Private Equity 101

Understanding the Fundamentals of PE Investing

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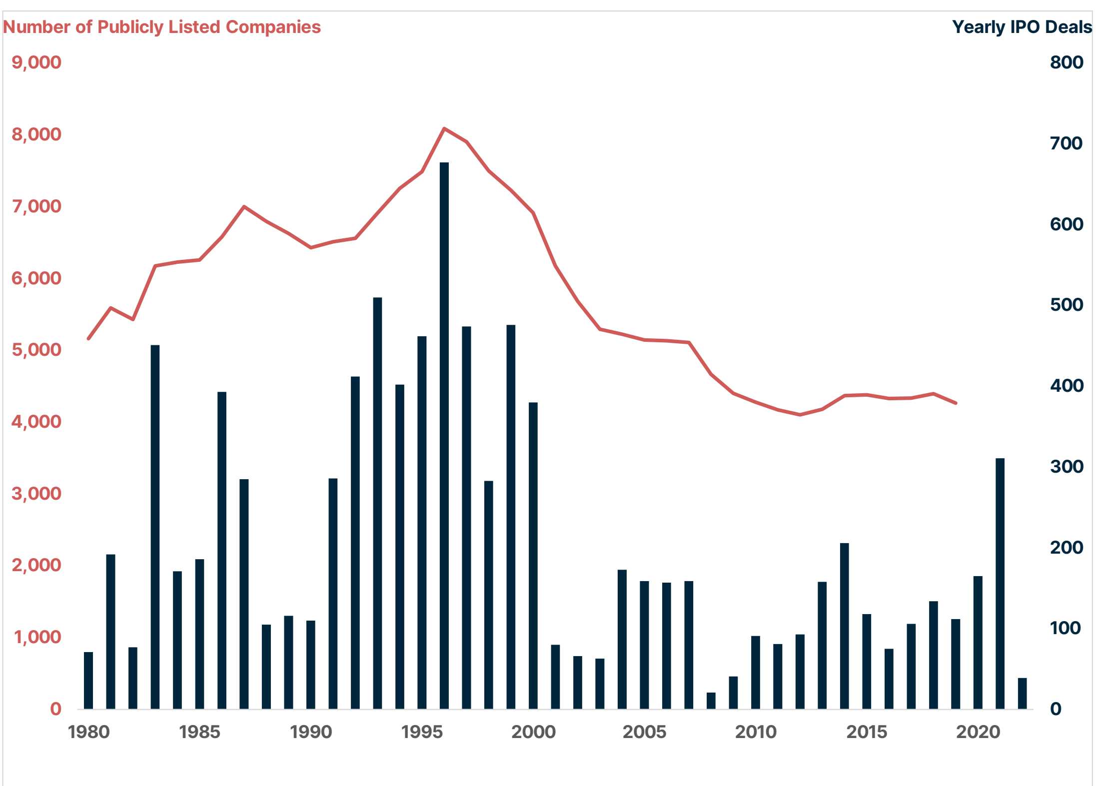
Introduction

At the peak of the public stock market in the United States (in terms of number of stocks), there were about 8,000 publicly traded stocks available on U.S. exchanges. That dropped fairly dramatically to about 3,000 in 2016. It has since recovered a bit, but still sits around 6,000 companies. During this same period, private equity markets have been growing exponentially, reaching an all-time high of $9.8 trillion in AUM in 2021 (McKinsey, 2022).

More and more companies are choosing to remain privately owned for a variety of reasons, including easier fundraising through private equity, being able to avoid the regulatory burdens of going public, the cost of becoming a public company, and the loss of control that comes with becoming publicly traded. Private markets offer a tremendous opportunity for investors, as an ever greater proportion of growth and market share stays in private hands. But the complexities of private equity have acted as an obstacle for many investors, who have gained comfort and familiarity with public markets. Understanding private equity fundamentals can help investors become more confident in accessing the opportunities available in private markets.

In this paper, we'll discuss the fundamentals of private equity investing, providing the information you need to make an educated decision about how to incorporate private markets into your strategy.

The Public Market is Shrinking



What is Private Equity?

When you purchase shares of public stock, you are buying a small piece of ownership in a company in the hope that as the company grows and returns profit, those shares will become more valuable over time. Investors can invest in companies of different sizes, geographical location, and industries. Private equity investing is fundamentally the same; investors purchase ownership interests in a company, seeking to invest in businesses that will grow in value over the life of their investment. Private equity covers a similar spectrum of small and large, new and mature, growth and value, and domestic and international. Both types of investing are subject to individual company fluctuations as well as larger market forces.

There are also, however, significant differences. Public and private equity are structured differently and governed by different reporting requirements. Public stock is easily accessed through a public stock exchange or via mutual funds; private equity is more difficult to access and only available to "accredited" or "qualified" investors via a private market. Private equity has a very different liquidity profile, as private equity investors typically commit their capital for a pre-established length of time. Performance, then, is usually only relevant over long periods of time.

Private equity financing provides a pathway whereby entrepreneurs can bring their best ideas to market and make them a reality, offering them access to capital and experienced partners who bring specialized expertise, connections, and business acumen. Private equity investors have the opportunity to support growing businesses and draw value from their great potential. Private markets can also provide investors with access to markets and niches that public equity may not reach, creating growth and diversification opportunities.

Public Versus Private Equity

	Public Equities	**Private Equities**
Definition	Securities that trade on a public exchange or can be bought or sold by anyone in the general population	Securities that are not listed on a public exchange and may only be offered to accredited and qualified investors
Liquidity	Daily liquidity	Limited liquidity
Transparency	Strict regulations governing reporting and transparency of information	Less transparency and limited availability of information
Investor administrative complexity	Low	Higher
Investment time horizon	Varies	Varies, but typically long-term
Regulatory requirements	Higher	Lower
Disclosure requirements	Publicly available information	Information not publicly available
Control	Shareholder voting	Varying degrees of control as a limited partner

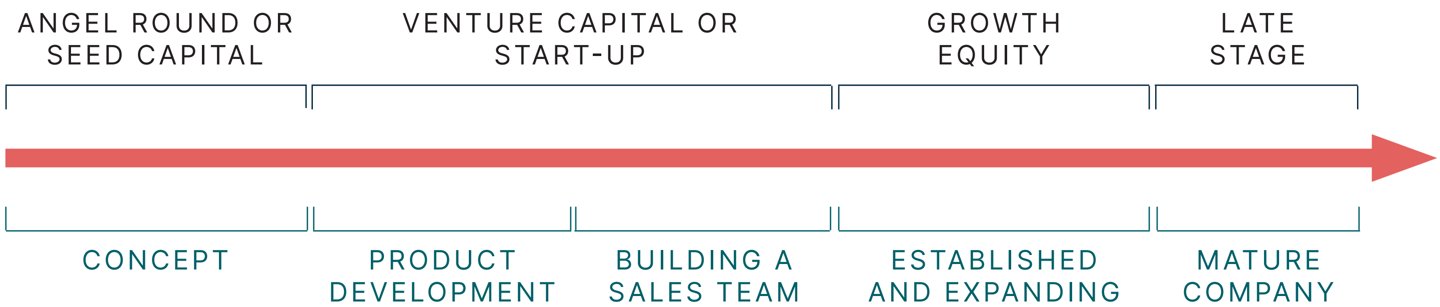
HOW TO ACCESS PRIVATE EQUITY

Private equity investors must meet certain criteria under U.S. securities laws, including the "accredited investor" and/or "qualified purchaser" definitions under the Securities Act of 1933 and Investment Company Act of 1940, respectively. These laws are intended to ensure that private equity investors are sophisticated enough to understand the particular risks involved in private equity investing, and that they are prepared to accept the potential illiquidity of private equity ownership.

