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Private Markets—From Alternative to Mainstream: Evolution during the Past 30 Years and Key Trends and Challenges for the Decades to Come

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KEY FINDINGS

- Private markets have grown dramatically in the past 30 years, and this growth is likely to continue.
- Key drivers of the historic growth include evolving investor behavior, disruptive innovations, financial disintermediation, and regulatory changes.
- Future growth of private markets is likely to come from the pursuit of higher returns, continued innovation in the growing private markets ecosystem, and a blurring of the current public/private distinction as investors increasingly evaluate investments across a spectrum of liquidity.

ABSTRACT

Private market investing has evolved dramatically during the past three decades, from small alternative allocations made by the most sophisticated investors into significant components of many programs' strategic asset allocations. During this period, the number of publicly traded companies in developed markets has declined precipitously, accompanied by a substantial increase in the amount of economic activity taking place in private markets—financed by both equity and debt—and across corporate and real asset structures. This article surveys this evolution and describes its key drivers, including evolving investor behavior, disruptive innovations, financial disintermediation, and regulatory changes. It also looks to the future of private market investing, seeking to lay out the key trends likely to drive further growth: the pursuit of higher returns, continued innovation in the growing private markets ecosystem, and a blurring of the current public/private distinction as investors increasingly evaluate investments across a spectrum of liquidity.

My first job in the asset management industry, fresh out of college in 1986, was as an analyst with a private equity (PE) firm. It was a rare job at the time, and the firm, First Chicago Venture Capital (now Madison Dearborn Partners), had been the only PE shop recruiting at my school. I assisted with due diligence on new deals, worked on projects for existing portfolio companies, and—to the significant amusement of my current colleagues, given the ossification of my spreadsheet skills

by the mid-1990s—built the firm's first computer spreadsheet to model deals in Lotus 1-2-3 on an IBM XT desktop machine. At the time, PE was a small and exotic activity. Venture capital investing was still concentrated in Boston and what was to become known as Silicon Valley in California. Leveraged buyouts, also known at the time as "boot strap financings," were beginning to garner attention facilitated in part by the innovative issuance of junk bonds, a market being revolutionized by Drexel Burnham Lambert. For the broader public, this early stage of PE investing would be characterized by the book *Barbarians at the Gate*, which described the ill-fated buyout of RJR Nabisco by KKR.

That was when I (foolishly) left this "cottage industry" to head off to business school and begin a career in multi-asset investing, as both a consultant and an asset manager. Thirty years later, PE investing has become a multi-trillion-dollar business, employing more than 100,000 professionals (Preqin Ltd. 2020). It has grown from small alternative allocations made only by the most sophisticated investors, to significant components of the strategic asset allocations of many investment programs. It has also gone from being a primarily US-oriented activity to a truly global industry, with transactions taking place across continents. As such, through its ownership of thousands of companies worldwide, it now influences broad swaths of the global economy. But that growth has not come without its critics who focus on high fees, questionable performance reporting, and concerns about liquidity and leverage risk.

In this article, I will survey the remarkable evolution of private market investing during the past three decades. I will review key drivers of these changes, including changes in investor behavior, regulation, technological innovation, and financial disintermediation, as well as assess the criticisms of the industry. And I will argue that private markets are likely to continue to grow as key drivers from the past remain in place, with additional impetus provided by the pursuit of higher returns in an environment of low expected returns for traditional markets, as well as the ever-blurring line between public and private assets in cutting-edge asset allocation. More than 30 years after leaving the PE industry, I find private markets playing a larger role in the multi-asset portfolios I manage, and I fully expect that those allocations will continue to grow.

THE GROWTH AND EVOLUTION OF PRIVATE MARKETS

In 1990, when I graduated from business school, the total PE industry had $21.3 billion in assets under management (AUM), equivalent to 0.2% of the approximately $9 trillion in global public equity market capitalization. By 2020, PE had grown to $2.3 trillion in AUM; however, the public equity markets had ballooned to $109 trillion, leaving PE at a still modest 2.1% of public-market capitalization.[1]

But this is a story not merely of growth, but also of evolution. Even as the market capitalization of global public equity has grown, the number of US listed companies has declined from a peak of more than 8,000 in the late 1990s, falling to as few as 4,266 by 2019 (World Bank 2019). In contrast, according to a report prepared for Neuberger Berman by Pitchbook Data, Inc., the number of PE-owned companies quadrupled during the new century, standing at 8,892 by 2020.

