



Alternative Investments Compendium

A comprehensive guide for
understanding private capital markets,
hedge funds, and cryptocurrency assets.

Q4 2021

iCapital
NETWORK

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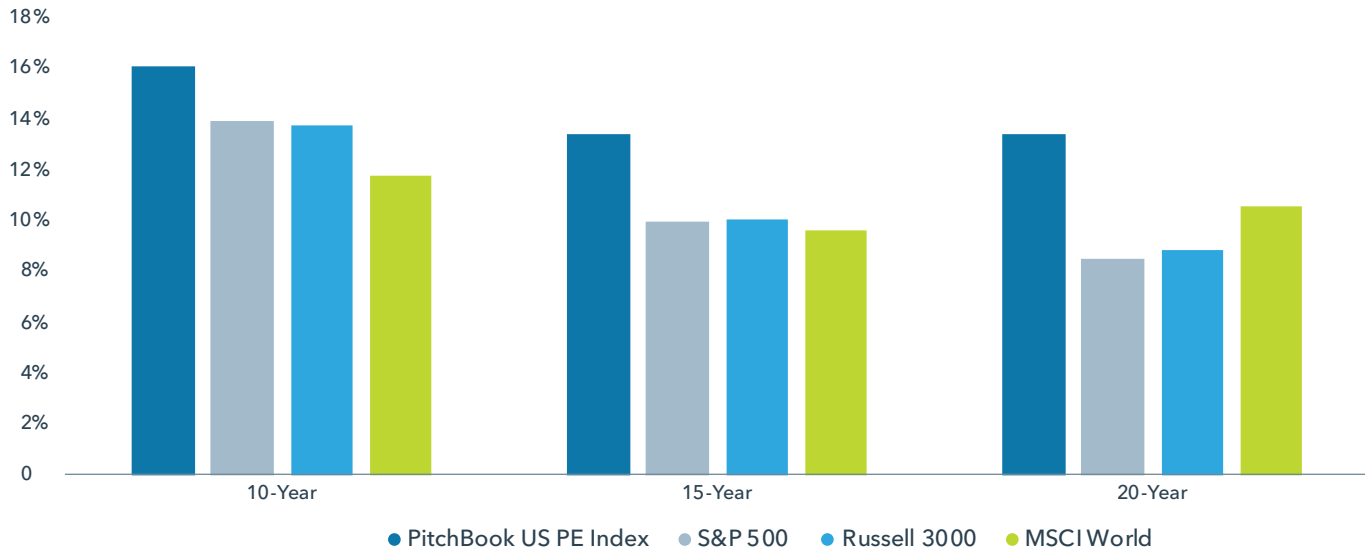
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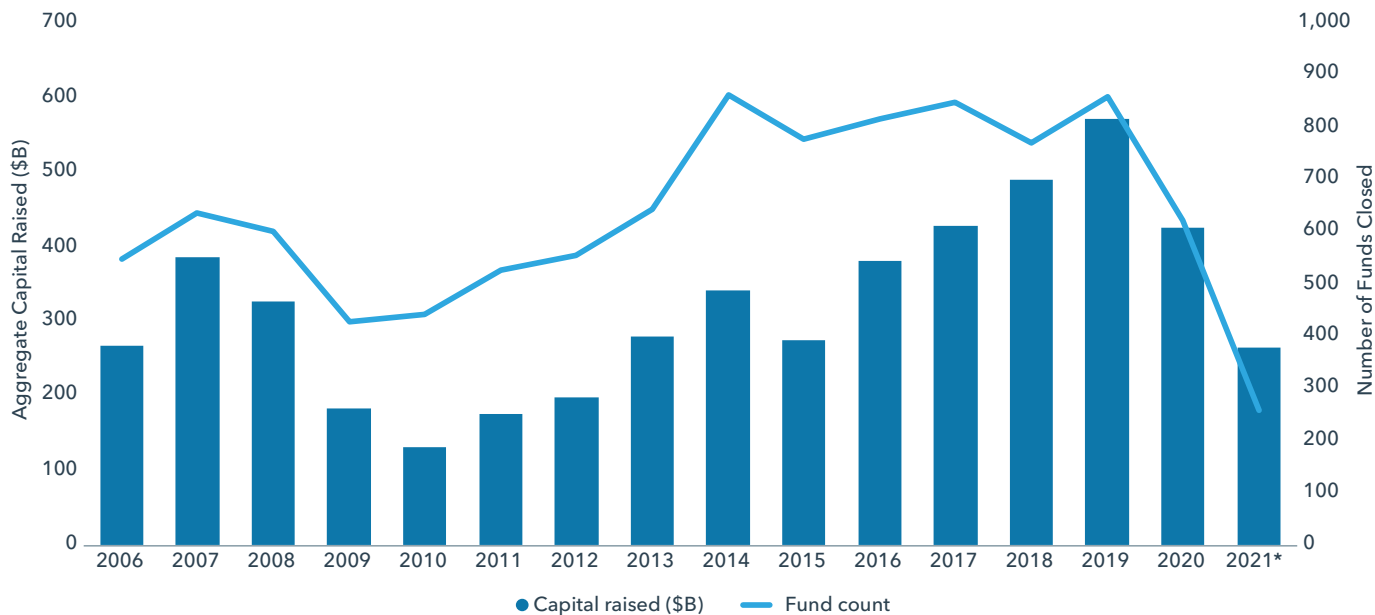
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Private equity continues to outperform major stock market indices over the long term.



Private equity fundraising rebounded significantly in 1H 2021, driven by larger funds from more established managers.

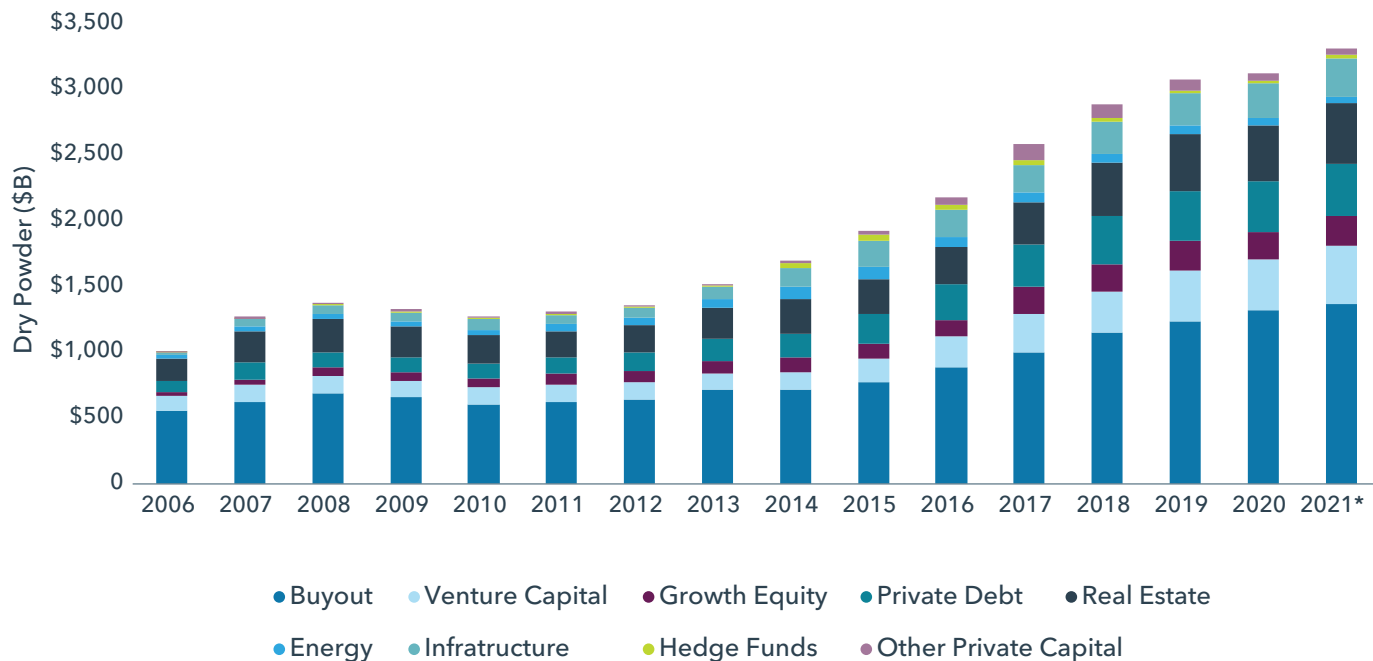


*As of June 30, 2021.

Source: PitchBook. Past performance is not indicative of future returns. For illustrative purposes only.

Private capital dry powder increased in 1H 2021, fueled by a strong fundraising environment.

Global Private Capital Dry Powder

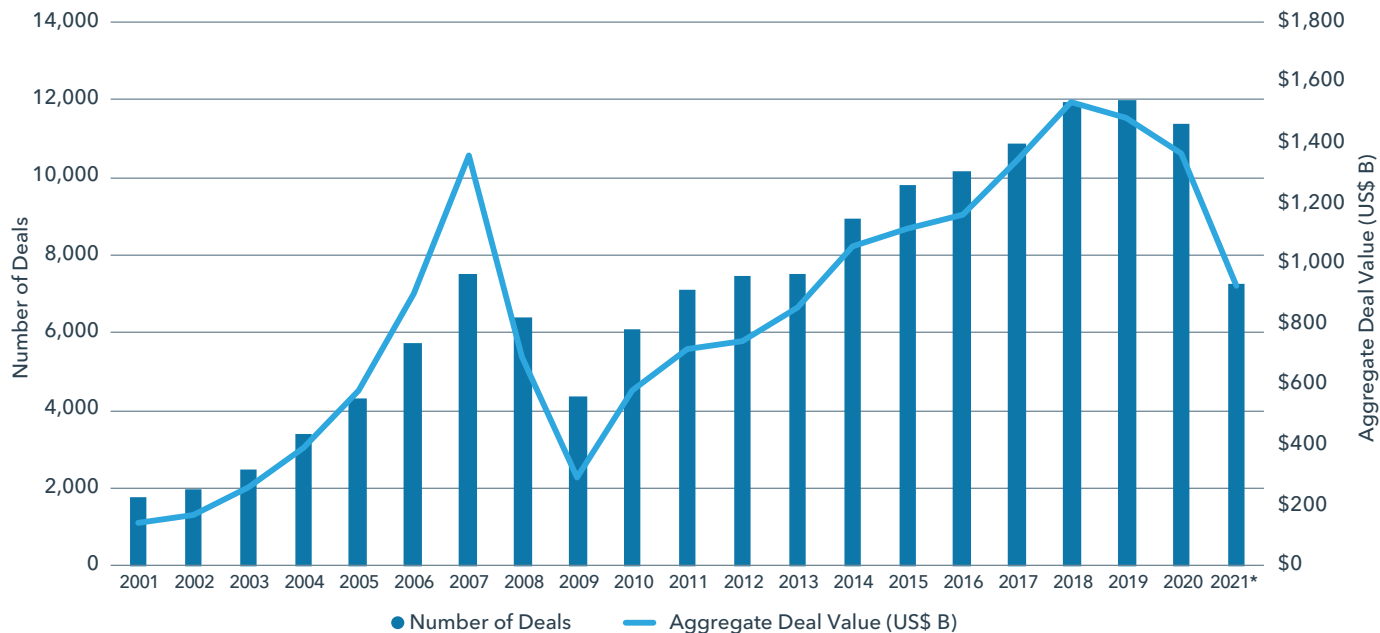


*As of March 31, 2021.

Source: PitchBook. For illustrative purposes only.

Deal activity in 2021 has reaccelerated and is on pace to eclipse prior records for number of deals and deal value.

Global Private Equity Deal Activity, 2001 - Q2 2021

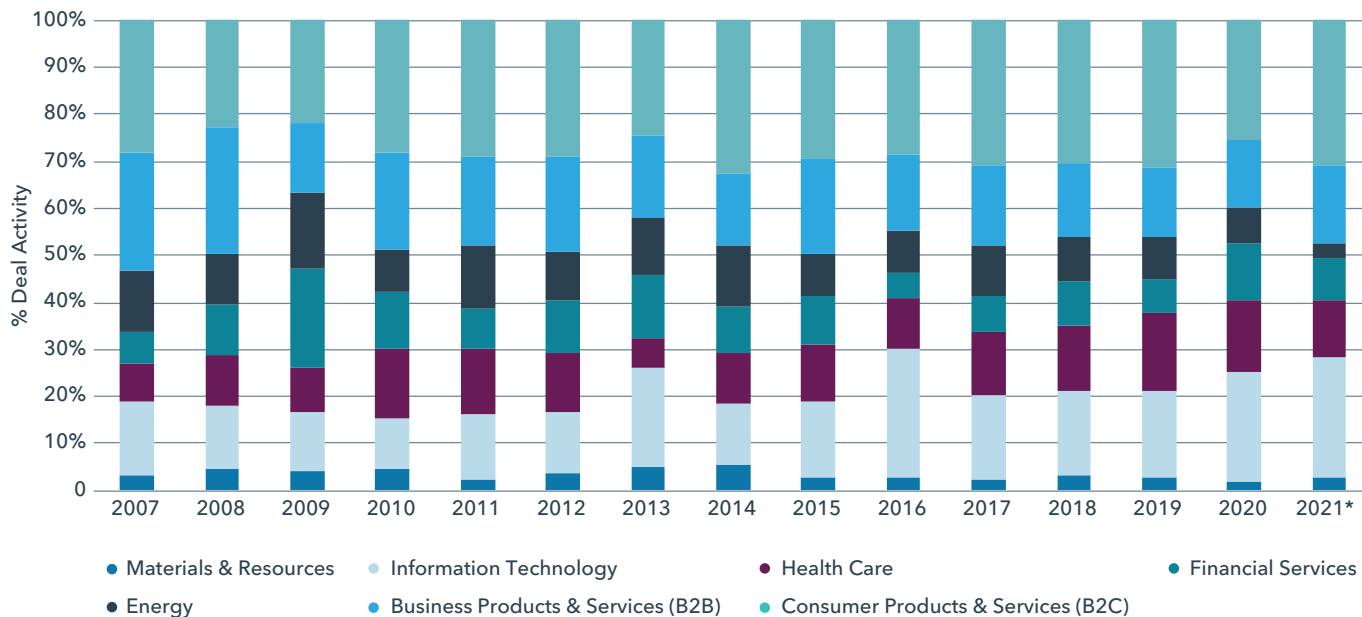


*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

The Consumer Products & Services and Technology sectors led deal activity while Energy continued to decline.