When an investor invests in a private company, they enter into a Limited Partnership Agreement, which outlines the investment terms, fees, and duration of the investment. Often, investors are expected to commit a certain amount of capital at the beginning of the relationship, which then may be called — or deployed — at different points of the company's fundraising.

Private companies are not subject to the same regulations and reporting requirements as public companies, so private equity investors may not have access to the same information or types of information they are accustomed to with public stocks. Instead of a prospectus, private equity investors receive an offering memorandum, generally called a private placement memorandum, or PPM. The PPM describes the company offering the securities, the offering teams, distribution expectations, structure, and investment risks. Private companies have more latitude in their capital structure, and may not have the same transparency as is required with public equity.

Lifecycle Stages of a Company



LIQUIDITY AND RISK

One of the most significant differences in private equity investing is the difference in liquidity. Public equities have daily liquidity — an investor can buy and sell their shares at any time and gains may be realized virtually instantaneously. With private equity, assets may be tied up and unavailable for extended periods of time. Private equity investors are supplying the capital needed to manage the business, and commitments are often for years, with limited opportunities to exit and realize gains. Private equity gains are realized in a variety of ways, from distributions and dividends to the sale of shares or the company.

The primary risk of investing in private equity is the same as it is in public equity investing: the risk that the value of your shares will decrease. However, that risk may be heightened in private markets because there is less certainty and history. Experienced private equity investors are willing to accept this risk for the higher return potential.

Stages of Private Equity

Private equity companies are generally categorized by the stage of their lifecycle. Not all private equity is alike; some private companies are just getting off the ground, whereas others may be large, established companies with a long history of profitable business. Understanding company lifecycles is key to PE investing.

To understand how private companies are categorized, it's helpful to look at the stages a developing company will typically experience over the course of its lifetime. Each stage is often accompanied by at least one round of financing, creating opportunities to invest at all stages. The graphic above illustrates the traditional stages a company experiences, though the distinctions between one stage and the next are not necessarily clearly delineated. Individual companies may follow different trajectories or experience these stages differently.

ANGEL ROUND OR SEED CAPITAL

Every company begins with an idea. Someone has a concept of a product or service they believe is marketable and has the potential to be profitable. To turn that idea into a company requires initial capital. The term "angel round" refers to the "angel investors," often family and friends, who help to finance the company early on, sometimes simply supporting the individual or group so they can focus on developing the idea into something concrete. Typically, even for this first round of seed capital financing, the company-to-be must show a proof of concept that demonstrates the viability of the idea.

Because the risks are amplified in the angel round, with a high potential for failure, investors should expect to be compensated for their investment. In order to have a high level of return expectation, though, the seed investor typically must participate in all financing rounds throughout the life of the company, until it is merged, sold, or goes public. Many angel investors are unable to continue to support the company financially as it grows and suffer the effects of dilution, where their ownership percentage decreases due to the issuance of new ownership interests in subsequent rounds, or find that they need to sell their shares (often at a significant discount) before being able to realize the highest potential return from their investment.

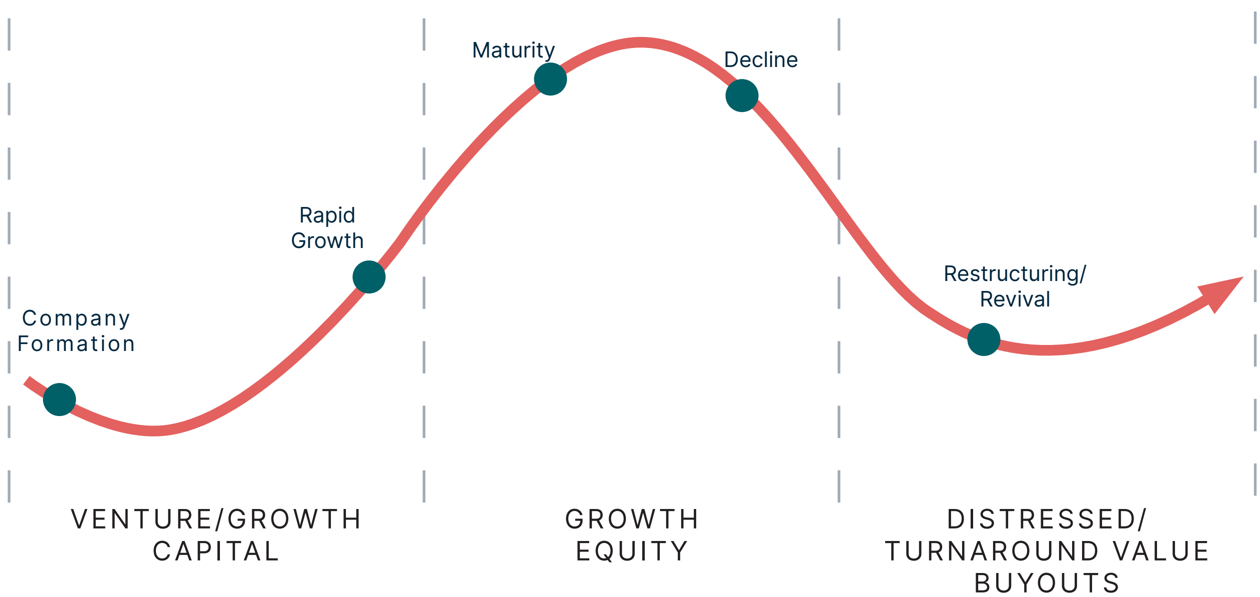
VENTURE OR START-UP

In its next stage, a company may be labeled as an early stage, start-up, or venture company. The company exists and has a workable concept, but needs capital to develop its product or service and get it to market. "Venture capital" refers to private equity at this stage of its lifecycle.

Several rounds of financing may occur within the venture stage, sometimes designated as financing rounds A, B, and C. The A round is often when institutional capital enters for the first time, and may be used to develop the business and product to the point of accumulating customers. By the C round of financing, also called the commercial round, the company should have a customer base, be earning a revenue stream, and be building out their sales team.

At the venture stage and the next growth equity stage, the risks are not quite as pronounced as

Typical Growth Curve of a Company



in the seed stage, but are still elevated. Because they are "in on the ground floor," the high potential for return is alluring, but comes with a high risk of failure. Private equity investors who invest in venture capital and continue investing through the company's subsequent financing rounds until a monetization event occurs should expect returns in the range of three to five times the initial investment.

GROWTH EQUITY

Once a company reaches the middle market stage — when the product or service is successfully selling to customers — the next step is to raise capital to fund growth efforts. This round of financing is referred to as growth equity or mezzanine-level financing. This stage can offer a very attractive return potential, and many investors are interested in entering the private equity market at this stage; their investment can help a company expand and grow its clientele, building on an already established foundation.

As with the venture stage, the growth equity stage may involve multiple rounds of fundraising and financing. The expected return for investors entering at the growth equity stage is usually around two to three times the initial investment.

LATE STAGE/BUYOUT

Late-stage financing refers to the capital needed to help a company prepare and position for a liquidity event. The risks at this stage are lower, as investors are working with mature firms that are already established and have steady cash flow. An expected return for late-stage investing is typically two to three times the initial investment.

MONETIZATION/EXITS

For private equity investors, the exit — also called a liquidity event — is the key point at which returns are realized. There are several different ways an exit can be accomplished.

Financial exit

Initial Public Offering (IPO): The company's initial offer of its equity interests to the public through a listing on a public exchange. Part of all the private equity investors' shares may be sold in the IPO or after an initial holding period.

Liquidity event or strategic exit

Sale: The company is sold and investors earn a proportionate share of the proceeds.

Buyout/acquisition: The company is acquired by another company, which purchases the shares directly from investors in return for cash or stock in the acquiring company, or a combination of both. If the acquiring company is a publicly traded company, its stock may be subsequently sold.