The flow of capital to businesses and individuals is privatizing in other important ways. Particularly since the Great Financial Crisis (GFC) of 2008–2009, the dominance of the banking system in credit flows has given way to capital markets, private debt funds, crowdfunding, and lending-platform technologies. The multi-skilled teams nurtured by the longest established private market firms are facilitating this shift by taking advantage of the opportunities opening beyond the heavily leveraged buyout

[1] For global public equity capitalization in 1990 and 2020, see World Bank 2020 and World Federation of Exchanges 2021. For PE AUM, see Cambridge Associates 2021a.

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transactions of the past, which are now a much smaller proportion of the PE industry. As a result, the entire private markets ecosystem is deepening to include everything from direct lending and mezzanine financing, through secondaries and co-investment, to investing in the equity of alternative investment firms themselves.

KEY DRIVERS OF GROWTH—SUPPLY SIDE

The growth and evolution of private markets are clear, then—but why has this been taking place? I will turn to the incentives of investors later, but first, consider the influence of changes on the supply side, the corporate operating environment.

Exhibit 1 shows some key regulatory developments for US corporations during the past 40 years. In general, the regulation of public listed companies has become much tighter, while the regulation of private companies has become looser. Many company management teams have chosen, as a result, to stay private.

Regulation is not the only factor. With the rise of indexation, high frequency trading, and activist investors, alongside the decline in individual investors, marginal price-setters in public markets can spurn companies with volatile earnings. This can be true even when that earnings volatility is a symptom of strategic decision making or investment activity that can benefit the company. The contrasting advantages of private ownership have been starkly revealed recently: being privately owned, with the support of sophisticated PE sponsors, allowed many companies to weather the stresses of the GFC and the Covid-19 shock better than companies whose stock

EXHIBIT 1

Major Structural and Regulatory Changes Affecting Public and Private Equity Markets—Regulation in the US Has Reduced Incentives to Listing and Increased Benefits of Staying Private

Public Market Regulation and Structural Events	Private Market Deregulation
	1982 SEC Regulation D provided several safe harbors from registration.
	1990 SEC Rule 144A allowed resale of private securities without restriction to qualified institutional buyers.
1996 Introduction and growth of online brokerage accounts may have reduced incentives for small-cap market makers.	**1996** A change to Section 3(c)7 of the Investment Company Act 1940 effectively removed the 100-investor cap for private investment funds, although investors must still be "qualified purchasers."
2000 The SEC's fair disclosure mandate may have caused a deterioration in research coverage of small companies.	
2001 Decimalization may have further reduced the incentive for small-cap research coverage and market making.	
2002 The Sarbanes–Oxley Act may have increased compliance costs for issuers.	
2003 The Global Settlement separated research and investment banking, possibly further reducing incentives for small-cap research.	
2005 The SEC's Regulation National Market System provided investors with equal access to information, contributing to increased fragmentation and "dark" pools of liquidity.	
	2012 The Jumpstart Our Business Startups Act raised the shareholder ceiling of private companies from 500 to 2,000.
	2015 NASDAQ acquired Second Market to facilitate the exchange of shares for private companies.

SOURCES: Mauboussin and Callahan 2020; De Fontenay 2017.

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market valuations were plummeting. To paraphrase one CEO of a PE-owned company, when the company was publicly traded, shareholders did not seem to understand its cash flow heavy, asset light business model. He went on to say that the company had already been sold by one PE firm and that he was looking forward to working with his next PE owner.

Patterns of regulation and deregulation have had a particular impact on the balance between the private and public debt markets, especially following the GFC of 2008–2009. The shock of that crisis to bank balance sheets and the subsequent wave of regulatory constraints on bank risk-taking has curtailed the activity of the economy's traditional lenders and financial market makers. Opportunities are varied and growing for institutional investors to transfer risks from bank balance sheets, step in where banks are withdrawing from lending markets, and take advantage of higher volatility and market liquidity gaps as broker dealers hold smaller securities inventories. Investors are also seeing the rise of disruptive platform-based lending and finance-disintermediation technologies, many of which are themselves funded by PE.