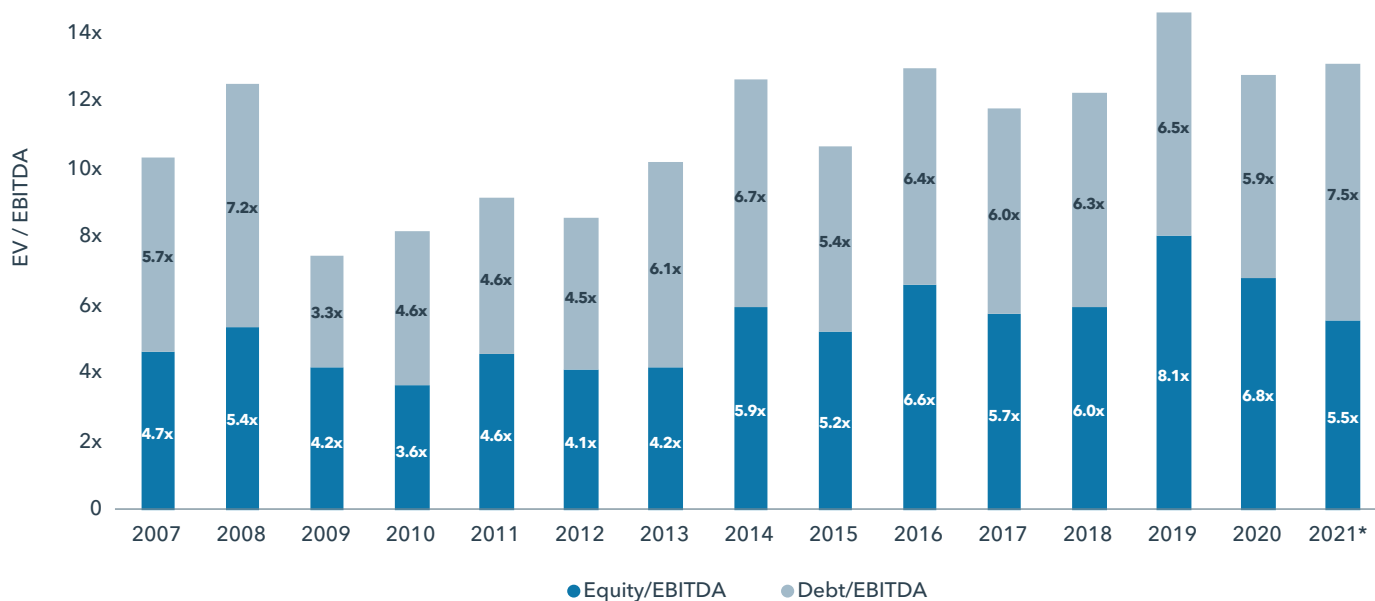
U.S. Private Equity Deal Activity, 2007 - Q2 2021



*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

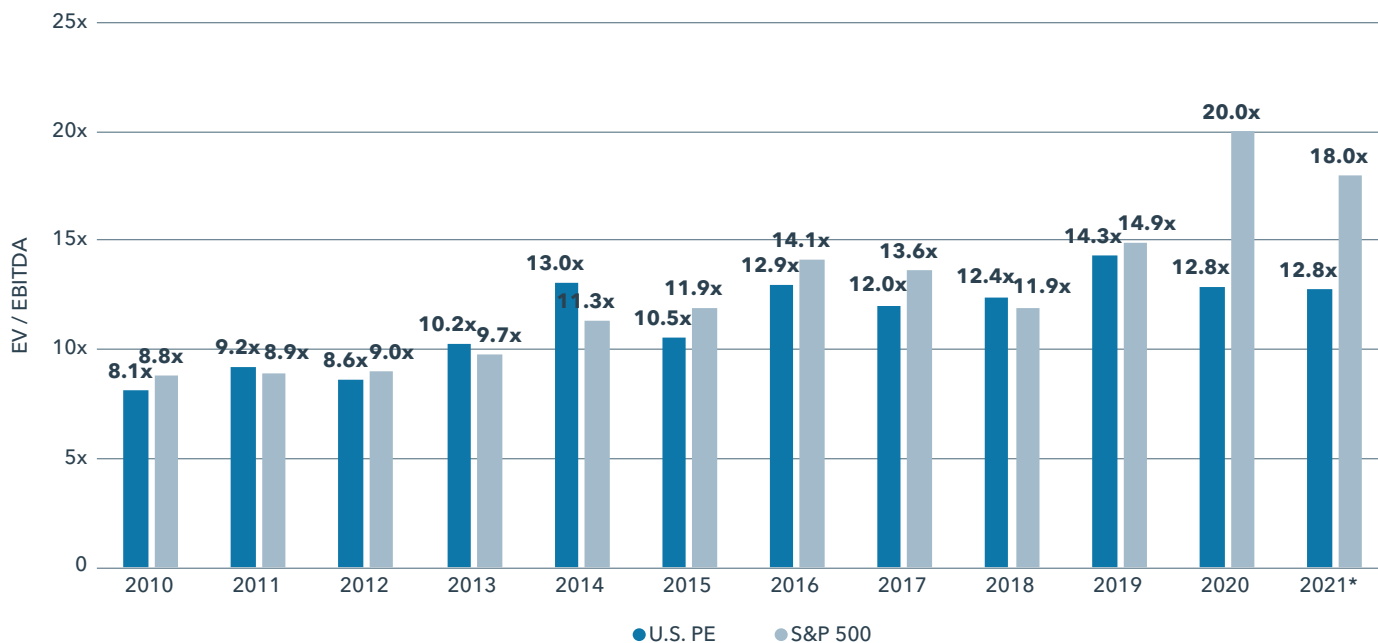
1H 2021 saw a dramatic increase in buyout LTV ratios with debt levels reaching an all-time high.



*As of June 30, 2021.

Source: PitchBook, PitchBook's 2020 Annual US PE Breakdown. For illustrative purposes only.

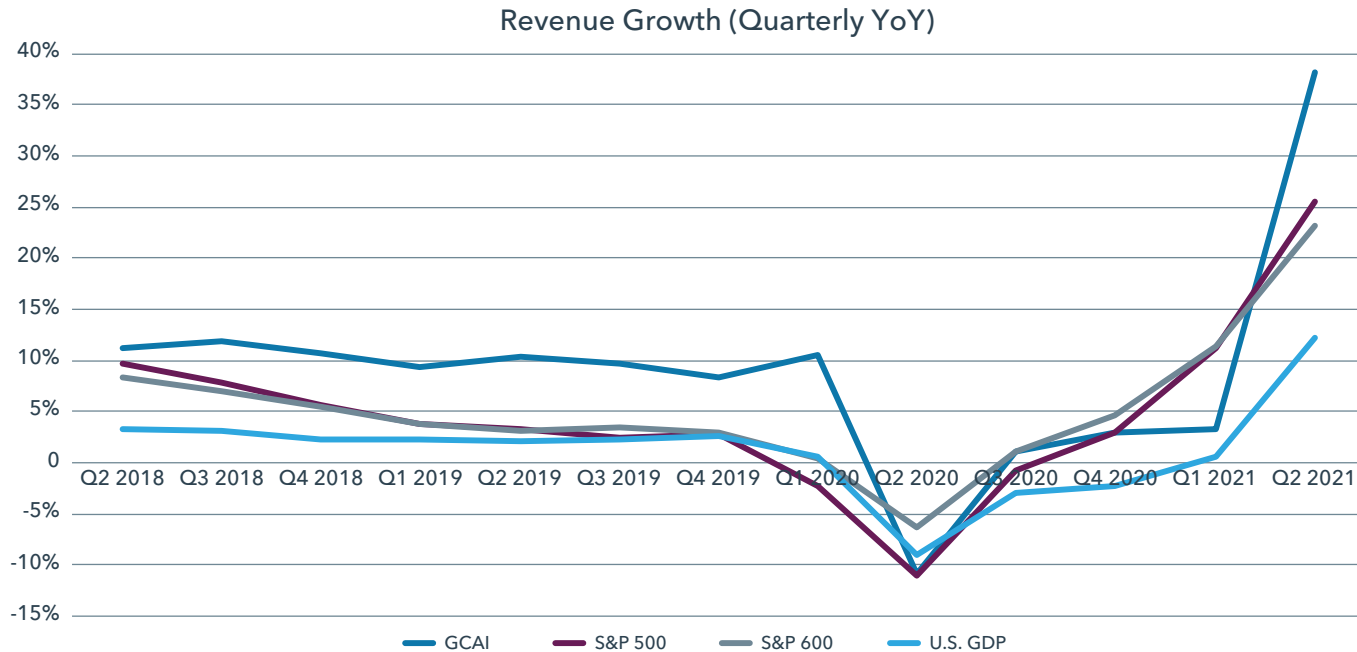
Public market valuations were significantly higher than private market valuations.



*As of June 30, 2021.

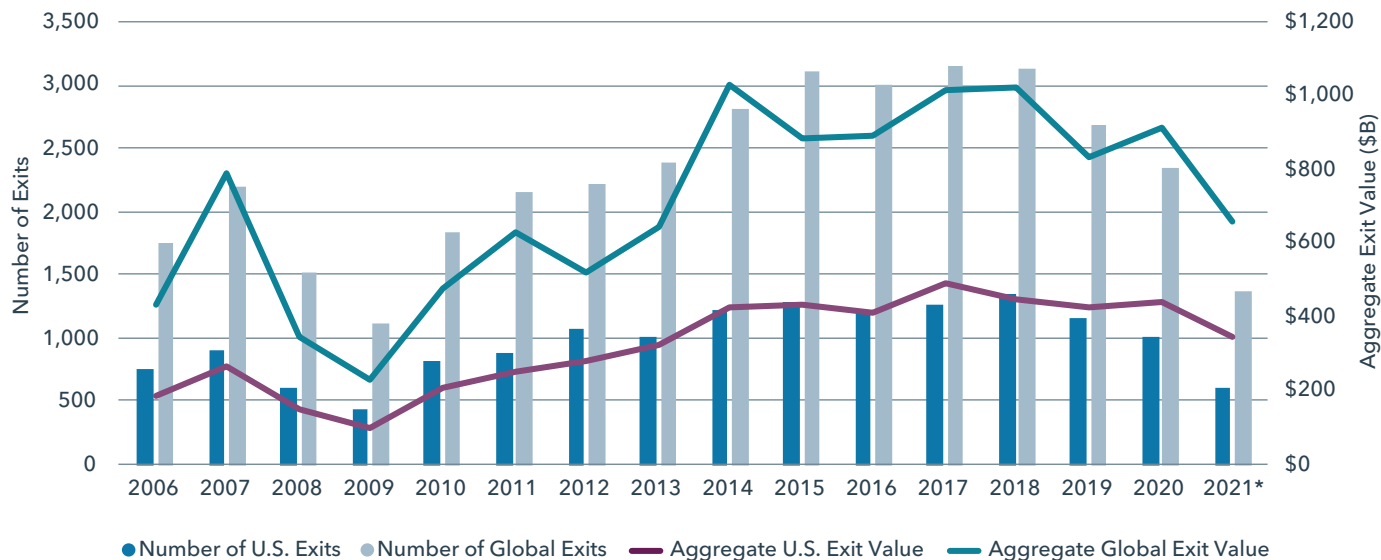
Source: PitchBook's Q2 2021 US PE Breakdown for U.S. PE and S&P 500 data; Partners Group for Russell 2000 data. For illustrative purposes only.

Private middle market and public companies rebounded with accelerated growth in Q2 2021.



Global and U.S. private equity exits saw a rapid acceleration in 1H 2021, and exit values are on pace to exceed prior full-year records.

Number and Aggregate Value of Exits, 2006 - Q2 2021

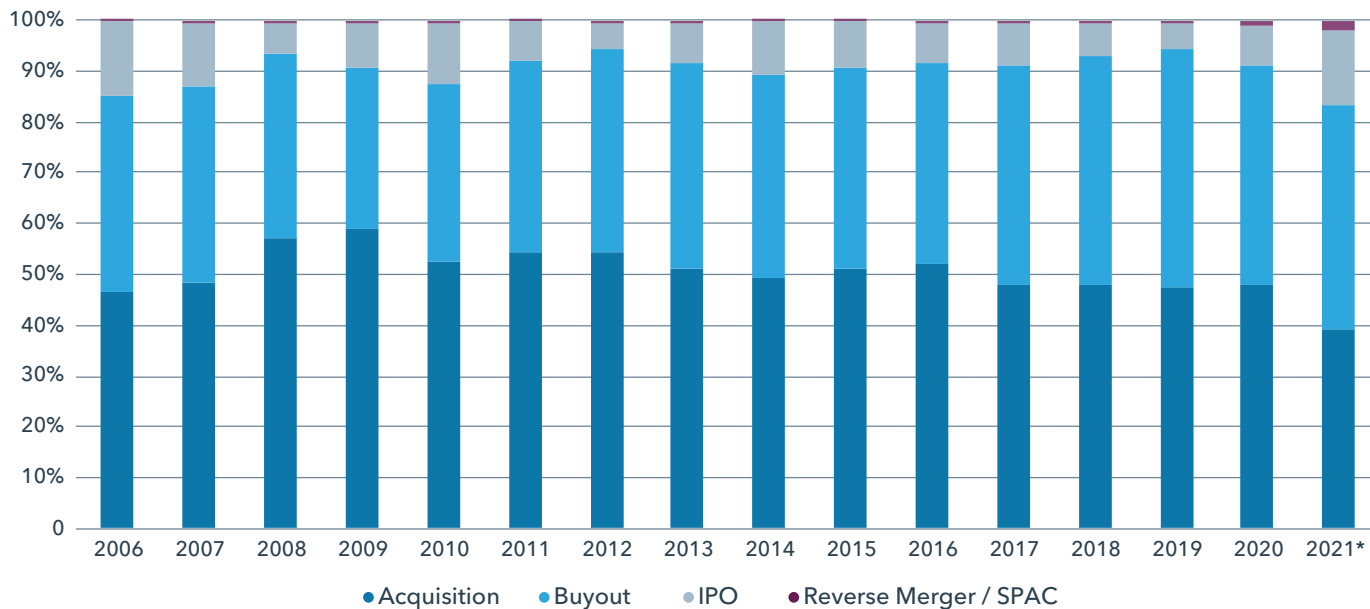


*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

Despite the growth in IPOs and SPACs, buyouts and acquisitions remain the two largest sources of U.S. private equity exits.

U.S. Private Equity Exit Environment, 2006 - Q2 2021



*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.



PRIVATE DEBT

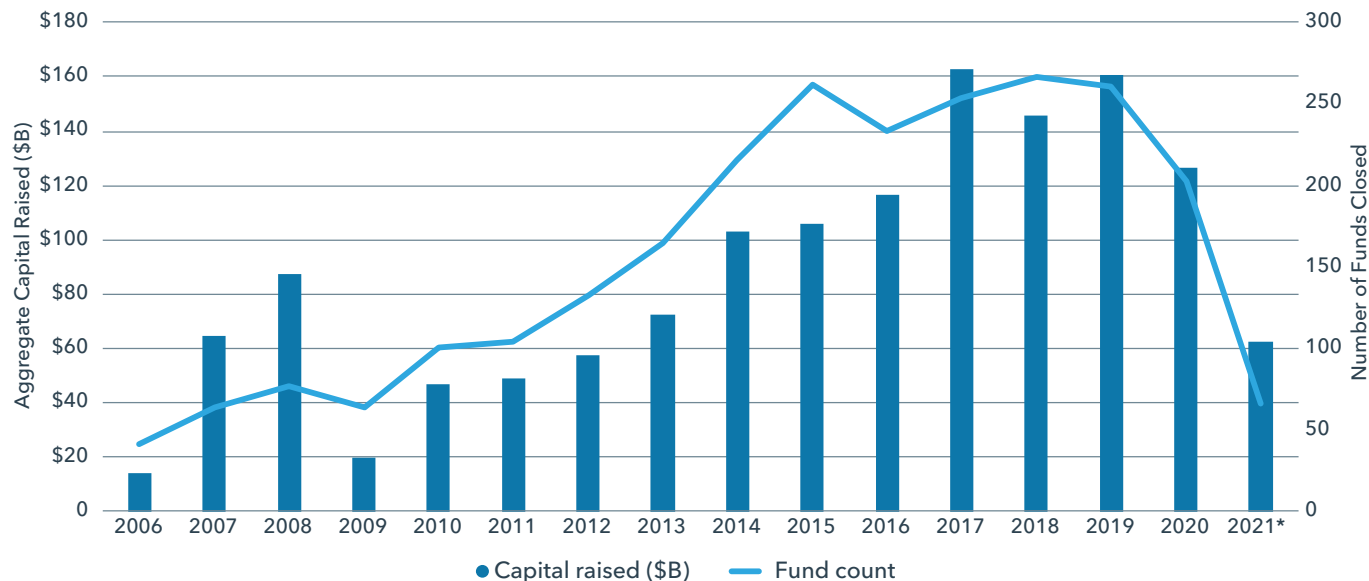
Private credit continues to generate strong, long-term returns on both an absolute and a risk-adjusted basis, compared with public fixed income indices.

Index	Total Returns (%)				Standard Deviation (%)			
	3-Month	1-Year	3-Year	5-Year	3-Month	1-Year	3-Year	5-Year
Bloomberg Barclays U.S. Aggregate Index	0.05	(0.90)	5.36	2.94	NA	3.05	3.54	3.31
ICE BofA ML US High Yield Index	0.94	11.46	6.62	6.35	NA	3.87	9.47	7.46
S&P/LSTA Leveraged Loan Index	1.09	8.39	4.14	4.58	NA	2.2	8.8	6.81
Cliffwater Direct Lending Index	3.96	15.20	8.43	8.92	NA	0.59	4.71	3.62

Denotes private market index

Private debt fundraising continues to be concentrated among larger, more established managers who oversee more capital as fund counts decline.

