIQ*. <https://privateiq.burgiss.com/home>.
- World Bank. 2017. Market Capitalization of Listed Domestic Companies. <https://data.worldbank.org/indicator/cm.mkt.lcap.cd>.

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