As a result, the new importance of private investing in the economy is not only about more and more companies being held privately and fewer and fewer being held publicly, but it is also about more and more of the credit in our economy coming from investment funds and businesses backed by PE.[2]

KEY DRIVERS OF GROWTH—DEMAND SIDE

These increased incentives for company management to seek capital and credit from private, non-bank sources have been met with growing private capital allocations from investors.

During the past 30 years, large global investors have grown and professionalized their investment organizations, leading to increasingly sophisticated strategic asset allocation, risk management, and investment manager evaluation capabilities. According to Preqin, the average pension fund now allocates 7%–8% to PE; endowments, foundations, and sovereign wealth funds allocate 13%–16%; while family offices allocate 24% (Preqin Ltd. 2021a). Many investors indicate they expect to increase these commitments in the future. Investment consulting firms have also grown their research capabilities in private markets during this period. That has helped change the role of private markets in a typical strategic asset allocation, from a small allocation to alternatives 30 years ago (which encompassed everything from hedge funds and PE to real estate and commodities), to a sizable, dedicated allocation.

I see five important drivers behind this broad embrace of private markets.

Performance—Strong, Despite Skepticism about Internal Rates of Return (IRRs) and High Fees

First and foremost is performance. Although there has been significant debate in the academic literature regarding the return benefits of investing in private markets, the total impact on investment programs has been unquestionable. That is borne out in long-term performance for institutional investors, which has shown a strong correlation between the amount allocated to private markets and higher total rates of return. In my view, a big part of the confusion about PE performance, and the criticism that it is just "leveraged equity," arises from the way performance is measured. The most common approach to measuring PE performance is the use of the

[2] For example, the share of leveraged loan market taken by institutional investors had risen from about 25% in Europe and 65% in the United States in 2004 to 70% and almost 90%, respectively, by 2018 (S&P Global 2018).

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internal rate of return (IRR). Using that approach, the Cambridge Associates Index shows that the median US PE fund outperformed the S&P 500 by 1.4% annualized over the 10 years to March 31, 2021, and by significantly wider margins over 5, 15, and 25 periods. The results for global PE versus the MSCI World Index are similar (Cambridge Associates 2021a).

Many articles and papers have highlighted the shortcomings of IRR, however, and particularly the many ways in which PE general partners (GPs) can manipulate it, including with the increasing use of capital call lines of credit (see, for example, Bollinger 2020). Those concerns, together with high fees and expenses, the potential challenges associated with illiquidity in the segment, and the wide dispersion of performance for managers, have sparked a spirited debate about whether PE has delivered positive returns relative to public markets, and, if so, whether the returns are commensurate with the risks taken.

The Journal of Investing, in a December 2020 edition dedicated to PE, ran a series of articles, the majority of which made the case that the category has not added value relative to public market benchmarks, except as a result of excessive leverage and risk taking. Studies have shown that PE returns can be replicated with public market factors, such as exposure to small-company value stocks, with an added dollop of leverage. Other work has focused on the smoothing effects of the infrequent pricing of private market investments, which arguably reduce realized volatility artificially, resulting in flattering risk-adjusted returns. Other industry and academic authors, such as Steven Kaplan, have disputed those assessments. A summary of the debate can be found in Michael Cembalest's recent edition of J.P. Morgan's Eye on the Market series, in which he is inclined to side with the pro-PE view on performance (Cembalest 2021).[3]

I agree with several points of criticism, particularly concerning the shortcomings of IRR and its vulnerability to manipulation, and the high fees. As a result, for performance comparisons I favor the public market equivalent (PME) approach, which calculates the return of a public market equity index such as the S&P 500 Index as if shares were bought and sold on a schedule matching the cash flows of private funds. Additional metrics such as total value to paid-in capital and distributions to paid-in capital can also be useful for comparing private investment vehicles and they are not subject to the potential manipulations associated with IRR. Valuations may be unreliable, but cash flows are very much real. Of these, PME is the metric best suited to comparison of public and private markets. A recent study from Cambridge Associates using this approach shows that the more PE exposure an investment program has, the stronger the results (Zhang 2021, Cambridge Associates 2021b). According to Cambridge Associates, "In the past decade, those with a private investment allocation of at least 30 percent have outperformed those with an allocation of 10 percent or less by 200 basis points." US public equities were shown to have lagged their private peers by 250 to 320 basis points during the past 5 and 15 years. Private equity and venture capital investments were also found to be more profitable than US public equities over 25 years. Those results are all net of fees and expenses.