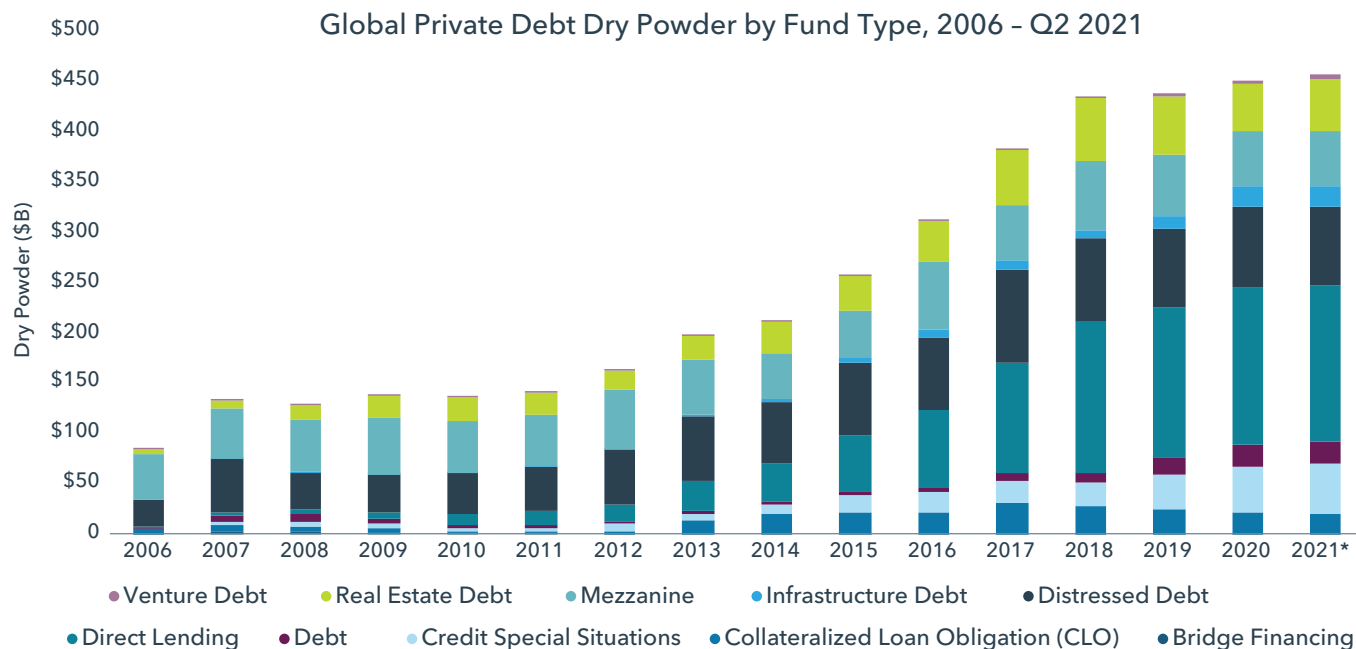
Global Private Debt Fundraising, 2006 - Q2 2021



*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

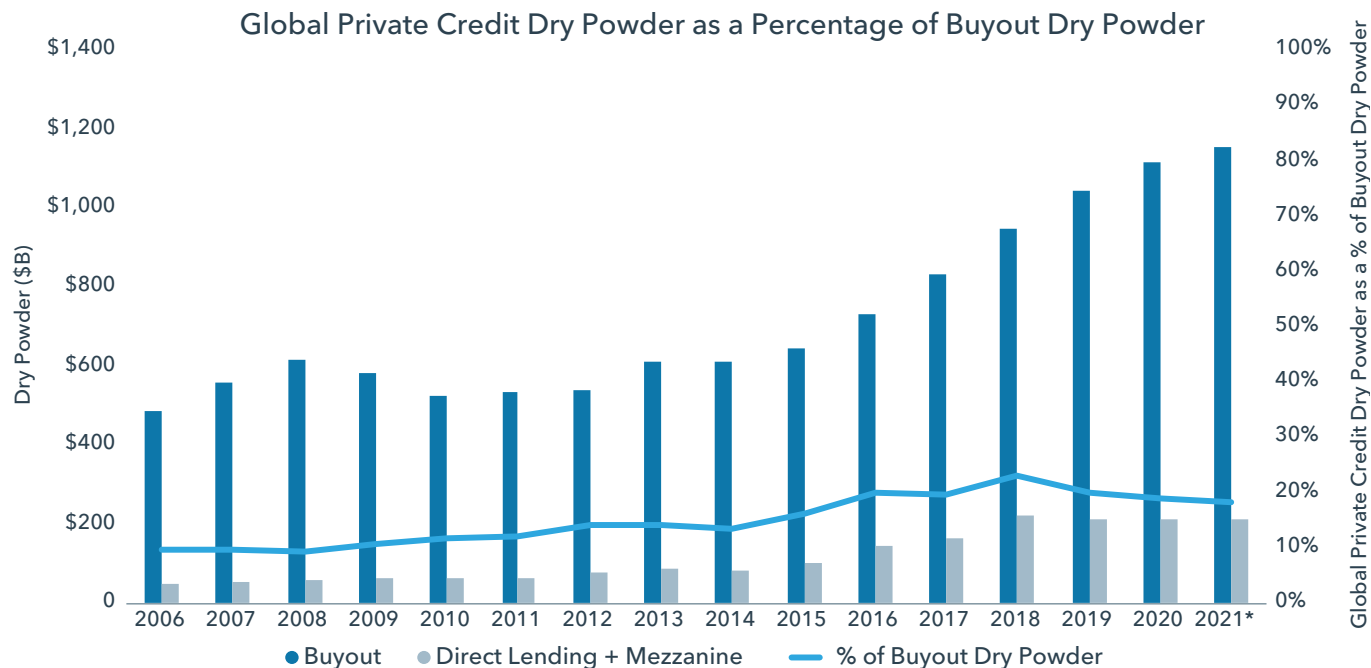
Private debt dry powder continues to increase,
and direct lending now accounts for a third of all dry powder.



*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

As a percentage of buyout dry powder, private debt remains relatively small and continues to trend lower.



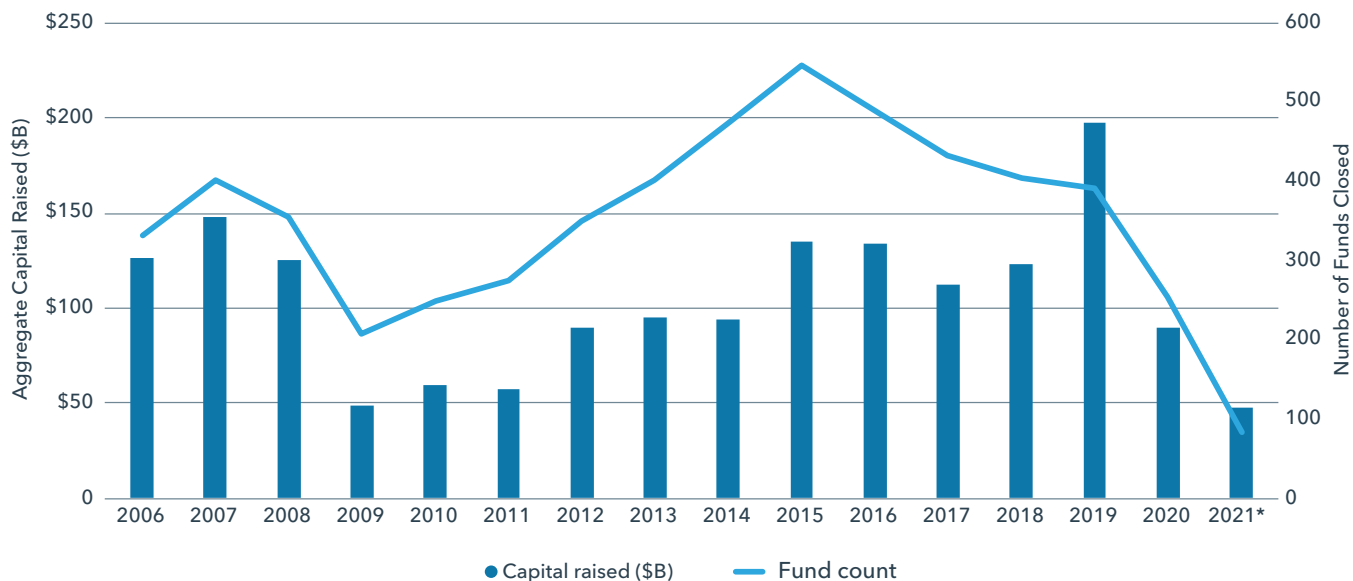
*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.



Real estate fundraising continues to be concentrated among larger, more established managers who oversee more capital as fund counts decline.

Global Closed-end Private Real Estate Fundraising, 2006 - Q2 2021

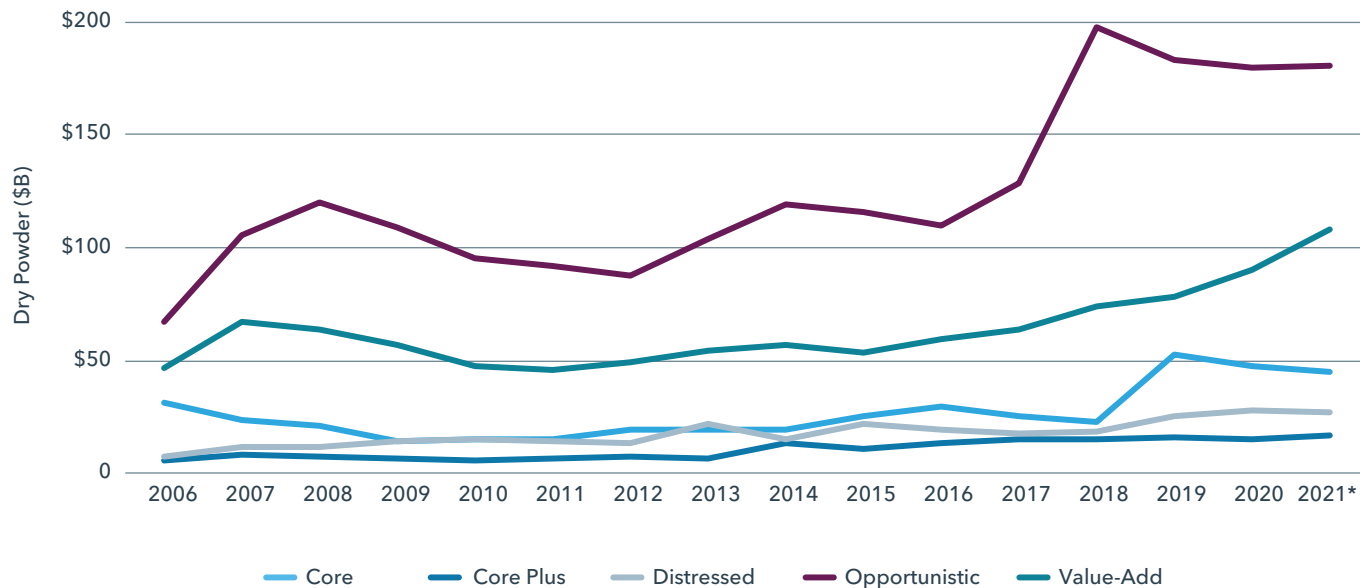


*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

Value-add real estate dry powder grew amid strong fundraising.

Real Estate Dry Powder by Strategy

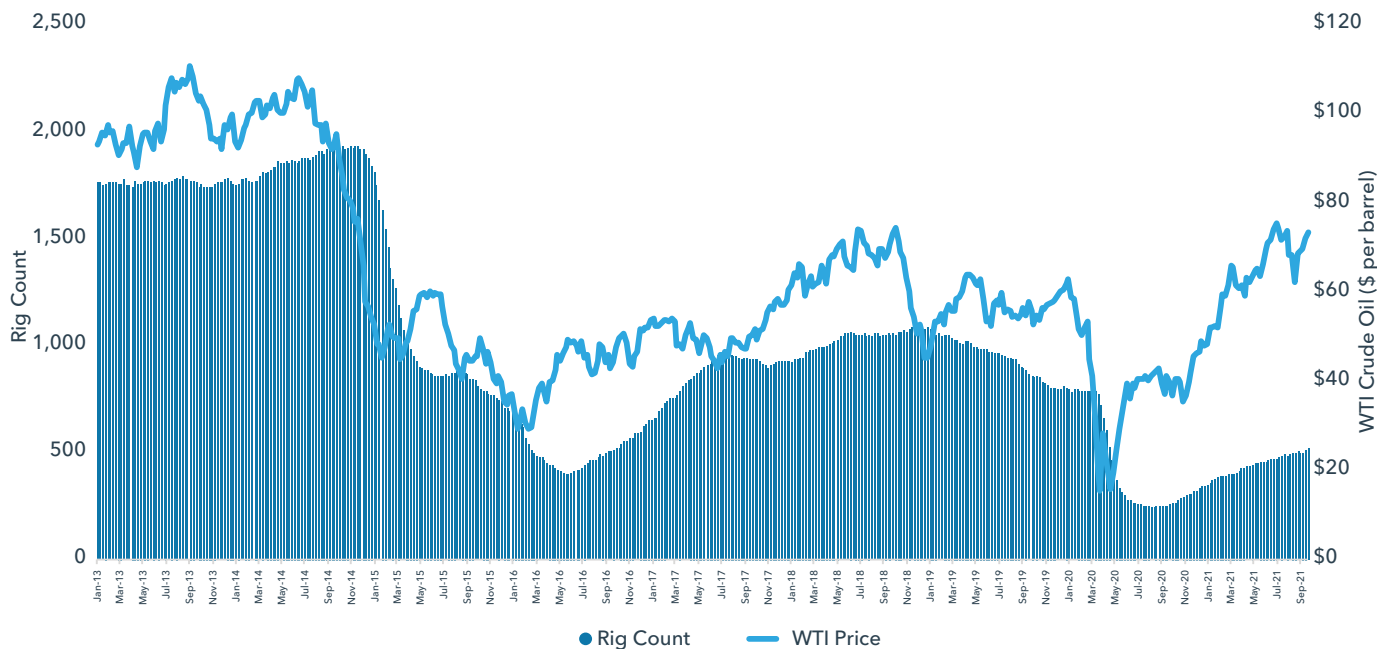


*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.



U.S. rig counts continued to recover through 1H 2021
with WTI nearing \$80 per barrel – a level not seen since 2014.

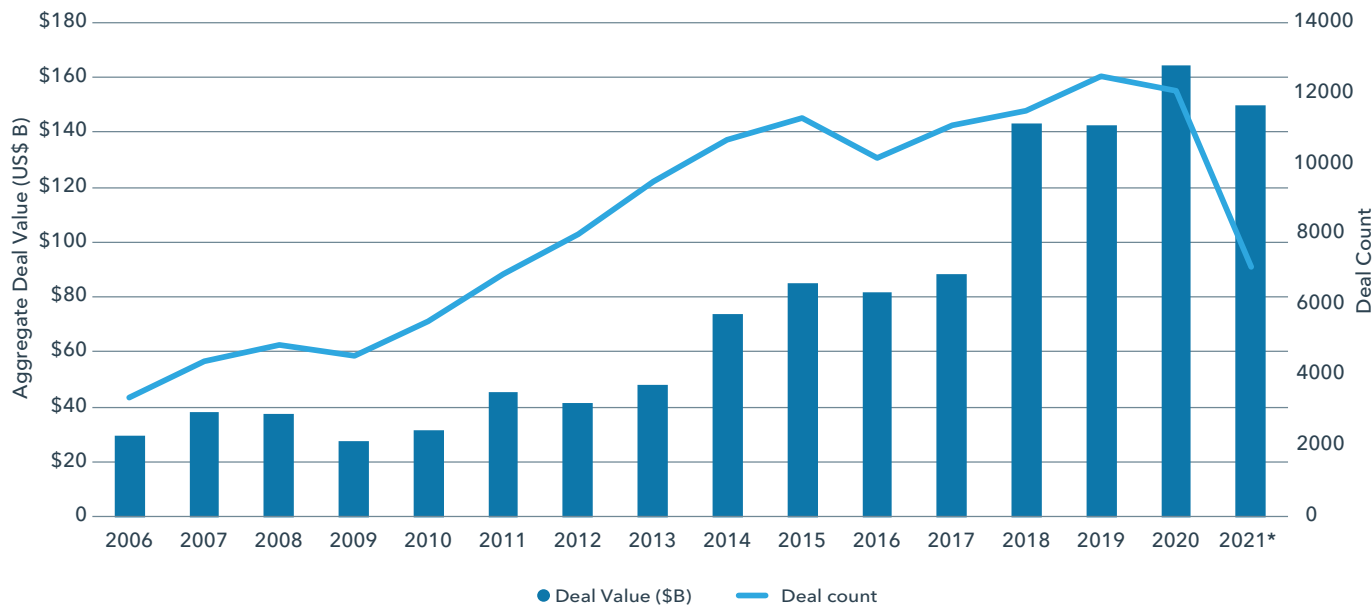


Source: U.S. Department of Energy; Baker Hughes Corporation Rig Count. For illustrative purposes only.