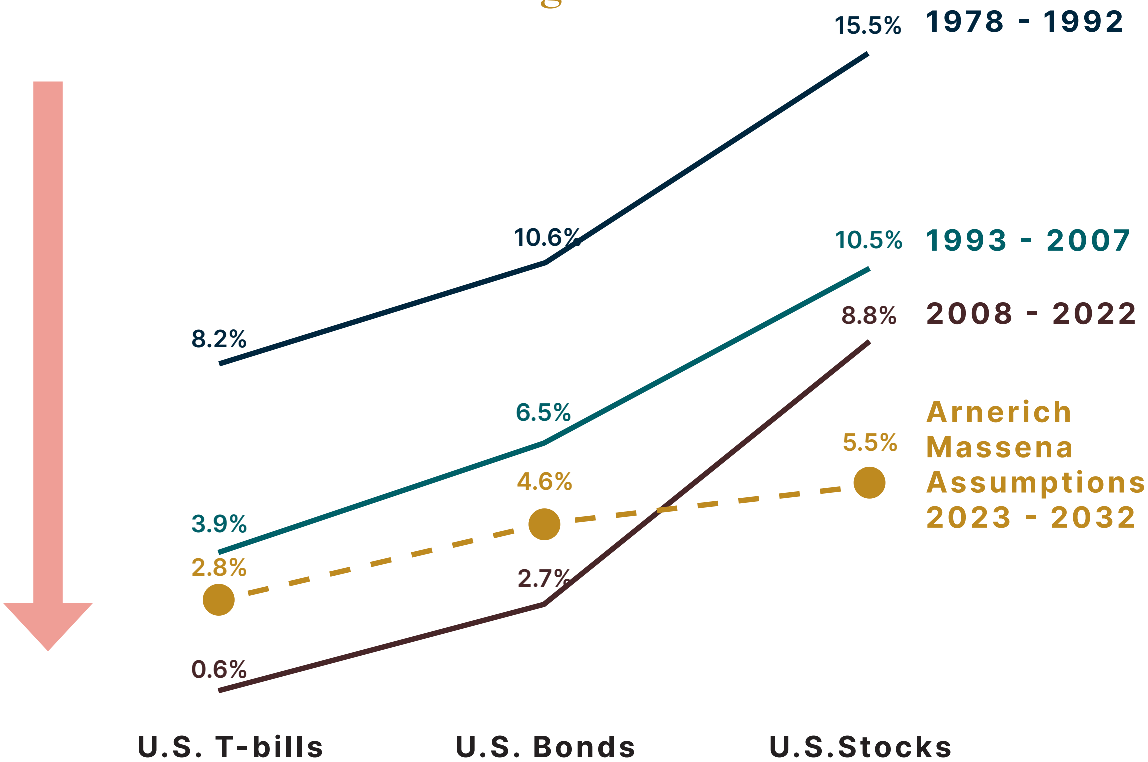
Company buy-back: The company purchases the shares back from investors.

While these liquidity events are most often the source of return for private equity investors, there is a vibrant secondary market for investors who wish to gain liquidity out of their investment before a liquidity event. However, selling shares on the secondary market often means selling at a discount, depending on company-specific factors and the market environment at the time.

Why Private Equity?

Performance. It's that simple; the primary reason for including private equity as part of an investment portfolio is long-term growth and performance. Expectations for a well-put-together private equity portfolio far outweigh return expectations for most public equity over the long term.

Five Decades of Moderating Returns



Historical returns are based on Ibbotson Associates US 30-Day T-Bills, Bloomberg US Aggregate, and S&P 500 Indexes, January 1976 - December 2022. Forward-looking return assumptions are based on Arnerich Massena's capital markets outlook.

In addition to performance, private equity offers diversification benefits that are difficult to achieve through public equity alone. And lastly, private equity offers a measure of control that many investors find appealing.

ACCESS TO GROWTH

Public markets, despite periods of growth, have been experiencing a long-term downward trend of moderating returns. Add to that the current storm of inflation, high debt, supply chain issues, and rising interest rates, and the long-term outlook for stocks looks volatile. Several decades ago, a long-term investor might have reasonably expected a double-digit ten-year return from a stock portfolio, but those expectations have since dampened.

You can see above that our expectations going forward are 5.5% for a ten-year return in the U.S. stock market, significantly lower than what investors might have expected 20 or 30 years ago. A traditional balanced portfolio of U.S. stocks and bonds in most cases can no longer supply a 5% annual spending rate.

One of the reasons for this shift is that companies are rethinking their funding and growth strategies. Many firms are either choosing to stay private and not go public at all, as private funding sources become more accessible, while other companies are

> "DESPITE THE EXPLOSION OF FIRMS GOING PUBLIC, HALF OF THE COMPANIES THAT LISTED ON U.S. EXCHANGES BETWEEN 2015 AND 2019 WERE TRADING BELOW THEIR IPO PRICES ONE YEAR LATER "
>
> - Forbes, 2022

Public Markets May Be Missing the Most Explosive Growth

Firm	IPO Year	IPO Market Cap	Market Cap as of Jan 2023	Public Market Multiple
Microsoft	1986	$800 million	$1.793 trillion	2241x
amazon	1997	$438 million	$991 billion	2263x
Google	2004	$23 billion	$1.242 trillion	54x
Meta	2012	$104 billion	$562 billion	5x
Alibaba.com	2014	$230 billion	$318 billion	1.4x
UBER	2019	$84 billion	$60 billion	0.72x
SoFi	2021	$2.4 billion	$11.7 billion	4.9x

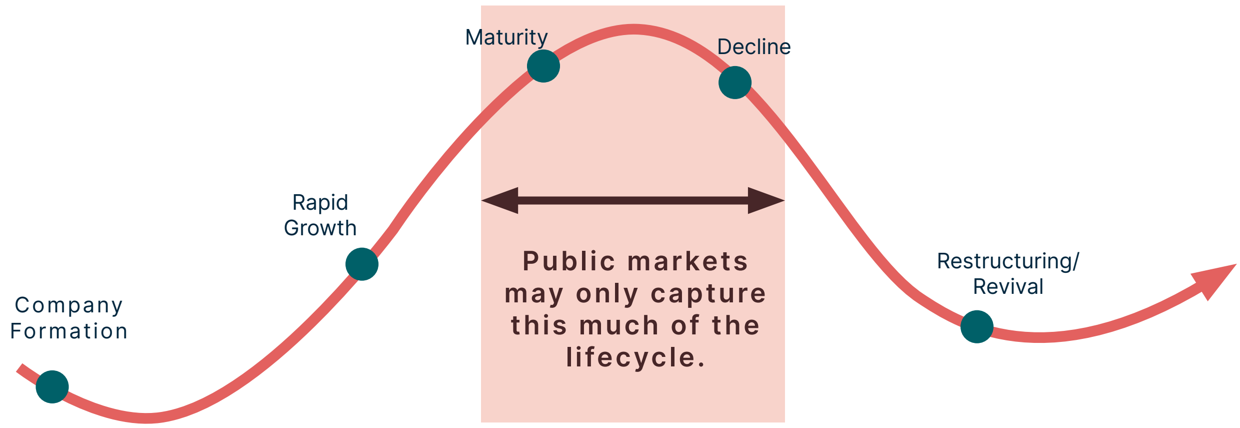
"The last twenty years or so have seen a sharp decline in public equity...the decline in public equity is explained by the increased supply of funds for private equity and changes in the nature of firms. The increase in the importance of intangible assets makes it costlier for young firms to be public when the alternative is funding through private equity from investors who have specialized knowledge that enables them to better understand the business model of young firms and contribute to the development of that business model in contrast to passive public equity investors."