It is important to reflect on the quality, or lack thereof, of the Russell 2000 Index, the most common public market comparator to the PE universe, given the size of typical PE acquisition targets. With money-losing companies representing more than 40% of its constituents and more than 30% of its market capitalization, and the average credit quality of its rated companies being below investment grade, investors should consider the index's applicability or desirability relative to the profile of the companies that PE funds seek to acquire.[4]

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[3] Michael Cembalest's piece expands on a debate in Phalippou and Kaplan 2021; see also Phalippou 2020.

[4] The median market capitalization of Russell 2000 Index companies is approx. $900 million, according to FTSE Russell. Neuberger Berman analysis of PE due diligence material suggests an average

In regard to the application of leverage in private markets structures, I suggest putting this in context. Many sophisticated investors evaluate the use of leverage to enhance returns in their programs, whether through financial debt or derivatives, or at the total program level or in "packaged" vehicles such as risk parity or hedge fund structures (see, for example, Jacobius 2021). Similarly, leveraged private market vehicles should be assessed in the context of the level of leverage deployed by public market peers (such as Russell 2000 constituents, many of which are also meaningfully levered), but also the ability of private market fund sponsors to deploy leverage effectively and efficiently to enhance total returns, consistent with an investment program's overall objectives.

It is impossible to get away from the fact that PE fees are high as a percentage of the overall value delivered. Nevertheless, the results delivered by private market managers are all net of fees and expenses. While it seems unlikely that, in the near-term, we will see the same kind of dramatic reduction in fees and expenses that the growth of index funds has driven in public markets asset management, allocators are increasingly able to manage the costs of their private market programs through engagement with general partners for early-closer and volume discounts, co-investments, secondary purchases, and so on.

Another important attribute of private markets has been the significant dispersion of performance across managers.[5] Private equity in general tends to outperform public equity, and the best managers tend to outperform the most, perhaps due to deeper access to information, more direct and transparent governance control, and the ability to create value through strategic and operational improvements to portfolio businesses. Because PE managers can spend months sourcing and completing investments and can choose between trade sales and sales to other PE funds and initial public offerings (IPOs), they also benefit from a lot of flexibility concerning their entry into and exit from positions. There are simply more levers for PE managers to pull to enhance performance. That provides an additional tool for investors to add value in the development and implementation of their programs although it also impedes the rationalization of fees and expenses, as demand for stronger performing managers remains high relative to the limited supply.

Exposure to Growth and Innovation

Globally, PE still accounts for just 2.1% of the world's market capitalization. Nonetheless, the number of private companies exceeds the number of public companies, the private companies can be among the world's fastest-growing businesses, and the probability that they are engaged in the important industries and markets of tomorrow is high.

Private companies are quite different from the larger firms that can cope with the demands of public ownership. It is much more difficult for a company in an industry in transition or early in its growth cycle to thrive in the public markets, in which investors increasingly demand more predictable revenues and earnings. As a result, many of these companies do not have a publicly investable equivalent or, if they do exist within a public corporation, they are often small divisions generating a negligible proportion of the parent company's overall revenue.

"mega cap" buyout total deal valuation of $1.2 billion and an average overall buyout valuation of $400 million. Data on the profitability of Russell 2000 Index companies as of November 30, 2021, were supplied to Neuberger Berman by Jefferies, analyzing data from FactSet and FTSE Russell. The average credit quality of the Index is BB-, with about 25% of the constituents having a rating, according to data supplied to Neuberger Berman by Furey Research Partners as of December 6, 2021.

[5] Source: Cambridge Associates as of March 31, 2021a.

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In addition, more and more of these firms are staying private longer as they mature and grow bigger:[6] today, the opportunity set includes high-growth technology companies that used to go public at an early stage in their life cycles. The proliferation of "unicorns" shows private companies can now be financed with hundreds of millions of dollars leading to billion-plus dollar valuations.[7]

As private markets have come to represent a greater proportion of economic activity, investors have recognized that they could miss an array of increasingly important return opportunities if they do not participate in them. In fact, I would argue that PE is rapidly becoming an essential exposure to capture the true long-term equity risk premium.