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NETWORK | VENTURE CAPITAL

U.S. venture capital continues to see record levels of deal activity with greater dollar amounts concentrated in fewer transactions as mega-rounds rise.

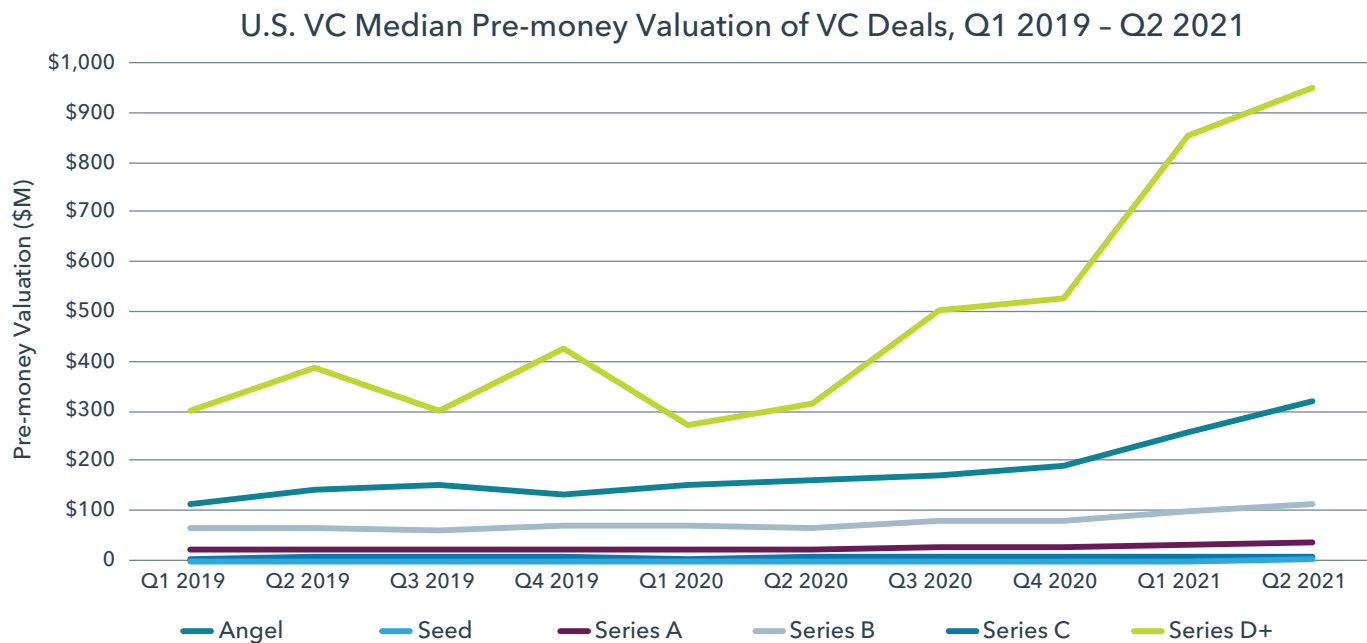
U.S. VC Deal Activity, 2006 - Q2 2021



*As of June 30, 2021.

Source: PitchBook. For illustrative purposes only.

1H 2021 saw a meaningful spike in the pre-money valuation of Series C and later rounds.
However, angel and seed rounds remain largely unaffected.



*As of June 30, 2021.

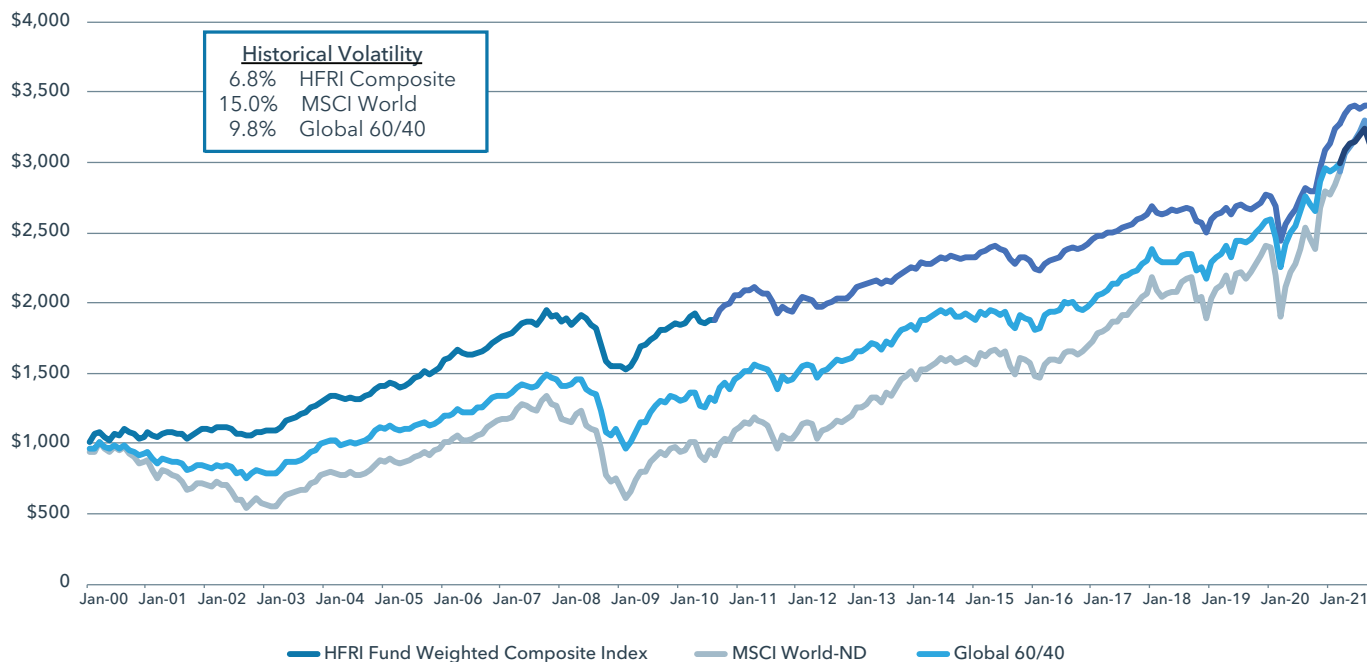
Source: PitchBook. For illustrative purposes only.



HEDGE FUNDS

Hedge funds have outperformed the broader global equity markets over the long term with lower volatility.

\$1,000 invested in 2000 and its worth at September 30, 2021.



Source: eVestment and Hedge Fund Research, Inc., as of September 30, 2021. Past performance is not indicative of future returns. For illustrative purposes only.

Hedge fund performance has been broadly positive in 2021.

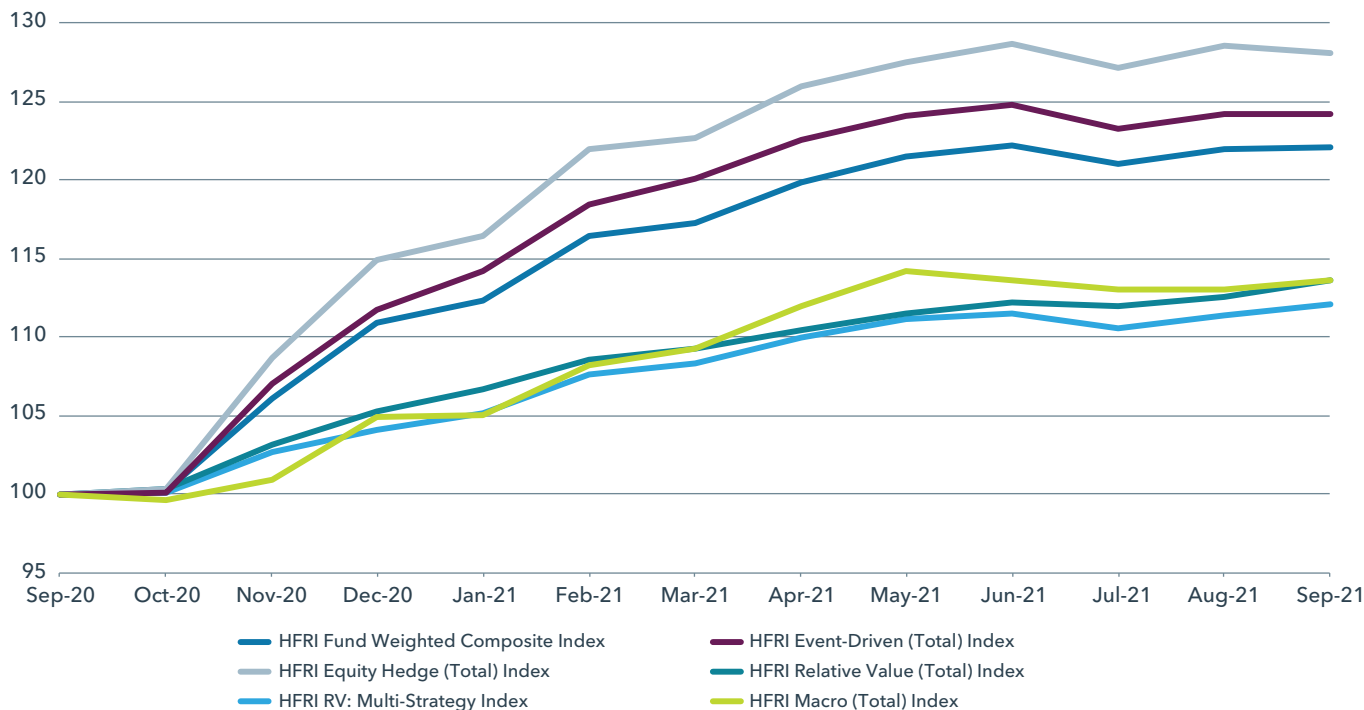
Hedge Funds (By Strategy)	YTD 2021	Last 1 Yr	Last 3 Yrs	Last 5 Yrs	Last 10 Yrs
HFRI Fund Weighted Composite Index	9.69%	21.65%	8.39%	7.23%	5.82%
HFRI Relative Value Index	7.39%	13.06%	4.83%	4.93%	5.25%
HFRI RV: Multi-Strategy Index	7.76%	12.21%	5.79%	5.02%	4.86%
HFRI RV: FI-Asset Backed Index	6.90%	11.44%	3.64%	5.07%	6.57%
HFRI Event-Driven (Total) Index	11.25%	24.28%	7.54%	7.33%	6.32%
HFRI ED: Distressed/Restructuring Index	14.78%	27.12%	7.61%	7.82%	6.36%
HFRI Equity Hedge (Total) Index	10.95%	27.47%	10.82%	9.64%	7.60%
HFRI EH: Sector - Technology Index	5.14%	17.01%	14.52%	13.78%	9.91%
HFRI EH: Sector - Healthcare Index	0.67%	15.87%	11.57%	12.55%	12.80%
HFRI Macro (Total) Index	8.09%	13.37%	5.83%	3.39%	2.04%
HFRI Macro: Discretionary Thematic Index	3.86%	11.50%	7.29%	4.71%	2.50%
HFRI Macro: Systematic Diversified Index	7.61%	13.79%	4.64%	1.93%	1.13%
Indices					
MSCI World - Net Total Return (\$)	13.04%	28.82%	13.14%	13.74%	12.68%
S&P 500 Total Return	15.92%	30.00%	15.99%	16.90%	16.63%
Nasdaq Composite	12.66%	30.26%	22.67%	23.37%	20.93%
Russell 2000	12.41%	47.68%	10.54%	13.45%	14.63%
Global 60/40	6.02%	16.29%	10.11%	9.30%	8.51%
Bloomberg Barclays US Aggregate	(1.55%)	(0.90%)	5.36%	2.94%	3.01%

Source: eVestment and Hedge Fund Research, Inc., as of September 30, 2021. Past performance is not indicative of future returns. For illustrative purposes only.

Equity hedge and event driven strategies have continued to lead in 2021.

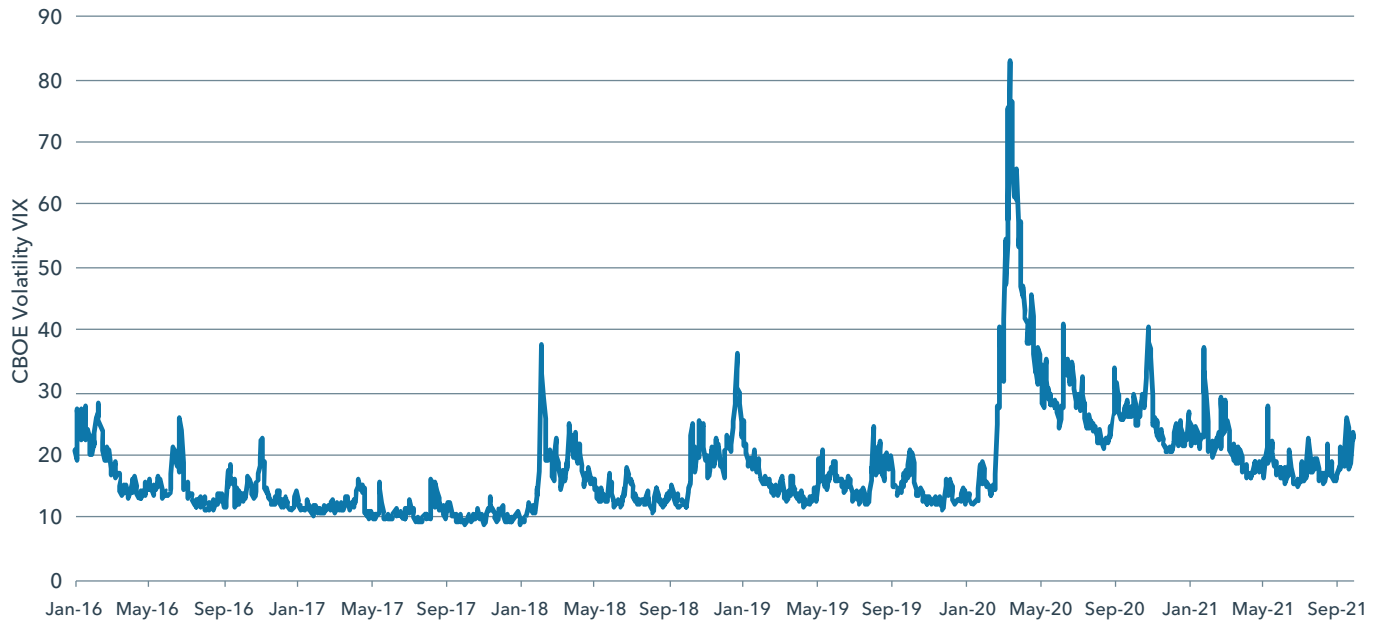
Event Driven 10.57%	Global 60/40 16.23%	Multi-Strategy (0.23%)	Global 60/40 19.10%	Equity Hedge 17.41%	Event Driven 11.25%
Relative Value 7.67%	Equity Hedge 13.29%	Relative Value (0.43%)	Equity Hedge 13.71%	Global 60/40 14.37%	Equity Hedge 10.95%
Multi-Strategy 6.36%	Event Driven 7.59%	Event Driven (2.13%)	Event Driven 7.49%	Event Driven 8.84%	Global Macro 8.09%
Global 60/40 5.49%	Relative Value 5.14%	Global Macro (4.08%)	Relative Value 7.42%	Multi-Strategy 6.75%	Multi-Strategy 7.76%
Equity Hedge 5.47%	Multi-Strategy 4.09%	Global 60/40 (5.43%)	Global Macro 6.50%	Global Macro 5.31%	Relative Value 7.39%
Global Macro 1.03%	Global Macro 2.20%	Equity Hedge (7.14%)	Multi-Strategy 5.29%	Relative Value 3.66%	Global 60/40 6.02%
2016	2017	2018	2019	2020	YTD 2021

Hedge fund strategies delivered between 12% and 28% during the trailing 12 months.