- Stulz, November 2019

choosing to wait longer if they do decide to go public. Regulations and reporting requirements for public firms have become more onerous, pushing companies to remain private. Whereas it was once a badge of honor to IPO, it has now become cheaper and easier to seek private capital to spur and maintain growth.

Not only are some companies remaining private, but they are also going public later. This can make a significant difference, as often, the steepest and most rapid growth of a company occurs early in its lifecycle. When a company goes public later, public stockholders

Typical Growth Curve of a Company



may have missed the period of greatest growth. In the table on the previous page, you can see the shift over time of the point at which companies are launching their IPOs. Compare Amazon, which went public in 1997 at an IPO price of $428 million, and Meta (then Facebook), which went public in 2012. After 26 years, Amazon's market cap is $961 billion, a 2263x multiple for early investors. Meta is only 11 years in, so could theoretically catch up, but its current multiple is only 5x after 11 years — that's a long way away.

The JOBS (Jumpstart Our Business Startups) Act of 2012 had a profound effect on companies staying private; previous to that, firms with more than $10 million in assets were required to become public reporting companies once they reached 500 shareholders. Google (now Alphabet), for instance, was required to go public in 2004 because it reached the 500-shareholder limit. After the passage of the JOBS Act, the threshold increased to 2,000 shareholders, allowing private companies greater access to funding sources.

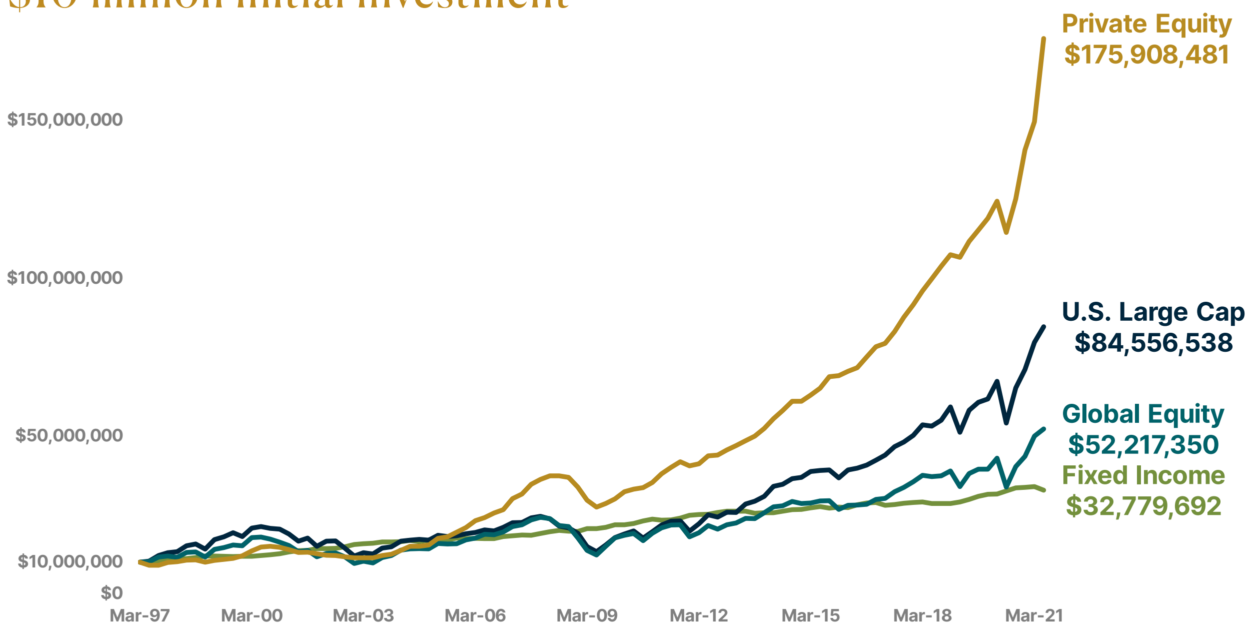
The combination of fewer publicly listed companies and companies going public later results in a reduced opportunity set for investors in public markets. In this environment, capturing the early years of active, rapid growth often requires investing in private markets. If we revisit the typical growth curve of a company, you can see above that public markets only capture a small portion of a company's growth. Private equity offers access to growth and opportunities that are not available through public investing alone.

PERFORMANCE

Now let's examine private equity performance and why it's so compelling.

It can be somewhat tricky to compare public versus private equity, because of the way private equity returns are calculated (more on that later). But a recent analysis from Pitchbook designed a new method to help make a meaningful comparison. The analysis was quite complex, running multiple simulated portfolios based on an optimized commitment schedule and randomized sets of PE buyout funds. That study found that "the addition of PE to a balanced

Private Equity Versus Public Markets
$10 million initial investment



Source: PitchBook, Morningstar Direct, Arnerich Massena. This chart illustrates the hypothetical growth of a $10 million initial investment made on December 31, 1996 in each of the following indexes: PitchBook Global Private Equity, S&P 500, MSCI ACWI, and Bloomberg US Aggregate Bond. Data through June 30, 2021. It is not possible to invest directly in an index Past performance does not guarantee future results.

portfolio would have added value (net of fees) on average over the full analysis period from 1997 through 2020." (Akers, *Pitchbook*, 2021)

Above, we conduct our own examination to look at the growth of a private equity portfolio compared with public equity and fixed income over the last 20-year period. It's important to note that our comparison is based on index performance, and indexes are not actually investable, so the analysis is for illustration only, but we think it does provide some valuable perspective. Starting with an initial $10 million investment, the private equity portfolio grows to more than $175 million, whereas U.S. large cap stock returns well less than half of that, at $85 million. (Keep in mind as well that this illustration uses a global private equity index, which seeks to represent the asset class as a whole. If you were to select a subset of select investments chosen for their unique potential, you would likely see a different return profile, with outperformance potential.)