Diversification, Risk, and Return Smoothing

Historically, private market strategies have shown muted correlations with their publicly traded counterparts as well as with lower realized volatility. This diversification benefit and lower realized risk are largely due to the different pricing protocols applied to private markets. Private market securities are priced periodically (not daily or tick-by-tick) and with methodologies that often smooth returns through time. These results may seem artificial given that the underlying return and volatility drivers are the same for private and public equity, private and public credit, and private real estate and REITs. As to mean-variance optimization processes that help determine portfolio allocations, most allocators "level the playing field" by applying capital market assumptions (CMAs) that match the higher forward-looking return assumptions of private markets with an amplified volatility input. For example, they would tend to input a modeled volatility of 25%–30% for PE, which is consistent with leveraged public-markets equity and exhibits a comparable Sharpe ratio—even though PE's realized volatility has been meaningfully less than for public markets, historically.[8] Once a PE allocation is in the portfolio, however, the investor gets the benefit of the smoothed realized return profile. As long as there is this divergence in the treatment of pricing, private market exposure will continue to have an outsized volatility-dampening benefit for asset allocators. To paraphrase a CIO at one pension plan, it is important not to underestimate the value to allocators of the smoothed pricing of private markets.

Better Alignment for Long-Term Investors

Another benefit of the structure of private markets is the alignment of their longer-term investment time horizons with those of investment plan sponsors. A strong case can be made that long-term investment programs should be comfortable locking up capital for extended periods to seek improved outcomes and to avoid the increasing short-termism of public markets. That alignment can also potentially help investors to avoid the behavioral errors driven by short-term price movements.

[6] A study of 8,775 IPOs with venture capital and buyout backing, excluding those with an offer price below $5.00 per share, unit offers, ADRs, closed-end funds, oil and gas limited partnerships, acquisition companies, REITs, bank and S&L IPOs, and firms not listed on CRSP, found that the median age at IPO was 8 years between 1980 and 1999 and 11 years between 2000 and 2021 (Ritter 2021).

[7] The tech sector intelligence provider CB Insights counted 936 unicorns, or private companies, valued at more than $1 billion worldwide as of December 15, 2021 (CB Insights 2021). The oldest of these still-private firms is France's Veepee, which hit a $1 billion-plus valuation in July 2007. The largest are ByteDance and SpaceX, both valued at more than $100 billion, and 15 are valued at $20 billion or more.

[8] For example, the observed volatility of the Cambridge Associates Global Buyout return series for the period from the second quarter of 2006 through the first quarter of 2021 is 11.1%, and for US Buyout it is 9.5%. For the same time period the volatility of the MSCI World Index was 17.5%, and for the S&P 500 it was 16.6%. Source: Cambridge Associates as of March 31, 2021a.

At the time of *Barbarians at the Gate*, PE firms were viewed as short-term-oriented financial engineers likely to leverage up companies, slash and burn costs, and look for a quick sale at a pumped-up valuation. That approach stood in contrast to what was viewed as the more stable and aligned interests of public market shareholders, historically comprising individuals, pensions, insurance companies, and bank trust departments. Over the years, however, the rise of indexing, high frequency trading, and activist hedge funds has, as I mentioned earlier, led to a fundamental change in the alignment of public shareholders with company management. A disappointing earnings announcement often leads to a punishing decline in stock market value; a string of disappointments can lead to an activist campaign and efforts to change management.

Today, many institutional investors find greater long-term alignment with PE sponsors, who will work with company management teams to identify a multi-year plan to build value in the company and often provide the resources and support to weather short-term challenges in pursuit of the longer-horizon objectives.

An element of this alignment can include a focus on environmental, social, and governance (ESG) considerations. As investors increase their emphasis on those important inputs in the investment process, they can work directly with PE GPs. That is leading to an increase in the number of ESG-integrated and impact-oriented private market strategies, a trend that I think will accelerate meaningfully in coming years.