Source: Hedge Fund Research, Inc. and iCapital calculations, as of September 30, 2021. Past performance is not indicative of future returns. For illustrative purposes only.

Equity volatility fell in 2021 but remains above the lows of recent years.



Growth topped value in 2021, continuing its outperformance over the past decade.

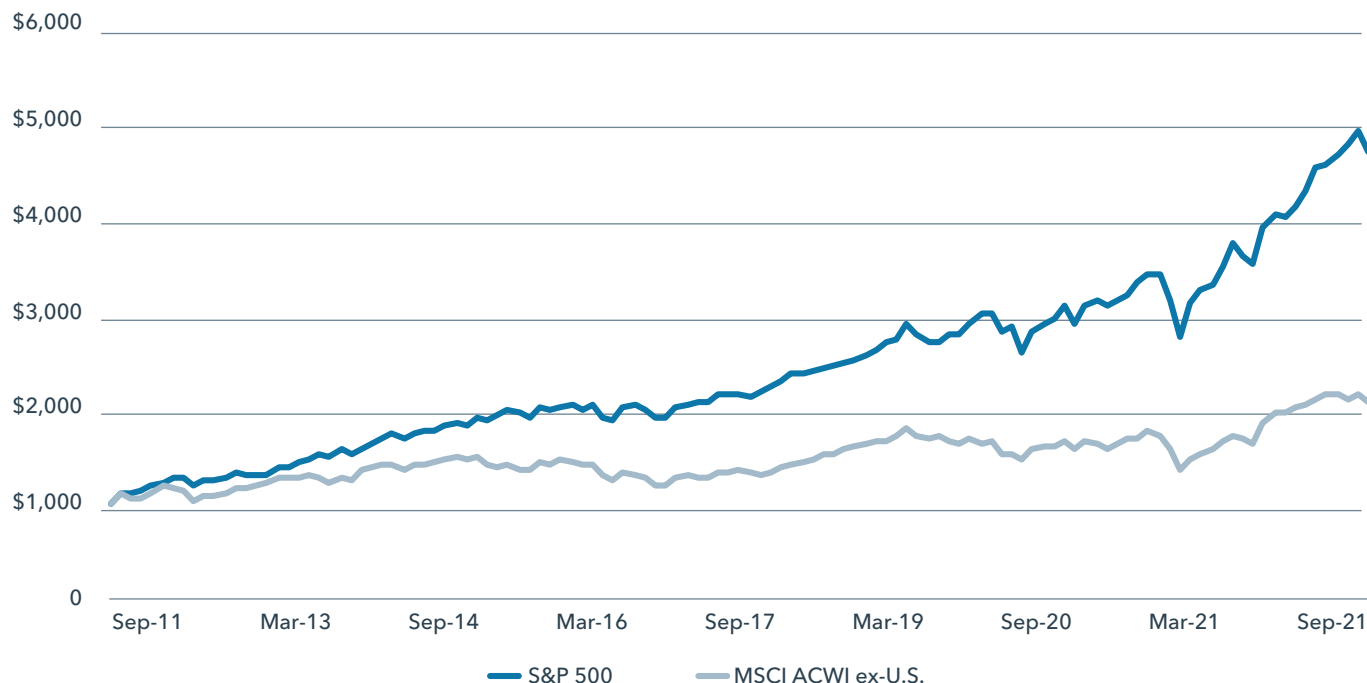
The performance of \$1,000 invested in value and growth strategies, respectively, between 2011 and September 30, 2021.



Source: eVestment, as of September 30, 2021. Past performance is not indicative of future returns. For illustrative purposes only.

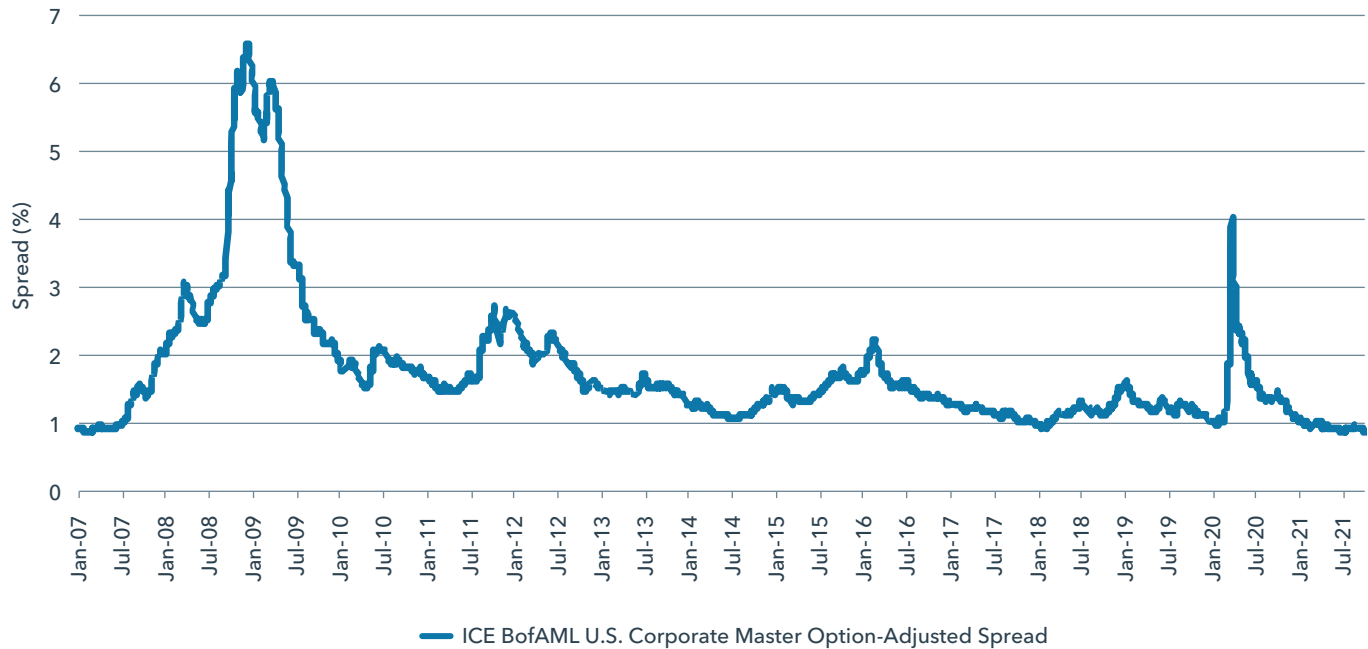
The U.S. has outperformed international markets by more than 250% cumulatively during the past decade.

The performance of \$1,000 invested in U.S. and international stocks, respectively, since 2011.

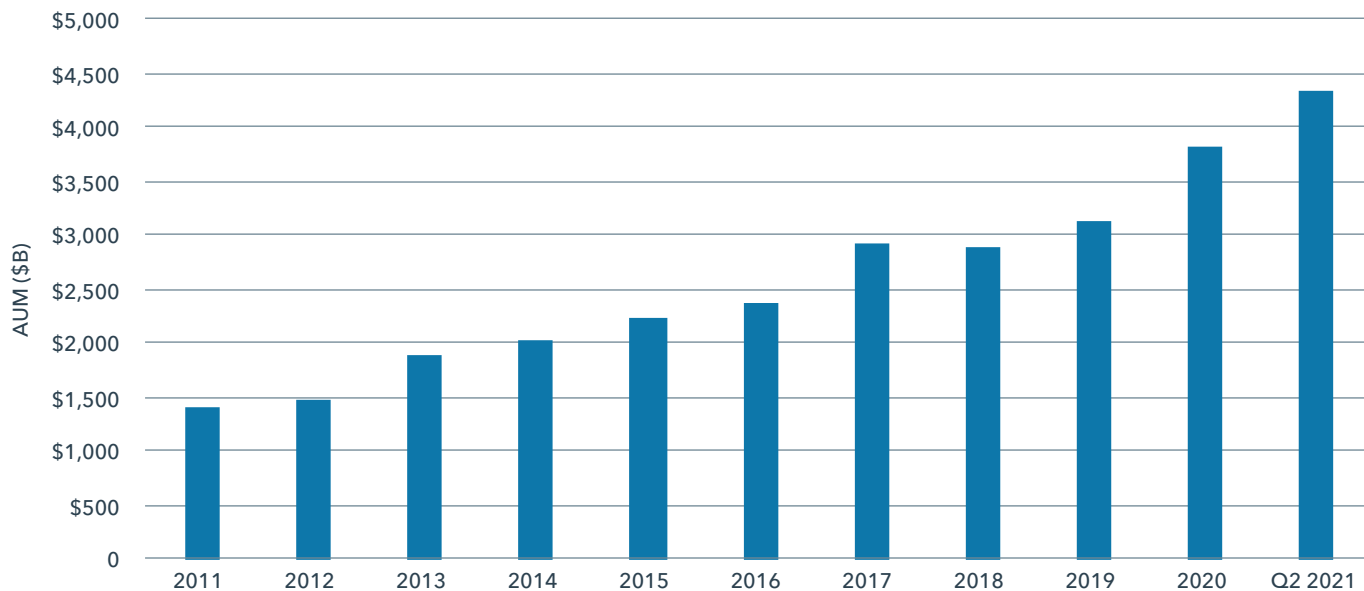


Source: eVestment, as of September 30, 2021. Past performance is not indicative of future returns. For illustrative purposes only.

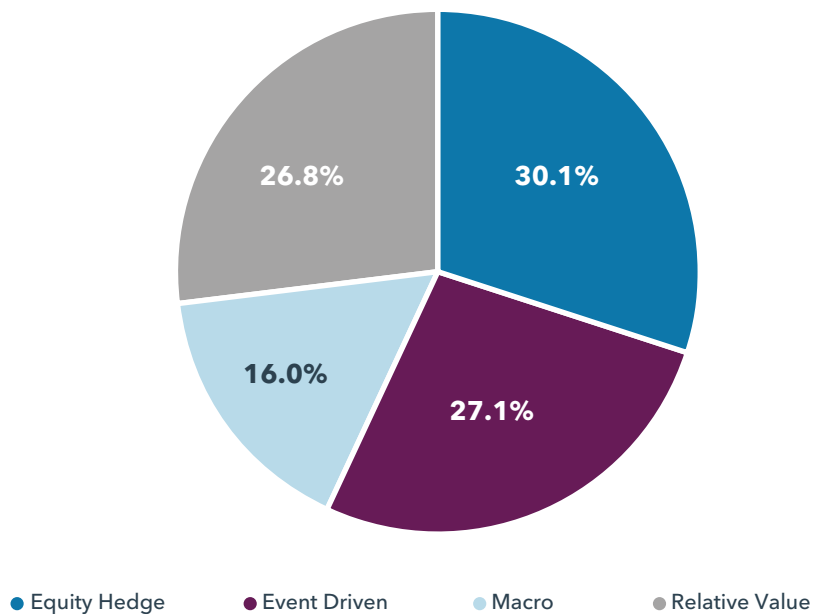
Credit spreads have reverted to their lows following the spike in March 2020.



Strong performance helped push industry assets beyond \$4 trillion for the first time.



Net inflows were broadly diversified across the major categories in 2021.



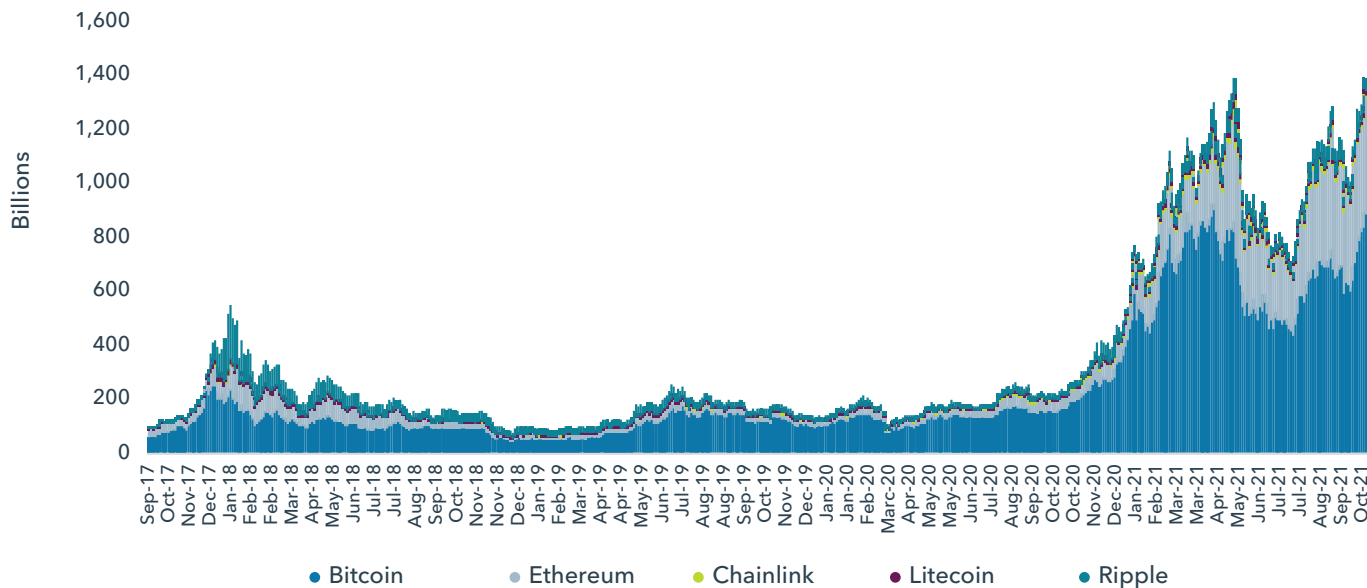
Hedge fund launches are on pace to exceed liquidations for the first time since 2014.





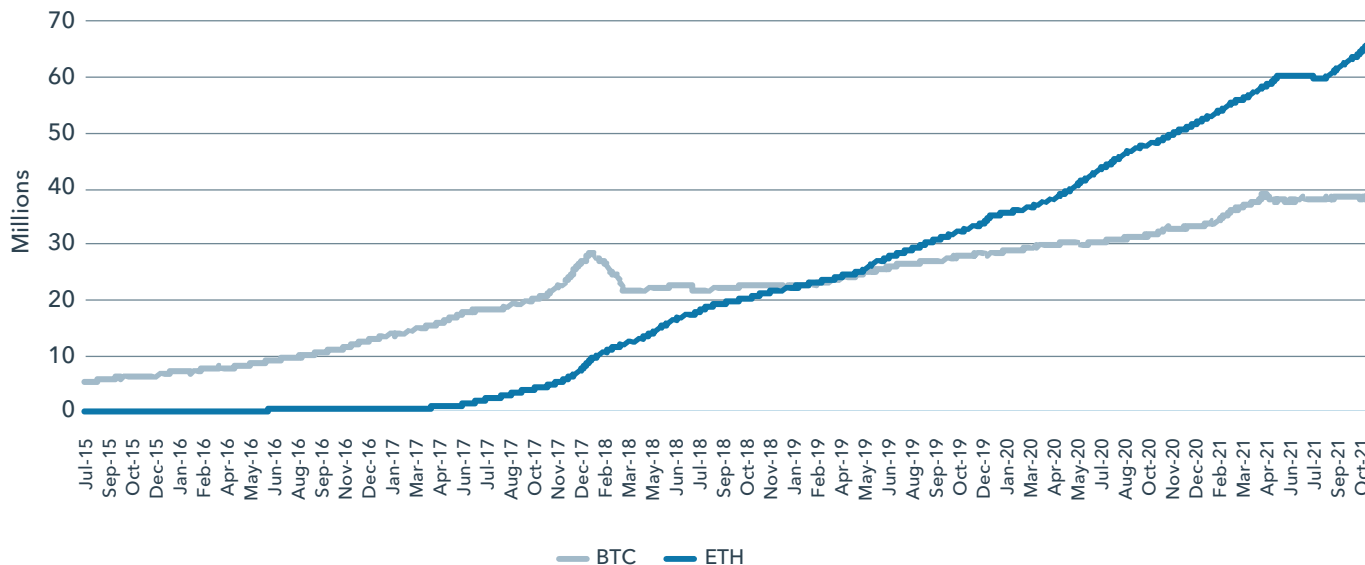
Multiple use cases are driving cryptocurrency adoption and diversification,
leading to growth in market capitalization.