DIVERSIFICATION

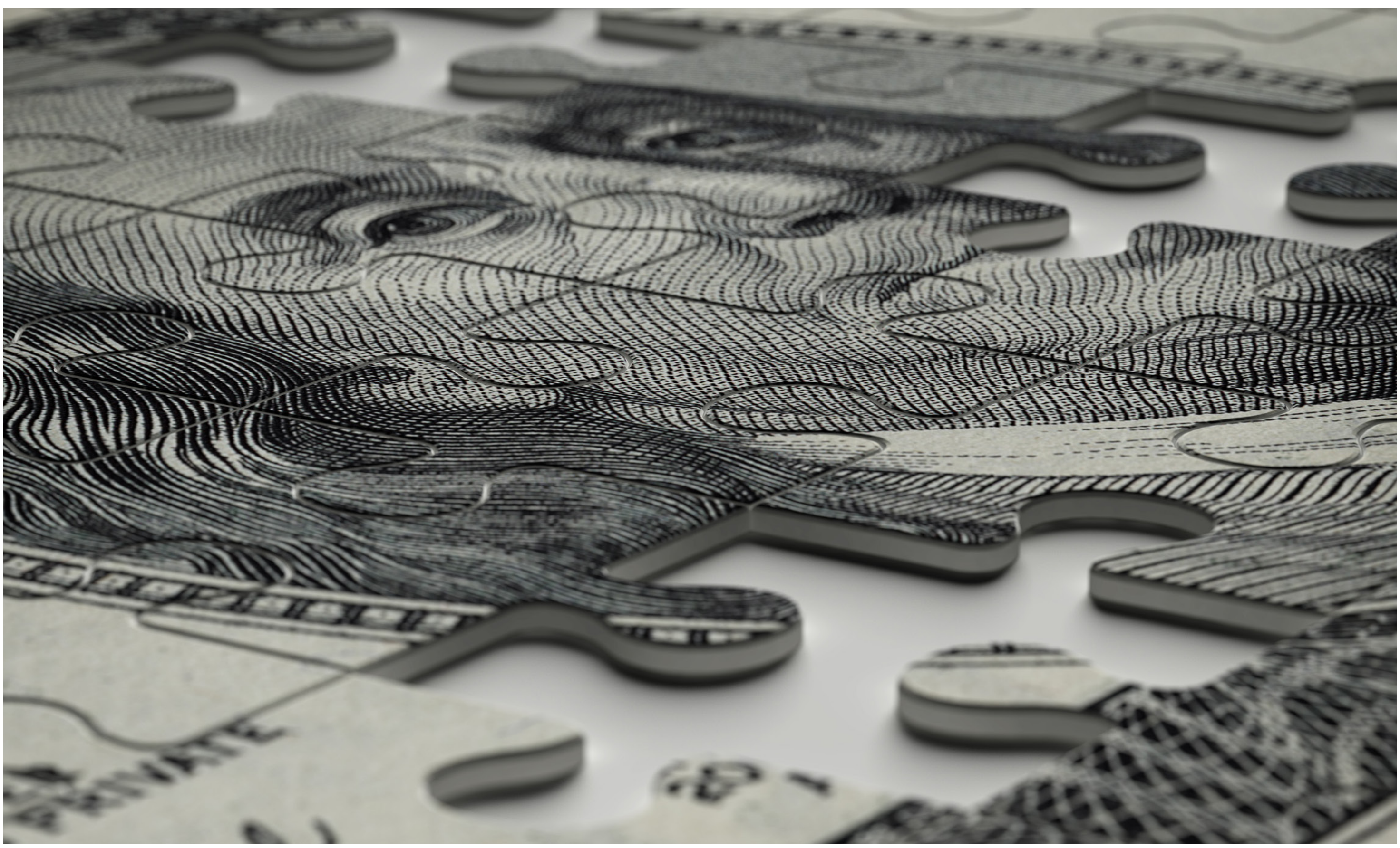
Though performance may be the most significant reason to incorporate private equity in a portfolio, diversification is another important factor. Correlations have been increasing among U.S., international, and emerging markets stocks over the last 30 years, as globalization has resulted in more multinational corporations and companies that are subject to market influences that span the globe. Similarly, within the United States, performance among small, mid, and large cap stock categories has been greatly influenced by overall market forces, so the asset classes become less differentiated over time. While careful manager selection can help to retain the diversification opportunities, going outside of public markets can provide a deeper layer of diversification.

The return dispersion among PE funds tends to be very wide — much broader than in public markets — so the diversification benefits depend largely on specific investment selection.

Private equity is generally viewed as riskier than public investing, largely as a result of the liquidity risk. When accounting for the liquidity limitations, we believe that a thoughtful private equity allocation can create a reduction in the long-term volatility of a portfolio. Private markets are not always subject to the same market forces that impact public stocks, resulting in diversification benefits. Because the measurement of PE performance differs due to reporting requirements, any reduction in volatility may not be apparent nor easy to measure in the short term, but over the long term, we have found that PE demonstrates portfolio risk mitigation properties.

CHOICE AND CONTROL

Private equity investors often enjoy the opportunity to play a larger role in the evolution of the companies in which they invest. In many cases, private equity investment is instrumental in developing a company from a start-up into a profitable venture, and investors are critical in the process. Depending on how the PE vehicle is structured, investors may have the opportunity to influence the company's decisions and participate in helping it grow. The private equity structure makes both capital and expertise available to entrepreneurs, and many investors enjoy lending their experience and connections to the process.



Some investors seek out companies where they have a connection to the firm's mission or management team. With PE investing, investors can be very specific about the types of companies, industries, or technologies in which they want to invest. And there is a profound allure to being in the groundswell of new ideas; many private equity investors feel an emotional connection to their PE holdings that generally isn't a factor with publicly traded securities.

How to Invest in Private Equity

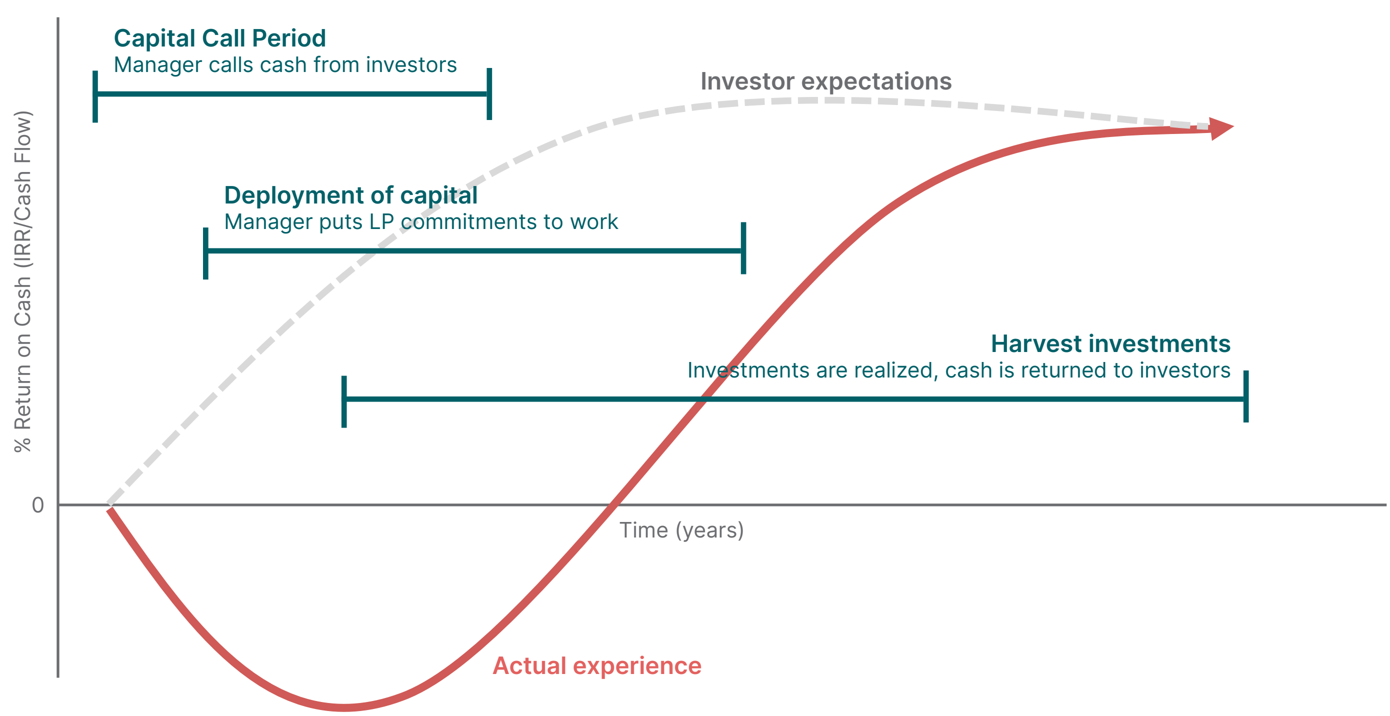
Building a private equity strategy requires patience, commitment, and specialized expertise. How an investor incorporates private equity into their portfolio depends on their objectives, interests, liquidity needs, and risk tolerance.

TIME HORIZON

Private equity investors need to recognize the long-term nature of private equity investments. PE investments don't typically deliver immediate returns and are not usually liquid investments. PE investing involves commitment of capital for long periods of time, as growing businesses need guaranteed capital they can count on. While there is a secondary market for selling private equity interests, sales are restricted under U.S. securities laws and often involve steep discounted prices.