Private Markets Are More Liquid, Public Markets Less Liquid

One notable impediment to private market investing, of course, has been the illiquid nature of the assets. That can give investors pause when they know that changing circumstances, liability profiles, or market shocks may one day require substantial adjustments to asset allocation.

While private market strategies are still most certainly long-term assets, recent developments have changed the overall liquidity profile of the category for investors.

A key driver of this change has been the growth of secondary-market transactions in fund interests. Volumes were low before the GFC but have steadily increased since that time (Jeffries Research 2021). The first wave was fed by institutional limited partners who wanted to sell to adjust asset allocation or cut down on their general partner relationships. That has evolved into a more general liquidity-management tool for institutional investors, significantly improving the flexibility of the private markets for these participants, and therefore the barriers to entry or larger allocations. And the secondary market in private-asset funds is not merely growing; recent years have seen the rise of "GP-led secondary" transactions, in which a PE manager puts mature assets into a new fund, so that its existing investors can choose either to hold on to these prize assets or take the liquidity they need. In 2015, these accounted for 15% of secondary market transactions, whereas in 2020 and the first half of 2021, they accounted for 60% (Jeffries Research 2021). Investments in secondaries, as well as co-investments and other shorter-time-to-liquidity strategies, such as pre-IPO equity, private investment in public equity securities (PIPES), and special purpose acquisition companies (SPACs), can also increase the overall liquidity profile of private market programs. Listed, closed-ended funds are another, venerable way to obtain private-asset exposure with some degree of liquidity. In addition, with the expansion of private credit markets and innovation of strategies within that universe, investors have additional components of their private markets' allocation with much shorter duration of cash flows than with the traditional PE model.

Taken collectively, as private market allocations grow as components of strategic asset allocations, the level of cash flows has increased and time to liquidity

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has declined, creating more opportunities to mitigate the traditional "j-curve" of PE investment returns and pursue more flexible deployment of liquidity through time.

While this has been occurring, the public markets have been becoming less liquid. Regulation passed in the aftermath of the GFC has made it much more capital-intensive for broker-dealers to "warehouse" securities on their balance sheets.[9] Those inventories are used to make markets and provide liquidity to clients as they buy and sell stocks and bonds; as they shrink, the liquidity of the public markets dries up and the potential for gaps in pricing and higher volatility rises. Brokers, alongside alternative liquidity providers such as high-frequency and algorithmic traders, have turned to providing more "risk-based" market making, but that can come to be illusory liquidity that disappears during bouts of risk aversion, just when liquidity is needed the most.

In short, today, investors are realizing that the simple dichotomy between publicly traded assets with immediate liquidity and private market strategies with far distant return of capital is no longer straightforward, and illiquidity is much less of a reason to avoid private markets, while liquidity is much less of a reason to favor public markets.

LOOKING FORWARD

As I consider the future of private markets, I believe the trends described above are likely to remain in place and even accelerate as markets continue to evolve.

On the demand side I see two major reasons to expect larger private market allocations from institutional investors.

Closing the Return Gap

Investment program sponsors are increasingly facing challenging investment objectives in an environment in which prudent expectations of returns from traditional asset classes have declined meaningfully. With a straightforward "building block" approach to developing forward-looking CMAs, current bond yields and expectations of future yields priced into forward curves result in estimated annualized returns for public investment grade bond markets in the 1%–3% range, depending on geography and sector composition; while projections of economic growth, inflation, return of capital through dividends and buybacks, and (elevated) valuations suggest annualized return estimates in the 5%–8% range for equity markets. Those estimates are meaningfully below realized returns during the past few years (Exhibit 2).

Many investors have total return targets of 6%–8%, or 3%–5% above a risk-free rate or inflation. Their ability to achieve those targets solely through public market allocations appears limited. A classic 60% equity and 40% fixed income mix has an expected return of 3%–5% today. Even a strategic asset allocation with up to a quarter of exposures targeted to an array of alternatives, ranging from hedge funds to real assets to private markets, likely has an expected return of 5%–6%.