Market Capitalization of Select Cryptocurrencies, 2017 - 2021



Cryptocurrencies continue to show increasing adoption as the number of Bitcoin and Ethereum addresses grow.

Growth in Bitcoin and Ethereum Addresses



PRIVATE EQUITY GLOSSARY

TERM

DEFINITION

Accredited Investor

In the U.S., this term is used by the Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated. This can include high net worth individuals (HNWI), banks, insurance companies, brokers and trusts.

To be an accredited investor, an individual must have an annual income exceeding \$200,000, or \$300,000 for joint income, for the last two years with expectation of earning the same or higher income in the current year. An individual is also considered an accredited investor if they have a net worth exceeding \$1 million, either individually or jointly with their spouse. Also, if a person can demonstrate sufficient education or job experience showing their professional knowledge of unregistered securities, they too can qualify to be an accredited investor. In order to invest in most PE offerings a client needs to be an Accredited Investors and Qualified Purchaser (defined below).

Alternative Investments

An alternative investment is an asset that is not one of the conventional investment types, such as stocks, bonds and cash. Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of the complex nature and limited regulation of the investments.

The most common alternative investments are in private equity, real estate, hedge funds and commodities. Alternatives tend to have different attributes to typical stock and bond investments from a risk return and time horizon perspective, so adding them to a portfolio may provide broader diversification, reduce risk, and enhance returns. Historically, alternative investments have played a major role in institutional investors' portfolios, such as endowments.

Benchmark

A benchmark is a standard against which the performance of a fund or portfolio can be measured. Generally, broad market and market-segment stock and bond indexes are used for this purpose.

Benchmarks are used to see how a fund has performed compared to peers. For example, when investing in a 2007 buyout fund, one would want to see how it performed compared to other 2007 buyout funds. Returns are divided into four quartiles: the top quartile (the 25% of funds who performed best), the second quartile, the third quartile and lastly the fourth quartile (the 25% of funds who had the worst performance). Performance can also be benchmarked against a public index (e.g. S&P 500) to show relative performance against the public markets over a given period of time. Typically at the portfolio level, public markets are used to benchmark for private markets funds. This is helpful in order to determine the illiquidity premium (see glossary term) associated with a private markets investment.

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Buyout Investment Strategy	<p>A buyout is generally the acquisition of an established & mature company with positive cashflows. Buyouts of such companies normally include change of control & ownership to the new owner. Buyouts can span investments in small, mid-sized or large companies.</p> <p><i>A buyout is typically when a private equity firm comes in and take ownership of a public or private company by buying part or all of its equity. The PE firm's aim is to improve how a company is managed during their ownership and provide resources & guidance for long-term strategic planning and execution.</i></p>
Capital Call (also known as a Drawdown)	<p>A notification by the fund manager to the investors for cash required to fund investments or fees & expenses. Unlike mutual funds, whereby an investor puts their money into the fund upfront, private equity fund managers ask investors for the money when needed.</p> <p><i>For example, let's say you commit \$100MM to a private equity fund. You aren't required to provide that money all upfront. Each payment is only due once a fund identifies/makes an investment, or when a fund needs to pay down its credit facility, in order to pay for an investor's portion of that particular deal / set of deals / fees.</i></p>
Capital Call Facility (a/k/a Credit Facility, Subscription Line)	<p>Capital call facilities are a short-term funding by banks on a revolving basis to private equity funds to bridge the time between when an investment is made by the fund and when capital contributions are received from investors to finance that investment. These loans are collateralized by underlying investor commitments and are repaid with capital contributions once they are received from investors or by a fund's investment realizations.</p> <p><i>Following on from the capital call explanation above, let's say a PE fund identifies an attractive investment. Instead of requesting cash ("calling capital") from investors, they pay for the investment using borrowed money (from a capital call facility). One of the reasons for doing so includes the fact that it's a quick way to pay for deals and doesn't burden investors with a short notice period to provide funds on time. This practice has gained popularity in the last few years.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Capital Commitment or Total Commitment	<p>The amount of money that an investor commits to investing into a fund. The commitment will be confirmed to the investor at the fund's closing, although capital will only be called as needed during the fund's life.</p> <p><i>This is the overall cash amount than an investor commits upfront to a fund. A fund's total commitment is the aggregate of all its underlying investors' commitments. As discussed earlier, unlike mutual funds, private equity managers do not call capital upfront. Instead investors are bound to a commitment agreement, which PE managers then rely on to make investments.</i></p>
Capital Contributions	<p>A contribution to a fund. Investors make capital contributions over time out of their capital commitment to a fund.</p> <p><i>Contributions occur when a fund manager calls capital from investors in order to fund a deal, fees and expenses and/or to pay down the fund's credit line, and an investor contributes their pro rata share of the necessary amount of capital.</i></p>
Capital Distributions	<p>A distribution from a fund. Distributions occur primarily after investment realizations but can also occur after other income events such as interest or dividend payments. Distributions are primarily made in cash.</p> <p><i>These are cash returns that investors receive back from their alternative fund investments once those funds make a profit. They can be driven by several occurrences: for example, a company has been sold, a recapitalization has occurred, a dividend has been paid, or in the case of credit investments, from interest payments.</i></p>
Carried Interest	<p>Carried interest, or carry, is a share of any profits that the general partners of private equity and hedge funds receive as compensation. This method of compensation seeks to motivate the general partner (fund manager) to work toward improving the fund's performance.</p> <p><i>Carried interest serves as one of the sources of income for a fund manager, traditionally amounting to 20% of the fund's overall profit. This normally kicks in above a certain rate of return, typically an 8% annualized return. For example (for a fund with 20% carry above an 8% hurdle), first a fund must generate an 8% annual return on capital called. Second, the fund manager will receive 100% of all additional distributions until they "catch up" to an overall 20% of all distributions. Thereafter, any distributions in excess of the first two steps are split 80% to the investors/LPs and 20% to the fund manager.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Catch Up	<p>The carried interest catch up refers to the situation in which a fund manager is fully compensated at the agreed-upon rate, once investors have received their preferred return as disclosed in the Partnership Agreement. Under such a fee arrangement, the investor typically still receive profit in addition to their expected return, but only once the manager has received their pre-agreed share.</p> <p><i>If a fund has a 100% catch up provision, then once a fund generates returns above the pre-determined hurdle (typically 8%), a fund manager will typically receive 100% of all distributions until they “catch up” to a pre-determined percentage (typically 20% of all distributions made). Thereafter, returns are split between the fund manager and investors (typically split 80% to investors and 20% to the fund manager).</i></p>
Clawback or Clawback Provision	<p>In private equity, this refers to investors' rights to recover any excess carried interest that has been paid to the General Partner, in cases where subsequent losses mean that the general partners received excess compensation.</p> <p><i>In other words, this refers to investors' rights (towards or at the end of a fund's life) to reclaim part of the fund manager's carried interest (see carry explanation above). This typically happens when a fund manager takes their carried interest share early on in a fund's life due to early strong performance, but then performance falls below a hurdle rate (or other agreed upon measure). The clawback provision is built in to protect investors from such scenarios.</i></p>
Close (1st, 2nd, 3rd, etc., Final)	<p>A stage when a certain amount of money is raised by a private equity fund. The close is accompanied by a group of the fund's limited partners completing their partnership agreement documents. Depending on the fund and its target size, there can be one or several closings before fundraising is completed. The last close is referred to as the final close, at which time the final fund size is set.</p> <p><i>Each closing represents a stage in the fundraise. For example, a fund could raise \$100MM from investors in their first close, \$300MM in their second close, and another \$100MM in their final close, bringing the overall fund size to \$500MM. Sometimes, there will be incentives for investors to commit into a first close (e.g. lower fees). Investors who come into later closes typically have to pay subsequent closing interest.</i></p>

PRIVATE EQUITY GLOSSARY

TERM

DEFINITION

Closed-End Fund

Closed-end funds have a specific term (typically 10 years with extensions) and are only open to new investors during their initial fundraising period (typically a period of between 6-18 months).

A private equity fund is typically a closed-end fund, meaning it is only open to new investors while it is fundraising. Once a private equity fund has its final close, it is closed to new investors. PE funds also have a finite life as they have a certain timeframe within which they have to dispose of their holdings – typically ten years plus a two-year term extension.

**Debt Financing
(also known as Leverage)**

At its most basic meaning, debt is an amount of money borrowed by one party from another. Debt financing occurs when a company raises money (e.g. for working capital or capital expenditures) by selling debt instruments to investors. In return for lending the money, investors become creditors and receive a pledge that the principal and interest on the debt will be repaid.

In a scenario where a PE fund is using leverage to help finance the acquisition of a company (also known as a Leveraged Buyout), the use of debt, which has a lower cost of capital than equity, serves to reduce the overall cost of financing the acquisition and potentially to increase the return on equity. Within private credit, a fund's legal documentation typically stipulates the maximum amount of leverage that can be used (e.g. 3x).

Distressed Debt

Distressed debt refers to debt bought from companies that are either in bankruptcy or on the verge of it.

Some investors specialize in buying distressed debt, typically as a way to gain control of a company once it does enter bankruptcy, with the intention of turning around its operations.

Direct Lending

When lenders other than banks make loans to companies without intermediaries such as an investment bank or a broker.

Historically, banks would make loans to companies. However, after the financial crisis, banks are more capital constrained and are unable to lend as swiftly – but companies are still in need of funding. Private credit firms have therefore stepped in to fill the gap and 'directly lend' to companies.

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Distribution Waterfall (typically European or American)	<p>The distribution waterfall is a pre-agreed formula for a private equity fund to make distributions of income / capital gains to investors and the fund manager.</p> <p><i>In a European-style distribution waterfall schedule, the hurdle threshold is calculated at the fund level. All distributions will go to investors and the manager will not participate in any profits until the investor's capital and preferred return have been fully satisfied.</i></p> <p><i>In an American-style distribution waterfall schedule, the hurdle threshold is calculated on each individual investment. This structure allows for managers to take a profit prior to investors receiving their fund-level preferred return and 100% of invested capital.</i></p>
Dividend Recapitalization	<p>A dividend recapitalization (also known as a dividend recap) happens when a company incurs a new debt in order to pay a special dividend to shareholders. This usually involves a company owned by a private investment firm, which can authorize a dividend recapitalization as an alternative to the company declaring regular dividends, based on earnings.</p> <p><i>In other words, where a company purposefully takes on debt so that they can return cash to their existing investors (or to repurchase shares). Oftentimes, this recap is only possible after an increase in earnings.</i></p>
DPI (Distributions to Paid-In Multiple or Realization Multiple)	<p>A realization multiple is a private equity measurement that shows how much has been paid out to investors. The realization multiple is so called because it measures the return that is realized or paid back from the investment. The realization multiple is found by dividing the cumulative distributions from a fund or company by the paid-in capital.</p> <p><i>The DPI is how you calculate the amount of cash you have received back from your investments, versus how much cash you have paid in, and is represented by a percentage. A 50% DPI means that for every \$1 you gave to a private equity fund, you have received \$0.50 back. A DPI of greater than 100% means that a fund has returned its initial cost.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Dry Powder	<p>The amount of cash or other liquid assets available for a fund to deploy, based on capital committed to the fund by investors. In other words, dry powder is the difference remaining between a fund's total committed capital and invested capital to date.</p> <p><i>This is a fund's total commitments less any dollars committed to investments. For example, if a fund raised \$100 million and committed to 5 deals worth \$60 million total (even if they didn't call capital), the remaining dry powder is \$40 million – a/k/a/a what the fund manager has left to spend.</i></p>
Due Diligence	<p>The research performed by an investor on a potential investment, in order to determine its merits and uncover potential risks.</p> <p><i>The due diligence process is designed to uncover the strengths and weaknesses that could potentially affect performance. The key areas that are typically analyzed are: a fund's past performance, the team members and their experience, the fund's strategy, market opportunity, the attractiveness of the sector, how deals are sourced and how value is created during the firm's ownership period.</i></p>
EBITDA	<p>EBITDA stands for earnings before interest, taxes, depreciation and amortization.</p> <p><i>EBITDA is a measure of a company's performance. Essentially, it's a way to evaluate a company's performance without having to factor in financing decisions, accounting decisions or tax environments, and gives a better understanding of free cash flow generation.</i></p>
Exit	<p>The sale of an asset or portfolio company.</p> <p><i>Typical paths to exit include listing a private company in the public markets before selling it down in block trades or selling the company to another private equity fund (strategic sale) or a corporate firm (trade sale). Once a deal closes, then the fund will receive cash from that sale (this may happen several months after the sale is announced). These cash proceeds are then given to investors in the form of a distribution.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Financial Engineering	<p>A lever to generate returns on an investment by modifying a company's capital structure and use of leverage. Financial engineering differs from making operating improvements in a company.</p> <p><i>The management of leverage and cash management is typically one of the components to value creation in a private equity firm's portfolio. Debt often has a lower cost of capital – thus, using leverage for an acquisition and then paying it down using cashflows creates value for equity investors.</i></p>
Follow-on Investment	<p>A follow-on is a subsequent investment made into a portfolio company which has already received funding. In the case of a venture capital fund, there may be several rounds of follow-on investing.</p> <p><i>For example, four years into a PE fund owning a company, the company might need additional cash in order to acquire a competitor and merge the two together. In order to finance this, the PE fund can provide a follow-on investment. Follow-on investments can be called for after the investment period ends.</i></p>
Fund (or Investment Fund)	<p>An investment fund is the pooled capital of investors that enables the fund manager make investment decisions on their behalf.</p> <p><i>The commingled fund is managed by a General Partner, and investors are known as Limited Partners.</i></p>
Fund Term	<p>The number of years that a fund expects to be in operation. Typically, a private equity fund will operate for 10 years, with the option to extend for a few more years if the need arises.</p> <p><i>The fund term is simply another way of saying how long the fund life lasts.</i></p>
Fund-of-Funds	<p>A fund that takes equity positions in other funds. Fund-of-Funds can invest in private equity funds or secondary funds.</p> <p><i>In other words, an alternative investment fund that aggregates investors commitments in order to invest in underlying fund managers. The basic idea is that a fund of funds can offer greater diversification and access to high-minimum funds, albeit with an additional layer of fees.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Fundraising Period	<p>The period from when a fund's formation is announced to the time when the final closing occurs.</p> <p><i>This period usually lasts 6-18 months. During this period, the fund's investor relations team will typically meet with prospective investors to market the fund.</i></p>
General Partner (GP)	<p>The manager of a private equity fund. The GP is given unlimited liability for the debts and obligations of the fund as well as the right to manage the fund.</p> <p><i>In other words, the fund manager.</i></p>
Growth Equity	<p>Growth equity investors pursue companies at a development stage between venture capital (early stage businesses with limited historical financials) and leveraged buyouts (mature companies with a long track-record of cash generation).</p> <p><i>Growth equity investors seek to invest in well-run companies with proven business models (established products and/or technology and existing customers) and a history of significant and rapid revenue growth, which minimize the technology adoption risks often associated with venture capital investing. Growth equity investments can be minority or majority in nature (historically these were minority positions but this has shifted in recent years), and typically use little to no debt.</i></p>
Hard Cap	<p>The stated maximum amount of capital that a fund manager wishes to raise before they stop fundraising.</p> <p><i>For example, a PE fund might have a target \$100MM fund size with a stated hard cap of \$120MM. Once they reach \$120MM, they will stop accepting commitments from investors. Large investors often impose this cap in order to ensure that there is no significant strategy shift into larger deals.</i></p>
Hurdle Rate (a/k/a Preferred Return)	<p>Represents the minimum rate of return that a fund must earn before it can begin to charge a performance fee.</p> <p><i>A hurdle is typically 8%. This means that investors are entitled to a minimum 8% annual return before the fund manager may begin receiving carried interest (see definition: carried interest).</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Illiquidity Premium (interchangeable with Liquidity Premium)	<p>A premium demanded by investors when any given security cannot be easily converted into cash for its fair market value.</p> <p><i>The illiquidity premium compensates an investor for tying up their capital in an illiquid security or fund. In return, they are typically compensated by the expectation of greater potential returns.</i></p>
Investment Period	<p>The initial period of a private equity fund's life in which deals are sourced and new investments can be made.</p> <p><i>The investment period is typically three to six years. After that period, management fees are typically lowered and cash can only be called from investors to cover follow-ons or fees.</i></p>
IRR (Internal Rate of Return)	<p>The IRR is a performance metric which expresses the discount rate that sets a fund's cash outflows equal to its inflows in present value terms. In other words, all of the fund's contributions and distributions are listed, and the discount rate that makes them add up to zero is solved for. The net IRR is a modified IRR value that has taken into consideration management fees and any carried interest.</p> <p><i>The net IRR is the net return earned by PE investors over a particular period, which is calculated on the basis of cash flows to and from investors, after the deduction of all fees and expenses. IRR is a dollar-based concept which takes into account the effect of time – as an investment is held for longer, IRR will lessen (in other words, doubling your money in two years is much better than doubling your money in five years). Although IRR is a standard performance metric within private equity, it does not reflect actual cash returned to investors, and so should be analyzed in conjunction with the relevant MOIC metric (MOIC definition can be found below).</i></p>