Many PE investors experience the "J-curve" phenomenon, in which the initial value of the investment drops due to cash outflows, early write-offs, and fees early in the life of the investment. This early drop in value can be alarming for inexperienced investors, but experienced PE investors are familiar with the J-curve and prepared for it. Over time, as a PE

Experiencing the "J-Curve"



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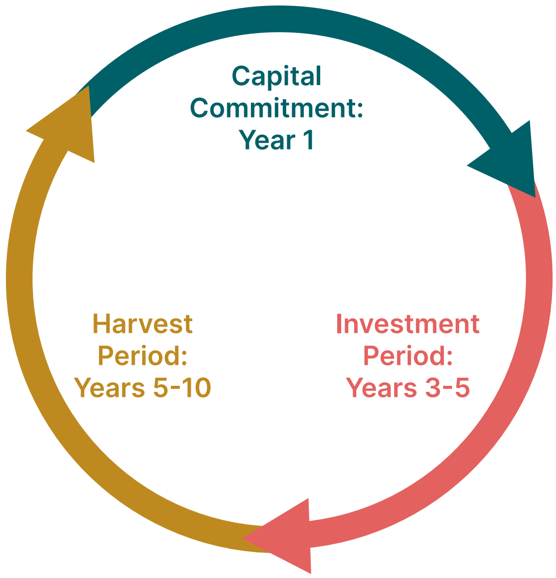


portfolio matures, it begins to deliver returns, but it generally takes three to five years of private market commitments before the asset class generates cash flows from existing investments. This return pattern is shaped like a "J," as illustrated on the previous page.

A typical private equity time horizon may see the harvest period beginning as much as ten years from the initial investment.

DIRECT INVESTMENT, FUNDS, FUNDS OF FUNDS, INTERVAL FUNDS

Investors wishing to add private equity to their portfolios have several options: direct PE investing, investment in a private equity fund, investment in a private equity fund of funds, and investment in an interval fund.

Direct private equity investing

Direct PE investors provide capital directly to a private company. Only accredited investors and qualified purchasers can invest in direct private equity, and it typically requires significant capital to meet minimum investment requirements. Direct PE investing is for experienced private equity investors or investors who have guidance. They often prefer to be quite hands-on with the company(ies) in which they invest, participating directly in management and development.

Concentration risk is an issue with direct private equity investing; any direct PE investments should be part of an overall diversified portfolio. We recommend that direct PE make up no more than 20 percent of a total portfolio.

Direct PE investors need to think ahead. Most successful companies go through multiple rounds of financing and require significant time to grow. Investors need to be patient and maintain a long-term outlook and most importantly, need to have a commitment mentality, with the willingness to stick with the company as it goes through its growing pains. This includes the willingness to continue to participate in subsequent investment rounds to preserve one's interest and prevent dilution.

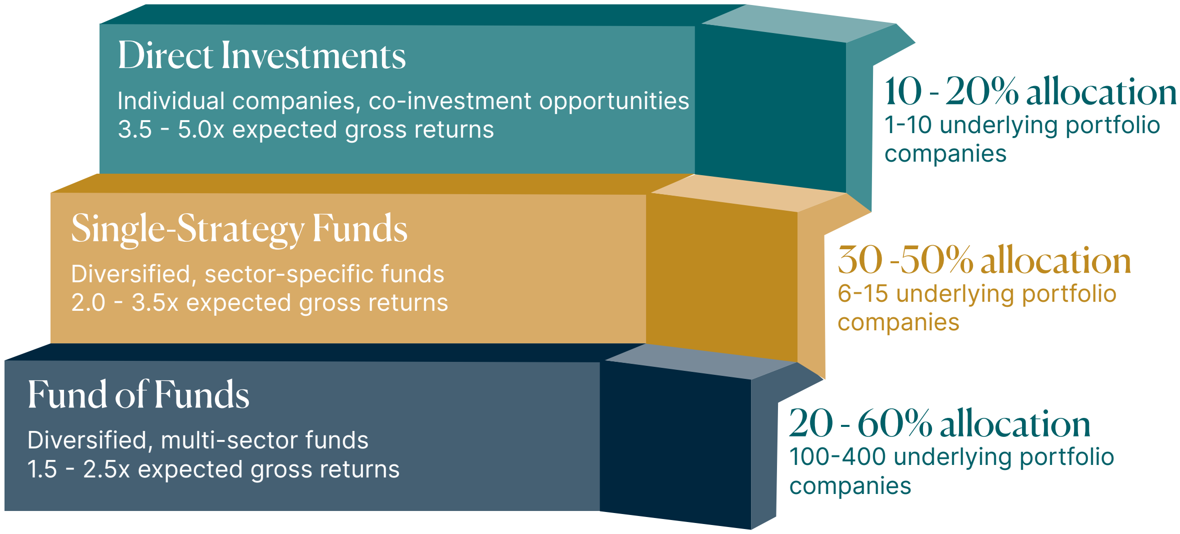
Direct PE has a higher risk profile, but also carries the greatest potential for long-term return as investors can capture what is often the highest growth period of a company. Company selection is of course critical, as investment return depends entirely on the success of the company.

Our expectation, based on our criteria for company selection, is that direct private equity investments will generate a long-term gross return of 3.5 - 5.0x.

Private equity funds

Private equity funds typically hold a diversified selection of businesses, often with a specific focus. Some funds target a particular lifecycle stage while others specialize in particular industries or geographic areas. Most PE funds are structured in the form of limited partnerships. The fund manager acts as the general partner

Types of Private Equity Investing



with control over — and liability for — the management of the fund. Private investors become limited partners, sharing in ownership but without management participation.

When you invest in a private equity fund, you commit a certain amount of capital to the fund. When the fund manager identifies an appropriate investment opportunity, you receive a "capital call" — the fund requests a portion of your committed capital for investment. Most PE funds have a three- to seven-year investment window in which to invest committed capital. (Some funds charge their fees only on invested capital, whereas others charge fees based on committed capital, so it's important to understand how your fund charges fees before developing your commitment strategy.)

Because private equity funds have a more diversified approach than individual direct investments, they can be incorporated as a greater proportion of an overall portfolio. Because of this diversification, the risk is mitigated relative to single direct investments. The return potential is also slightly lower, but still very attractive; we expect a long-term gross return of 2.0 - 3.5x.

Private equity funds of funds

A private equity fund of funds is structured similarly to a PE fund, but rather than investing in individual PE companies, the fund manager selects multiple PE fund managers in which to commit capital, often providing investors with access to managers they might not have if investing individually. Through a fund of funds, PE investors can diversify across a large number of companies, incorporating diversification in the vintage year, lifecycle stage, industry or market sector, and geography. However, this additional level of risk management, access, and diversification also adds another layer of fees.

A fund of funds makes it possible to invest a significant portion of a portfolio in private equity while maintaining a fully diversified strategy. Our expected gross return of 1.5 - 2.5x is reduced from more concentrated approaches, but even this lower expectation is much higher than public equity expectations.