The difference between what a standard strategic asset allocation may prudently be expected to deliver and a program's target return is what I characterize as "the return gap." While many investment programs are responding by reducing their return targets, the reductions are often not large enough to close the gap—and they may merely crystalize the long-term funding, liability, and/or spending challenges that many programs face. As a result, allocators will likely need to pursue more innovative strategies to close this gap. These innovations can include seeking more from active

[9] For example, according to data from the Federal Reserve Bank of New York 2021, the corporate debt net position on its primary dealers' balance sheets has declined from almost $300 billion before the GFC to less than $30 billion in November 2021.

EXHIBIT 2

Estimates vs. Historical Returns—Neuberger Berman Capital Market Assumptions

	Estimated vs. Historical Return of Key Asset Classes							
	US Treasuries	US Corp A/Above	US Corp BBB	US HY	US Equity	Private Equity	Real Estate	Hedge Funds
Forward-Looking Estimated Annual Return	1.2	2.0	2.4	2.9	7.0	10.8	6.6	4.4
10-Year Historical Average Annual Return	2.2	4.4	5.3	6.8	16.6	20.9	7.8	6.5

SOURCES: Neuberger Berman, Bloomberg-Barclays, Cambridge Associates, FactSet; Analytics are as of December 31, 2021.
*IMPORTANT: Estimated return shown reflects Neuberger Berman's 20-year capital market assumptions; Historical return represents the 10-year historical average annual return from December 2011 to December 2021. Estimated returns shown are hypothetical and are for illustrative and discussion purposes only. They are not intended to represent, and should not be construed to represent, predictions of future rates of return. Actual returns may vary significantly. Investing entails risks, including possible loss of principal. Indexes are unmanaged and are not available for direct investment. Past performance is no guarantee of future results.

management, reducing costs, and taking on additional risks, including leverage, complexity, and illiquidity.

In that environment, I am seeing allocators increase their commitments to private markets, for which return expectations remain higher than for public markets, and that trend appears likely to continue. According to standard methodology for developing CMAs, private assets are generally assigned a two to four percentage point return premium compared with their public market counterparts. That is consistent with the historic return premium from PE over public markets (using PMEs to avoid an argument concerning IRRs). It is often conflated with an "illiquidity premium" for PE although there can be a number of drivers behind this outperformance. In private credit, the higher expected return, which is supported by historical experience, also can reflect observed yield with a reasonable loss adjustment for defaults. As noted in Exhibit 2, at my firm, we are currently assuming that PE will generate a long-term annualized return of 10.79% compared with a forecast of 7.00% for US equity and 7.25% for global equity. That margin is consistent with the historic advantage of private versus public equity based on PME analysis (Cambridge Associates 2021b). And we are not alone in expecting a return premium from private markets; that is true of the CMAs of virtually all consulting firms and major asset managers.

Is the historic outperformance of private markets likely to persist, as projected by CMAs? There are certainly headwinds to future excess returns for private markets. Valuations in PE are elevated although they are currently not as elevated as for publicly listed equities.[10] Increased flows to PE sponsors and record levels of uninvested capital or "dry powder" could potentially send valuations still higher. That said, when considered in terms of percent of PE firm total capital, or in terms of average time-to-deployment, today's dry powder levels are consistent with long-term averages.[11] Historically, starting valuation has been a strong determinant of long-term returns in public and private markets. Going forward, the balance of return drivers for PE may be changing. Whereas historical vintages often relied on buying cheap and applying leverage, today's average deal is now as much as 50% equity and often depends for its returns on successful operational and strategic enhancements (S&P Global 2018; Bain & Company 2021). As I touched on when highlighting the superior long-term alignment between private owners and company management teams, PE investors have additional tools available for them to add value to their companies,

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deriving from their involvement in the decision-making process as advisors, board members, or majority owners. Private investments often also benefit from information advantages, exposure to technology innovations, and the ability to target businesses that are helping to solve pressing issues such as climate change, health care, and diversity.

The simple fact is that most investors need exposure to asset categories with higher return expectations than traditional stock and bond markets to have a reasonable chance of meeting their return targets. For as long as private markets are widely expected to deliver higher returns than public markets, long-term investment program managers will have strong incentives to continue to allocate to private markets, and many are likely to increase those allocations. That trend is supported by surveys of asset allocation intentions (see, among many examples, Preqin Ltd. 2021b).