PRIVATE EQUITY GLOSSARY

TERM

DEFINITION

J-Curve

A phenomenon where an initial loss is followed by a significant gain. Typically shown as a line graph which illustrates how capital flows into a fund manager in the early years of a fund, in order to be used to make investments; and how the capital then produces gains towards the latter years in the fund's lifecycle. Plotted over time, the J-curve shows the historical tendency of private equity funds to deliver negative returns in early years as money is invested, and investment gains in the outlying years as the portfolios of companies mature.

This demonstrates how private equity funds typically have 'negative' returns in the first few years (as investors have to pay management fees and initial investment costs from day 1) which then turn into positive returns as the underlying investments mature and start to generate returns that significantly outweigh the fee and expenses. When you chart these cashflows over a private equity fund's life, they typically follow a "J" shaped curve.

Key Person Provision

A legal provision that takes into account the lead investment professionals in a fund and what action will be taken in case one or all of those people are no longer able to manage the partnership/fund.

This provision ensures that the most important people involved in investing a fund (for example, the founders or portfolio managers or the Managing Partners), who are expected to be key to the fund's success, are unable to leave before the fund has finished investing. If the provision is triggered, investors are typically given a range of options, such as being able to stop the investment period or approve a new investment manager instead.

**LBO
(Leveraged Buyout)**

A leveraged buyout is the acquisition of another company using borrowed money (bonds or loans) to meet the cost of acquisition. Often structured in such a way that the target's cash flows or assets are used as the collateral (or "leverage"). Leveraged buyouts allow companies to make large acquisitions without having to commit a lot of capital upfront.

In other words, when a company is purchased using a combination of both equity and debt, often involving a change of control.

**Limited Partner "LP"
(also Investor)**

An LP is an investor who makes a commitment to a private equity fund and provides capital as it is called. The investor has no control over the management of the fund.

In other words, an investor in a private equity fund. This could be an individual, an institution, a family office, a trust etc.

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Lock-up Agreement (Post-IPO)	<p>A lock-up agreement is a legally binding contract between the underwriters and insiders of a company prohibiting these individuals from selling any shares of stock for a specified period of time. Lock-up periods typically last 180 days (six months) but can on occasion last for as little as 120 days or as long as 365 days (one year).</p> <p><i>After an IPO, initial shareholders are typically subject to a period where they are unable to sell their shares. This prevents these holders from putting too much of the stock on the market and thereby diluting the stock price.</i></p>
Loss Ratio	<p>This tracks the total amount of capital that is valued or realized below cost (below 1.0x) in a fund, over total invested capital.</p> <p><i>A loss ratio is one of the metrics that allows investors to analyze the quantum of losses in prior funds. In buyout funds, a loss ratio of less than 15% (i.e. 15% of invested capital is realized or held below cost) is considered preferable. In venture funds, a loss ratio of less than 30% is considered preferable; in distressed debt funds, a loss ratio of less than 10% is considered preferable and in direct lending funds, a loss ratio of less than 5% is considered preferable.</i></p>
Management Fee	<p>A management fee is a charge levied by an investment manager for managing an investment fund. The management fee is intended to compensate the managers for their time and expertise for selecting investments and managing the portfolio. It can also include other items such as investor relations expenses and the administration costs of the fund.</p> <p><i>Investors (LPs) in a fund pay this fee to the fund manager in return for managing the fund. This fee is typically paid quarterly and is in the range of 1.0-2.5% of committed or invested capital annually, which varies by investment strategy.</i></p>
Mezzanine Debt	<p>Mezzanine debt is unsecured debt which is junior to the senior debt. Mezzanine debt is frequently associated with acquisitions and buyouts, for which it may be used to prioritize new owners ahead of existing owners in case of bankruptcy.</p> <p><i>Mezzanine is a middle layer of financing that is senior to equity but junior to the senior debt layer. Mezzanine financing is typically used to achieve goals that require capital beyond what senior lenders will extend.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Minimum Capital Commitment	<p>The smallest amount of capital that the fund will allow to be invested by a single LP.</p> <p><i>In other words, the minimum amount a potential fund investor has to invest in order to be able to participate directly in a fund. On the private equity side, this typically ranges from \$1MM-\$10MM.</i></p>
MOIC (Multiple of Invested Capital) or TVPI	<p>This ratio is calculated by dividing the remaining net asset value of a fund plus the cumulative distributions returned, by the total amount of capital that was paid in for investments, fees and expenses. The resulting ratio is used as a performance metric alternative to IRR.</p> <p><i>A net MOIC (also known as Total Value to Paid-in Capital “TVPI”) calculates the ratio of money generated to the money invested. For example, if you invest \$1MM, and the return generated in 10 years is \$10MM – your MOIC is 10x (\$10/\$1). If you invest \$1MM, and the return generated in 2 years is \$10MM, your MOIC is still 10x (\$10/\$1). Essentially, a MOIC does not take into account the time it takes for a return to be generated, and instead represents the actual cash return in your pocket as a multiple of your initial investment.</i></p>
Paid-In Capital	<p>The amount of money that has been called by the fund from investors.</p> <p><i>Another way of saying drawn capital – the cash from investors that has actually been called from investors for investments as well as fees and expenses.</i></p>
Percent Called	<p>The amount of money that the fund has called from investors (less recallable distributions) divided by the total amount of commitments to the fund.</p> <p><i>In other words, if you committed \$100MM to a fund and the fund has asked you to contribute \$20MM thus far to pay for deals, then you are 20% called. Any recallable distributions that take place are added back to the amount of unfunded capital that has yet to be called.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
PME (Public Market Equivalent)	<p>A benchmarking calculation that compares the performance of a private equity fund to the performance of an equivalent public market index, such as the S&P 500 or the Dow Jones Industrial Average. There are different versions of this calculation that have been developed, but the goal of each is to show how an investment in a PE fund compares to a similar investment pattern in the public market index.</p> <p><i>A PME calculates a fund's outperformance (or underperformance) over a public market index, therefore helping quantify the illiquidity premium that is achieved. For a U.S. buyout fund, we typically track outperformance versus the S&P 500 or Russell 2000.</i></p>
Private Credit	<p>Private credit is credit that is extended to companies or projects on a bilaterally negotiated basis. It is not publicly traded such as many corporate bonds and is originated or held by lenders other than banks. It takes various legal forms including loans, bonds, notes or private securitization issues.</p> <p><i>Private credit encompasses various strategies including real estate debt, distressed debt, direct lending, mezzanine financing and structured financing.</i></p>
Private Equity	<p>Private equity is an alternative investment class and consists of capital that is not listed on a public exchange. Private equity is composed of funds and investors that directly invest in private companies, or that engage in buyouts of public companies, resulting in the delisting of public equity.</p> <p><i>Generally speaking private buyout, growth and venture funds are all private equity investments. Institutional and HNW investors provide the capital for private equity, and the capital can be utilized to fund new technology, make acquisitions, expand working capital, and to bolster and solidify a balance sheet. In the U.S., due to regulations, individuals need to fit the Accredited Investor and Qualified Purchaser status in order to invest in private equity funds.</i></p>
Private Markets	<p>Investments not traded on a public exchange or market. Includes equity or fixed income investments directly into private companies or investments in partnerships investing in such private companies.</p> <p><i>Private markets asset classes include private equity, hedge funds, private credit, venture capital, infrastructure and real estate, amongst others.</i></p>

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Qualified Purchaser	<p>To be a Qualified Purchaser, an individual must own \$5 million or more in investments, or invest at least \$25 million, either for their own accounts or on others' behalf (e.g. a professional investment manager).</p> <p><i>The qualifications to be a Qualified Purchaser are significantly more stringent than that of an Accredited Investor. Most private market funds (e.g. private equity funds) require their investors to be Qualified Purchasers.</i></p>
Subsequent Closing Interest	<p>Investors who do not participate in the first closing are usually required to pay their pro rata share of previously funded capital for investments, fees & expenses, together with interest, which is typically distributed to the initial investors.</p> <p><i>Investors who do not participate in the first closing are essentially required to compensate the initial investors for their fair pro rata share of already-paid organizational and other expenses as well as any investments that were funded before they committed to the fund. This also incentivizes investors to participate in the first closing when possible. Subsequent closing interest is typically 8% p.a. but varies from fund to fund.</i></p>
Target Size	<p>The amount of capital that a fund manager wishes to raise to effectively deploy capital against their target market opportunity. It is not uncommon for a fund manager to raise a smaller or larger amount than their target size.</p> <p><i>In other words, this is how much overall cash a fund manager hopes to raise (and then invest) for a specific fund.</i></p>
Topic 820 (Formerly FAS 157)	<p>Topic 820 (formerly known as Financial Accounting Standard 157) is the Financial Accounting Standards Board (FASB)'s fair value accounting standard, which was initially introduced in 2006.</p> <p><i>Topic 820 is the PE industry accounting standard that is used to determine the 'fair value' of private investments on a quarterly basis, in accordance with U.S. GAAP. This valuation method has funds value their investments to reflect what the fund would receive if they sold their position as of a quarter end – not what the fund manager expects they will ultimately realize once the company is ready to be exited.</i></p>

PRIVATE EQUITY GLOSSARY

TERM

DEFINITION

Unrealized Portfolio

The value of the assets in a portfolio that have not yet been sold.

In other words, these are the underlying investments in a private equity fund that have not yet been sold for a gain (or loss). They are typically valued on a quarterly basis, and their unrealized value reflects the potential profit (or loss) that the fund expects they would receive if the asset was sold at that point in time, based on its current financial performance – not what the fund manager expects they will ultimately realize once the company is ready to be exited.

Valuation

Private equity funds value their investments on quarterly basis. U.S. GAAP – specifically, ASC 820, Fair Value Measurements and Disclosures (formerly known as FAS 157) – provides a single framework for measuring fair value and related disclosures.

Typically, a fund manager will work with their investment team (and sometimes a third party) to determine an investment's market value. This could include a discounted cash flow analysis ("DCF"), public comps etc. Fund managers typically provide quarterly reports to their investors, which includes each portfolio company's valuation, including information on valuation methodology.

Value Creation

Value creation is how fund managers generate returns in their portfolio companies for investors. There are three key value creation levers: earnings growth, multiple expansion and debt paydown.

Analyzing value creation methods allows investors to see the key drivers of a fund's returns. Fund managers who create value primarily through earnings growth are typically favored as this reflects a manager's skill in operationally improving a company, rather than relying on financial engineering or buoyant exit markets.

PRIVATE EQUITY GLOSSARY

TERM	DEFINITION
Venture Capital	<p>Venture capital is financing that investors provide to startup companies and small businesses that are believed to have long-term growth potential. Venture capital generally comes from well-off investors, investment banks and any other financial institutions. However, it does not always take just a monetary form; it can be provided in the form of technical or managerial expertise. Though it can be risky for the investors who put up the funds, the potential for above-average returns is an attractive payoff.</p> <p><i>In other words, venture capital typically involves investing money into early stage companies/start-ups in order to help them grow and become profitable. At the time of investment, venture-backed companies often do not have revenues and/or positive cash flow and may require more capital (/rounds of financing) prior to the company being sold or taken public. These investments involve a substantial element of risk.</i></p>
Vintage Year	<p>The vintage year is the year in which the first influx of investment capital is delivered to a project or company. This marks when capital is contributed by venture capital, a private equity fund or a partnership drawing down from its investors. Investors can use the vintage year of an investment to further explain its returns.</p> <p><i>For example, if a private equity fund starts investing in 2016, it is typically considered a 2016 vintage fund. However there are no official guidelines to determine a vintage year and some PE fund managers will instead use the fundraising year as the vintage year. This metric is particularly useful when benchmarking a fund's performance – as funds of the same vintage are typically compared to each other.</i></p>
Yield	<p>Yield is the income returned on an investment, such as the interest received from holding a security. The yield is usually expressed as an annual percentage rate based on the investment's cost, current market value, or face value. Yields may be considered known or anticipated depending on the security in question as certain securities may experience fluctuations in value.</p> <p><i>Yield measures the income, such as interest and dividends, that an investment earns and ignores capital gains. This income is taken in the context of a specific time period and then annualized.</i></p>

HEDGE FUND GLOSSARY

TERM

DEFINITION

Accredited Investor

In the U.S., this term is used by the Securities and Exchange Commission (SEC) under Regulation D to refer to investors who are financially sophisticated. This can include high net worth individuals (HNWI), banks, insurance companies, brokers and trusts.

To be an accredited investor, an individual must have an annual income exceeding \$200,000, or \$300,000 for joint income, for the last two years with expectation of earning the same or higher income in the current year. An individual is also considered an accredited investor if they have a net worth exceeding \$1 million, either individually or jointly with their spouse. Also, if a person can demonstrate sufficient education or job experience showing their professional knowledge of unregistered securities, they too can qualify to be an accredited investor. In order to invest in most PE offerings a client needs to be an Accredited Investors and Qualified Purchaser (defined below).

**Algorithmic
(or Program) Trading**

This is a type of trading done using computers that follow a defined set of instructions and mathematical models. These computers are typically able to place trades more quickly and more often than human traders.

Alternative Investments

These encompass investments that are not one of the conventional investments (bonds, stocks and cash). Alternative investments are typically held by institutions or accredited high net worth investors due to regulations limiting their sale to the broader public.

The most common alternative investments are in private equity, real estate, hedge funds, commodities, etc. Alternatives tend to behave differently than typical stock and bond investments, so adding them to a portfolio may provide broader diversification, reduce risk, and/or enhance returns.

Benchmark

A previously agreed upon point of reference. In the case of performance, a benchmark would be the index or indices chosen.

Benchmarks are used to show a fund's relative performance compared to similar peers or an index (e.g. S&P 500) over a given period of time.

Beta

This is a measure of the systematic risk arising from exposure to general market movements. The market's beta is 1.00, and beta is a multiplicative factor. This means that if an investment fund has a beta of 0.50, and the market is +1% then the investment fund will see +0.50% returns from its exposure to the markets.