Interval funds

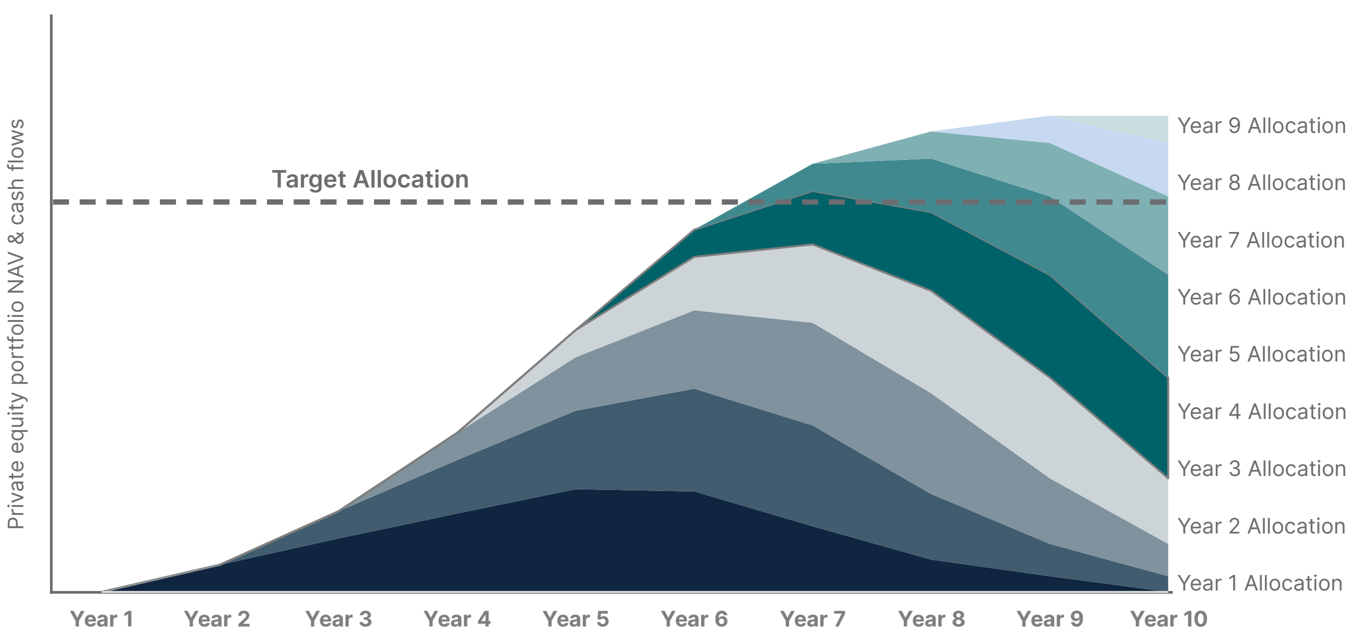
Interval funds offer a different structure for investors who are interested in accessing private equity opportunities without some of the drawbacks that typically accompany investing in alternative assets such as illiquidity, capital calls, and tax complexities. Interval funds are closed-end mutual funds, registered like mutual funds under the Investment Company Act of 1940. Interval funds may make private equity investing more broadly accessible by offering a more simplified, liquid structure.

Most interval funds invest the full allocation immediately, eliminating the need for a commitment strategy. Assets don't have daily liquidity as a mutual fund does, but interval funds usually offer a liquidity window each quarter, making it possible to sell a specified portion periodically. However, those redemptions often have limits; although interval funds are more liquid than most private equity partnerships, they are not as liquid as a mutual fund or ETF. Interval funds issue a regular 1099 each spring, rather than the K-1 reporting utilized by most alternative investments.

Interval funds often have higher fees than traditional mutual funds, due to the complexities of managing a portfolio of alternative assets.

Since interval funds were created to provide a way for investors to access alternative assets, they invest in a variety of different asset classes such as private credit or private real estate in addition to private equity. Most interval funds invest in a diversified pool of investments, and so are similar in risk profile to a fund or fund of funds. Investors can select interval funds that are focused on the area of the market that interests them, whether that be a certain lifecycle stage, sector, or industry.

The Importance of a Commitment Strategy



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Sample Commitment Strategy

		Capital Called/Dollars Invested										
Total commitment		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Year 1	$1,000,000	$300,000	$700,000	$500,000	$700,000	$1,000,000	$850,000	$750,000	$600,000	$400,000	$200,000	-
Year 2	$1,000,000		$100,000	$300,000	$500,000	$700,000	$1,000,000	$850,000	$750,000	$600,000	$400,000	$200,000
Year 3	$500,000			$50,000	$150,000	$250,000	$350,000	$500,000	$425,000	$375,000	$300,000	$200,000
Year 4	$500,000				$50,000	$150,000	$250,000	$350,000	$500,000	$425,000	$375,000	$300,000
Year 5	$500,000					$50,000	$150,000	$250,000	$350,000	$500,000	$425,000	$375,000
Year 6	$500,000						$50,000	$150,000	$250,000	$350,000	$500,000	$425,000
Year 7	$500,000							$50,000	$150,000	$250,000	$350,000	$500,000
Year 8	$500,000								$50,000	$150,000	$250,000	$350,000
Year 9	$1,000,000									$100,000	$300,000	$500,000
Year 10	$500,000										$50,000	$150,000
Year 11	$500,000											$50,000
Total invested (principal only)		$300,000	$800,000	$850,000	$1,400,000	$2,150,000	$2,650,000	$2,900,000	$3,075,000	$3,150,000	$3,150,000	$3,050,000

PE funds and funds of funds, as well as interval funds, may be more accessible to investors than direct private equity investing, with lower investment minimums due to pooling assets with other investors.

COMMITMENT STRATEGY

Building a private equity portfolio requires the development of a commitment strategy (unless you are using an interval fund). The timing of investment of committed capital is unpredictable, as is the return of capital and realization of profit, and it takes time to build a mature private equity portfolio with a consistent return. PE investors should identify a dollar amount or percentage of portfolio to commit to PE, recognizing that it may take several years to achieve full investment of the committed allocation.

Multiple investment commitments are generally necessary to reach and maintain an allocation to private equity, as committed capital is “called” over a period of time. It’s even possible that not all committed capital will actually be called; for this reason, some investors adopt a strategy of overcommitment, committing more capital than they actually want to invest. This strategy is widely adopted by PE investors and makes sense in normal market conditions. There is the risk, however, of unexpected capital calls that exceed current distributions, so investors who use this strategy should ensure they have adequate assets on hand just in case.

Flexibility is critical in private equity investing. In the table above, we provide a sample commitment strategy for an investor looking to invest $3 million in PE and maintain that level of investment over time. Though the table does not take into consideration investment appreciation, it illustrates what a schedule might look like over a period of years. Investors need to recognize that it may take four or five years of investment before a portfolio begins sustaining itself via distributions and begins to build value.