Evolving Treatment of Private Markets in Asset Allocation Frameworks

As private markets have become more mainstream, increasingly, I have seen allocators moving away from grouping private market allocations in a broad "alternative" category and focusing on the key drivers of investment returns, whether public or private. As a result, PE is increasingly grouped with public equity in strategic asset allocation frameworks. So too is private credit being grouped with public credit in the broad fixed income category (often within a "risk-assets" or "economically sensitive/growth assets" bucket that is discrete from Treasuries and other developed market government bonds). Private real assets are similarly grouped with their public market counterparts, such as REITs.

Those changes are consistent with the increasing understanding that it is important to consider investments by their key factor drivers rather than whether they have a CUSIP number or not. A related understanding is growing that the classic dichotomy of public securities with instant liquidity versus private markets in which capital is locked up for 10 years or longer must be reconsidered. As mentioned earlier, many securities that have CUSIPS numbers and trade on exchanges may experience significant bouts of illiquidity as measured by bid/ask spreads, particularly in times of stress, while some private assets may provide strong cash flow even during stress periods. As the private market ecosystem grows, there are increasing sources of liquidity for private assets in the secondary markets where bid/ask spreads may be no more punitive than in corners of nominally publicly traded markets. There are increasing volumes of private markets investments which feature shorter investment periods, high cash flows from both interest and return of capital and expected durations (in the sense of time to return of initial capital) of as short as two-to-three years. Furthermore, a broader array of investors can also gain exposure to private companies via registered private markets vehicles with some limited liquidity and growth-oriented mutual funds (some of which have meaningful exposure to private companies), as well as to newer "crossover" investment pools that can invest in pre-IPO equity, SPACs, PIPES, and public equity. This increasing access is being referred to as the democratization of private markets.

Increasingly investments are being assessed across a spectrum of liquidity. And with the increasing shift of economic activity from public markets to private, allocators are likely to seek to mirror this broadening opportunity set with their allocations. This framework leads to a blurring of the public/private distinction and a deeper understanding of liquidity risk management and will likely lead to more allocation to private markets through time.

CONCLUSION

During the past 30 years, private markets have evolved from a small cottage industry to a meaningful component of the investing universe. Looking out over the coming decades, I believe that private markets will continue to grow and become increasingly mainstream. Driving this growth will be

- Pursuit of higher returns
- Opportunity to gain exposure to new and innovative markets and growth drivers
- Onerous regulatory environment for public companies
- Ability of private market sponsors to drive improvement in their companies
- Growth of the overall private market ecosystem
- Increasing ability of allocators to manage costs in their private market programs
- Increasing allocator sophistication and tool availability to understand and manage the unique attributes and risks of private markets programs
- Benefits of smoothed pricing and diversification
- Time horizon alignment between allocators and private market investors
- Growing access to private markets investments for a broader array of investors
- Continued potential for innovation and disruption of financial markets, including by new technologies such as blockchain and its potential impact on mainstreaming private markets

Even as this evolution continues, it is reasonable to assume that increasing flows to private market strategies will likely compress the return premium for those activities. Also, innovation can cut both ways. During the past two years, a resurgence of IPOs and direct listings including more than 600 newly listed SPACs have increased the number of publicly traded companies and provided new avenues for PE-owned companies to access financing in public markets.[12]

As a multi-asset portfolio manager, I am seeing this evolution and convergence in real time. Until relatively recently, multi-asset investing was an exclusively public market–oriented activity. I built portfolios comprising publicly traded stocks and bonds with some possible exposure to liquid alternative categories such as commodities and hedged strategies. I am now seeing increasing interest in multi-asset mandates that include private markets. In fact, a significant portion of the portfolios that I and my team now manage incorporate private markets, as our clients seek to increase returns, expand the investment playing field, and allocate more dynamically across the broadest possible opportunity set. I am regularly engaging with investors as they seek to grow their exposure to private markets, navigate the new and innovative strategies that now populate this more diverse and growing ecosystem, and thereby increase returns while managing risk. In an important way, with the mainstreaming of private markets, my career has come full circle from analyzing individual PE deals to allocating across the converging global public and private market opportunity set. And I fully expect the importance of private markets in building long-term investment portfolios to continue to grow.

[12] According to Deal Point Data 2021, there were 698 US SPAC IPOs during 2020 and to the end of the third quarter of 2021.

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