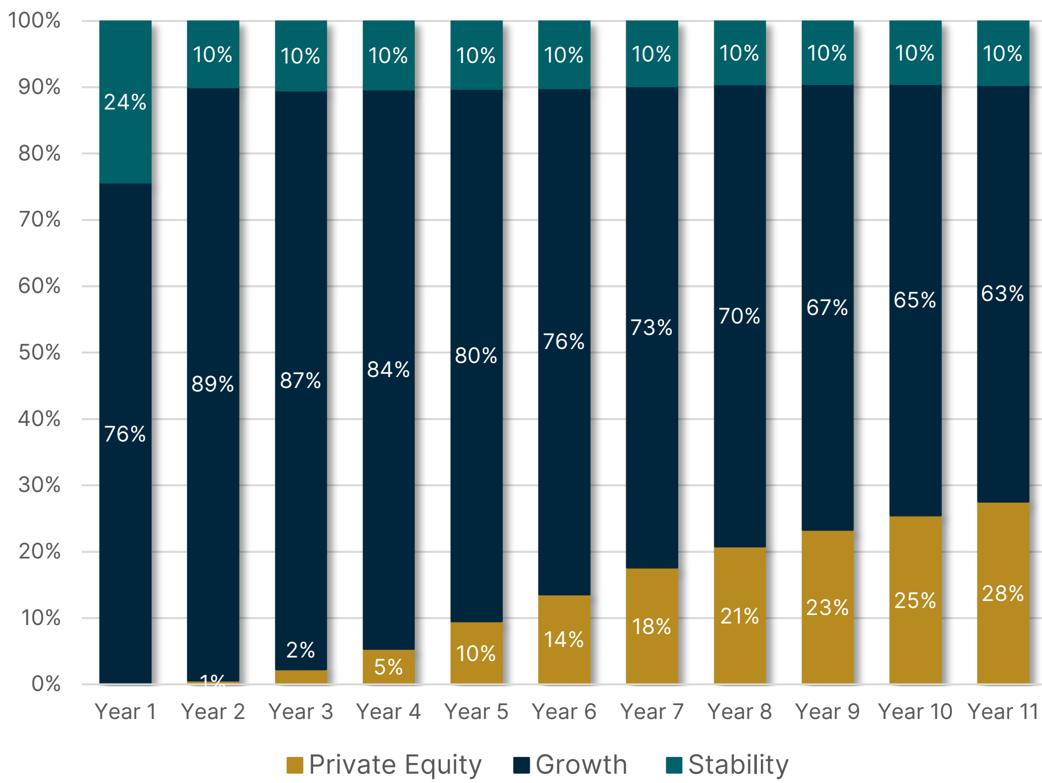
INVESTMENT SELECTION

Setting a commitment and diversification strategy lays the groundwork for a private equity portfolio, but the most critical ingredient is investment selection. Specialized knowledge and expertise can make a huge difference in navigating this complex asset class, which requires knowledge of market dynamics, economics, PE investing, and investment analysis. Past performance cannot serve as a guide in PE investing, and even manager track records have limited value. Larger funds that have outperformed in the past can become overvalued and thus unable to extend the return pattern into the future. PE investing requires a future-focused strategic approach.

As a result of Arnerich Massena's long history of successful private equity investing, we have built a well-developed network of relationships to serve as a pipeline for top-tier, exclusive PE opportunities. We use specific criteria to identify attractive opportunities:

- We are wary of overcapitalization; the greatest areas for opportunity are in less efficient parts of the market. Smaller, more niche areas are less likely to be oversaturated with investment.
- We seek out niche managers and products focused in thematic areas where we see strong opportunities for growth.
- We place a particular focus on the late venture/early growth phases of the lifecycle. Investing early has several advantages, not least of which is the ability to capture the early rapid growth and success of a company, but also early loyalty may result in preferred status and access in later fundraising rounds.
- Our goal is to lead trends, not follow them. We look for companies that are carving out their own categories or creating new markets.

Private Equity Pacing Analysis



Implementing a private markets program takes multiple years in order to bring the exposure to the desired level with adequate diversification. Here, we transition a 75/25 portfolio to a 90/10 portfolio with a 10-year target to bring the 90/10 portfolio to a strategic target of around 27% private equity.

- We look for sector specialists and/or regional specialists, focused on finding managers who have great talent and skill in their specific field which they are able to translate into private equity implementation.
- We build strong industry relationships that can help keep us apprised of prospective opportunities

Unique Private Equity Considerations

FEES

While fee structures vary among private equity funds, it is fairly typical for PE managers to charge two fees: an annual management fee and a carried interest fee, which is a portion of the profits generated from the fund. The often-referred to "2 and 20" rule is a fee structure in which investors pay a 2% annual management fee and 20% of net profits upon liquidation. Both the management fee and the carried interest fee vary among managers.

Usually, a hurdle or "preferred return" must be achieved before the manager can begin collecting the carried interest fee. The annual management fee, as noted above, may be charged on invested capital or committed capital, or on a combination of the two that may even change over time (for example, a fund may stop charging a management fee on committed capital at the end of the investment period, at which point it earns the fee only on invested capital.) Because private equity fees can be

complex, it is wise to carefully study a fund's fee structure before investing.

PRIVATE EQUITY RETURN CALCULATION

Calculating returns for private equity is challenging. Unlike public stocks, performance cannot be measured accurately with annualized returns. A private equity investment's cash flows are subject to irregular timing, sometimes severely so — money is committed at one point but called at a later date, usually in partial increments over an extended period of years. Furthermore, at each call, a PE fund may or may not invest all of the called capital, generating further dissonance in the return pattern. Because of these factors, a private equity investment's performance is realized over the full life of the investment; realized returns are only recognized upon liquidity events. While quarterly company valuations provide periodic indicators of a fund's appreciation or depreciation, they may not reflect the ultimate return of the fund (as in the case of the J-curve). As such, several different methods are used to calculate private equity returns.

One of the most common return calculations is the internal rate of return, or IRR, also called the discounted cash flow rate of return. Generally speaking, the higher the IRR, the more desirable the investment. While IRR is the most common performance measurement because it incorporates the time value of money, IRR cannot be used to compare private equity with public equity asset classes and indexes. Near the end of a fund's life, time-weighted returns tend to approximate the IRR and provide a method whereby PE returns can be compared with public equity indexes and other asset classes. Time-weighted returns do not measure the effect of timing on performance; while this may be sensible in public markets where managers don't always control the size and timing of investments, it's less accurate for private equity investments where the timing of the investment is impactful.

BENCHMARKING

Like the challenge in comparing returns, benchmarking private equity is inherently difficult. PE is a long-term commitment, and evaluating it in terms of short-term performance can be misleading. A long-term time frame — ideally at least ten years — is really needed to effectively evaluate a PE portfolio. On the other hand, investors usually want some way to measure the progress of their private equity investments, particularly against the public stock market. To satisfy this demand, an increasing number of companies are creating and publishing proprietary private equity benchmarks. While we find these benchmarks to be useful, they all have significant shortcomings so none of them present a perfect solution

The Public Market Equivalent, or PME, is another method of benchmarking private equity. This method compares PE returns to a public benchmark by giving the benchmark a hypothetical return had the investor's cash flows been invested in the public index rather than the private equity investments. While difficult to produce, this method provides a good sense of the opportunity cost of having invested in private versus public equity, and has grown ever more popular.

Conclusion

As opportunities in the public space narrow, opportunities in private markets continue to expand and grow. Private equity is one of the most misunderstood asset classes, but understanding the fundamentals can help investors become more familiar with its unique features and gain confidence in developing a thoughtful strategy for incorporating PE into an investment portfolio.

Private equity offers one of the strongest and most consistent avenues for delivering long-term returns. PE overall has consistently outperformed public equity, and a carefully selected, well-built private equity portfolio has enormous potential. However, private equity investing is not for all investors — it requires patience, commitment, and a tolerance for illiquidity and the unique risks that come with private investments.

Our hope is that by sharing some of the fundamentals of private equity investing, we can provide investors with the critical information they need to make educated choices about whether private equity is the right space for them and, if so, how to move forward in building a strategy.

To learn more or discuss how Arnerich Massena can help you add private equity to your investment strategy, please contact us.

ENDNOTES

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ABOUT ARNERICH MASSENA

Arnerich Massena builds lasting legacies in service of a greater good by investing with vision, passion, and purpose. Founded in 1991, Arnerich Massena is an independent, 100% employee-owned investment advisory firm servicing wealth management clients and endowments & foundations from across the United States, providing portfolio management, investment advisory services, and family office services. Arnerich Massena is a Certified B Corporation®.

Focused on client service and investing in change, Arnerich Massena creates portfolios that reflect top-tier research and collaborative expertise cultivated over nearly 30 years. The firm is different by design, bringing innovation and a forward-looking approach to investment research and portfolio construction. Known for successfully investing in high-impact areas like water resources, sustainable agriculture, fisheries, healthcare, and clean energy technology, Arnerich Massena has been a pioneer in the investment industry with alternative investment strategies, global portfolios, and private markets expertise.

Arnerich Massena is dedicated to constantly seeking new opportunities that resonate with clients' values, objectives, and the outcomes they are looking for. The firm strives to be a business that exemplifies both corporate citizenship and professional service, and has received awards for its innovations in corporate philanthropy.

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