HEDGE FUND GLOSSARY

TERM	DEFINITION
Closed Fund	<p>A fund that is no longer accepting commitments from investors.</p> <p><i>A hedge fund is described as 'hard-closed' if it is accepting no new contributions and 'soft-closed' if it is only accepting commitments from existing investors, typically reflecting previously agreed capacity arrangements.</i></p>
Correlation	<p>This measures the degree to which two securities move in relation to one another.</p> <p><i>In hedge funds, it is often used to compare the similarity in movement of a fund and an index.</i></p>
Directional Strategies	<p>These are investment strategies that have a meaningful amount of exposure to the broad market.</p> <p><i>Directional hedge funds tend to operate with lower leverage and less hedging, with most of the returns generated on the long-side through owning stocks, bonds and other instruments.</i></p>
Discretionary Investing	<p>This is when the decisions to buy/sell assets are being made based on the judgment of the investment manager.</p>
Diversification	<p>This is a method of risk management where an investor reduces the risk and volatility of its portfolio through holding a wide array of different assets that have limited correlation to each other.</p>
Downside Deviation	<p>This is a measure of risk that focuses only on returns that fall below a minimum acceptable return (MAR).</p>
Drawdown	<p>This represents the peak-to-trough decline of an investment fund; it is normally measured in %-terms.</p>
Due Diligence	<p>This is the research performed by an investor on a potential investment, in order to determine its merits and uncover potential risks.</p> <p><i>The due diligence process should uncover the strengths and weaknesses that could potentially affect performance. The key areas that are typically analyzed include the past performance and the factors that drove it, the team members and their experience, the strategy, how ideas are generated and diligence, how positions are sized and traded, and risk management. A separate part of the due diligence process is operational due diligence which analyzes the management firm's operational procedures and compliance/regulatory adherence.</i></p>

HEDGE FUND GLOSSARY

TERM	DEFINITION
Expense Pass-Through	<p>Rather than charge a management fee, some investment managers pass through the management company's operating expenses to the Fund's investors. The eligibility of expenses to be passed through is stated in the fund's offering memorandum and the amounts for the previous year can be found in a fund's Audited Financial Statements.</p> <p><i>Expense pass-through structures are relatively rare, except for hedge funds that have a large number of underlying portfolio managers.</i></p>
Fund-of-Hedge-Funds	<p>A fund that takes limited partner positions in a number of hedge funds.</p> <p><i>The purpose of these vehicles is to give the investor in the fund-of-funds more opportunity and diversity in the underlying hedge fund investments.</i></p>
Fund	<p>An investment fund is the pooled capital of investors that enables the fund manager make investment decisions on their behalf.</p> <p><i>The commingled fund is managed by a General Partner (or investment manager), and investors are known as Limited Partners.</i></p>
Fundamental Investing	<p>This is when an investment manager makes decisions based upon analyzing businesses at the most basic or fundamental level. This type of analysis focuses on a company's financial statements and the market in which it operates. This is supplemented by speaking with management, customers and suppliers, in order to determine a fair value for an asset.</p>
Gain-to-Pain Ratio	<p>This is a measure of return against the risk taken. It is calculated by taking the sum of all monthly returns and dividing by the absolute value of the sum of all monthly losses.</p>

HEDGE FUND GLOSSARY

TERM	DEFINITION
Gate	<p>This is a provision in an investment fund's offering documents that allows the investment manager to restrict redemptions and identifies the circumstances when such restrictions can be applied.</p> <p><i>Gates typically come in 2 forms; share-class level gates and fund-level, which reflect how the gate is measured and applied. A manager may apply a share-class level gate when total redemptions in a share-class exceed a prescribed limit, typically 25%, on a redemption date. The share-class level gate is only applied to that share class. The fund-level gate is applied when the redemptions exceed the prescribed limit for the entire fund and is applied to all redemptions in the fund. Gates can either be applied on a pro-rata (i.e. all redemption requests are treated the same) or a first-come first-served basis (i.e. those who submitted redemptions for prior quarters, and may have been gated, are given priority over new redemptions).</i></p>
General Partner ("GP"), or Investment Manager	<p>These two terms are used interchangeably for the manager of a hedge fund. The GP, or investment manager, is given authority to make the fund's investments and trades.</p>
Gross Exposure	<p>Gross exposure refers to the absolute total of a fund's investments and indicates the Fund's total exposure to financial markets. It is calculated by adding the absolute value of Fund's long and short positions.</p> <p><i>A higher gross exposure indicates increased leverage and provides an insight into amount of risk that is being taken.</i></p>
Gross Performance	<p>Gross performance means the return before the investment manager's fees and expenses are deducted.</p>
Hedge Fund	<p>This is an investment partnership. The name derives from the use of trading techniques that the partnership can utilize, most importantly to "hedge" against perceived risks by taking offsetting positions.</p>
High Water Mark, or "Loss Carryforward"	<p>This represents the peak net asset value that an investor's holding in an investment fund has reached. A high water mark is used to help determine the amount of performance-based compensation that a manager can earn; if the net asset value of the fund falls in one investment period (typically annual), the manager can only begin to charge a performance fee again once the investment has recouped those losses and the net asset value has exceeded the high water mark.</p>
Hurdle Rate	<p>This represents the minimum return that a hedge fund must earn before it can begin to charge a performance fee.</p>

HEDGE FUND GLOSSARY

TERM	DEFINITION
Incentive (or Performance) Fee	This is a payment made to an investment manager for generating positive performance returns. The performance fee is typically calculated as a percentage of the profits, both realized and unrealized, over the course of a year.
Key Person Provision	<p>A legal provision that takes into account the lead investment professionals in a fund and what action will be taken in case one or all of those people are no longer able to manage the fund.</p> <p><i>This key person provision typically provides investors with improved liquidity if the designated key person(s) involved in managing a fund is no longer involved.</i></p>
Leverage	<p>This is the use of borrowed money or securities that are used by an investment manager to increase the potential return of a fund.</p> <p><i>Hedge fund leverage can be looked at in two ways, gross leverage and accounting leverage. The gross leverage is the same as a fund's gross exposure and reflects the ratio of the total invested capital on both the long and short sides of the portfolio divided by the fund's net asset value. The accounting leverage reflects the invested capital on the long side divided by the fund's net asset value.</i></p>
Limited Partner ("LP"), or investor	A limited partner is a business partner whose liability is limited to the amount of their investment in the company.
Lock-Up Period	<p>This represents the window of time when investors in a hedge fund are not allowed to redeem (sell) their holding. There are two types of lock-ups; hard lock-ups and soft lock-ups. Investors are forbidden from redeeming during a hard lock-up under any circumstances. In a soft-lock up period, investors can redeem but must pay a penalty (typically 1-5% of the investors net asset value) in order to do so. The penalty is typically paid to the fund, and so benefits the other investors in the fund.</p> <p><i>Lock-ups were created to prevent investors from trading into and out of hedge funds, with the aim of providing the GP with a more stable base of capital and allowing it to take longer-term positions.</i></p>

HEDGE FUND GLOSSARY

TERM

DEFINITION

Management Fee

A management fee is a charge levied by an investment manager for managing an investment fund. The management fee is intended to compensate the managers for their time and expertise for selecting investments and managing the portfolio.

Investors (LPs) in a fund pay this fee, normally 1.0% to 2.0% of net asset value per annum, to the fund manager in return for them managing the fund. This fee is typically paid either monthly or quarterly and is not contingent on any kind of performance.

Market-Neutral Strategies

These are investment strategies which seek to minimize the strategies exposure to the broad market.

Market neutral strategies seek to be uncorrelated with markets, and thus should not be impacted by the rise or fall of markets. As a result, the strategies are expected to generate modest but consistent returns irrespective of the investment environment. As these funds typically utilize a greater degree of hedging, they operate using higher leverage.

Net Exposure

Net exposure is a measure of the fund's exposure to market fluctuations. It is calculated by taking the difference between the firm's long exposure and short exposure.

Typically, fund's with lower net exposure are thought of as less risky due to their more limited exposure to market fluctuations.

Net Performance

Net performance means the return after all fees and expenses.

Net performance is lower than gross performance as it accounts for and deducts the effect of all management fees, fund expenses, and performance fees. In other words, the net returns are the "real" investment returns that LPs receive from their investment in a fund.

Pairwise Correlation

This is a process of analyzing assets, normally the components in an index, in pairs to ascertain their correlation. The correlations of each of the underlying pairs are combined to provide an indication of how tied the components of an index are to each other.

HEDGE FUND GLOSSARY

TERM	DEFINITION
Portfolio Concentration	<p>This is the number of positions or themes that an investment manager holds within its portfolio. It is something that investors should track to ensure that the manager is investing in accordance with its stated investment strategy.</p> <p><i>The optimal concentration for a fund manager will vary significantly depending on the manager's style and strategy.</i></p>
Qualified Purchaser	<p>"To be a Qualified Purchase, an individual must own \$5 million or more in investments or invest at least \$25 million, either for their own accounts or on others' behalf (e.g. a professional investment manager)</p> <p><i>The qualifications to be a Qualified Purchaser are significantly more stringent than that of an Accredited Investor. Most private market funds (e.g. private equity funds) require their investors to be Qualified Purchasers."</i></p>
Redemption Limit	<p>This is a limit on the size of an investor's redemption at each redemption date.</p> <p><i>The redemption limits are stated in the offering memorandum for the fund. The most prevalent is a 25% quarterly redemption limit, which limits the investor to withdrawing 25% of its capital each quarter. This means that it would take a year to fully exit the investment.</i></p>
Quantitative (or Systematic) Investing	<p>This is a form of investing that uses computer algorithms and models to sort through data – normally financial, but increasingly other types – in order to identify predictable patterns. The investment decisions are made by the computer within a predetermined set of investment constraints.</p>
Sharpe Ratio	<p>This is a measure of performance adjusted by the associated risks. It is calculated by taking a fund's annualized return, removing the risk-free rate (typically the 3-month Treasury rate), and dividing this "excess return" by the fund's standard deviation.</p>
Short Selling	<p>This is the sale of a security that is not owned by the seller. The security is typically borrowed, and short sellers benefit from a fall in price that allows them to buy back the security at a lower price.</p> <p><i>Short-selling is a common hedge fund practice that is used to help reduce a fund's exposure to markets, or hedge out a specific risk.</i></p>

HEDGE FUND GLOSSARY

TERM	DEFINITION
Sortino Ratio	This is similar to the Sharpe Ratio, but is adjusted by using the standard deviation of only the fund's negative returns ("downside deviation"). It is calculated by taking the fund's annualized return, removing the risk-free rate (typically 3-month Treasury rate), and dividing this "excess return" by the fund's downside deviation.
Special Situations	<p>Special situation investment opportunities can take many forms and involve multiple asset classes. Typical special situations can arise from spinoffs, tender offers, mergers and acquisitions, bankruptcy or distress, litigation, capital structure dislocations, activism, or just complexity that the market does not understand.</p> <p><i>Special situations are typically investments into companies that have an element of distress, dislocation or dysfunction and are perceived to be undervalued.</i></p>
Standard Deviation	This is a measure of volatility, which is often used as a proxy for risk. It measures the degree to which a fund's individual monthly performances differs from its average monthly performance. Funds that have a high standard deviation are less predictable and therefore viewed as riskier.
Trailing Twelve Month "Performance (or Last Twelve-Month Performance)	<p>This is a common measure of performance that focuses on a Fund's return over the last twelve months.</p> <p><i>Hedge fund investors use this measure as it is a suitable time horizon for most hedge funds and thus provides consistent context for returns, as opposed to monthly, quarterly or year-to-date performance.</i></p>

MARKET INDICES

TERM	DEFINITION
Global 60/40 Index	An index comprising of 60% allocated to the MSCI World Net Daily Total Return Index and 40% to the Bloomberg Barclays Global Aggregate Index, which is rebalanced on a quarterly basis. Please see below for further details on the underlying indices.
Bloomberg Barclays US Aggregate Bond Index	A broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency).
Bloomberg Barclays Global Aggregate Bond Index	A flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.
Cliffwater Direct Lending Index	Seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements.
ICE BofA ML US High Yield Index	Tracks the performance of below investment grade, but not in default, US Dollar-denominated corporate bonds publicly issued in the US domestic market, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P.
MSCI World Index	The index captures large and mid cap representation across 23 Developed Markets (DM) countries. With 1,633 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. The MSCI World used herein specifically reflects the MSCI World Net Daily Total Return Index, which approximates the minimum possible reinvestment of the regular cash distributions.
Nasdaq Composite Index	The market capitalization-weighted index of over 3,300 common equities listed on the Nasdaq stock exchange. The types of securities in the index include American depositary receipts, common stocks, real estate investment trusts (REITs) and tracking stocks, as well as limited partnership interests. The index includes all Nasdaq-listed stocks that are not derivatives, preferred shares, funds, exchange-traded funds (ETFs) or debenture securities.
Russell 2000 Index	An index measuring the performance of approximately 2,000 small-cap companies in the Russell 3000 Index, which is made up of 3,000 of the biggest U.S. stocks. The Russell 2000 serves as a benchmark for small-cap stocks in the United States.

MARKET INDICES

TERM	DEFINITION
S&P 500 Total Return Index	An index of 500 stocks issued by 500 large companies with market capitalizations of over \$5 billion. The Total Return reflects the impact of dividends being reinvested in the S&P 500 Index.
S&P 600	An index of 600 small-cap stocks that tracks a broad range of small-sized companies that meet specific liquidity and stability requirements.
S&P/LSTA Leveraged Loan Index	Provides an overview of the Senior Secured, Floating Rate Leveraged Loan market as well as an expansive review of the S&P Leveraged Loan Index (LLI) and sub-indexes including daily pricing on the S&P/LSTA LLI 100.
West Texas Intermediate ("WTI")	Also known as 'Texas light sweet', WTI is a grade of crude oil used as a benchmark in oil pricing. This grade is described as a Medium crude oil because of its relatively low density, and sweet because of its low sulfur content. It is the underlying commodity of New York Mercantile Exchange's oil futures contracts.
VIX or VIX Index	A calculation designed to produce a measure of constant, 30-day expected volatility of the U.S. stock market, derived from real-time, mid-quote prices of S&P 500 Index call and put options. On a global basis, it is one of the most recognized measures of volatility—widely reported by financial media and closely followed by a variety of market participants as a daily market indicator.

HEDGE FUND INDICES

TERM	DEFINITION
HFRI Equity Hedge (Total) Index: Equity Hedge	Investment Managers who maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios. EH managers would typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.
HFRI Equity Hedge: Sector - Healthcare Index	Sector - Healthcare strategies employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintain a level of expertise which exceeds that of a market generalist in identifying opportunities in companies engaged in all development, production and application of pharmaceuticals, biotechnology, and healthcare products and services. Sector - Healthcare strategies typically maintain a primary focus in this area or expect to maintain in excess of 50% of portfolio exposure to these sectors over a various market cycles.
HFRI Equity Hedge: Sector - Technology Index	Sector - Technology strategies employ investment processes designed to identify opportunities in securities in specific niche areas of the market in which the Manager maintain a level of expertise which exceeds that of a market generalist in identifying opportunities in information technology companies. Sector - Technology strategies typically maintain a primary focus in this area or expect to maintain in excess of 50% of portfolio exposure to these sectors over a various market cycles.
HFRI Event Driven (Total) Index: Event-Driven	Investment Managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investment theses are typically predicated on fundamental characteristics (as opposed to quantitative), with the realization of the thesis predicated on a specific development exogenous to the existing capital structure.

HEDGE FUND INDICES
TERM
DEFINITION
**HFRI Event Driven:
Distressed/Restructuring
Index**

Distressed/Restructuring strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in most cases portfolio exposures are concentrated in instruments which are publicly traded, in some cases actively and in others under reduced liquidity but in general for which a reasonable public market exists. In contrast to Special Situations, Distressed Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure.

**HFRI RV Fixed Income -
Asset Backed Index**

Fixed Income: Asset Backed includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a fixed income instrument backed physical collateral or other financial obligations (loans, credit cards) other than those of a specific corporation. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments specifically securitized by collateral commitments which frequently include loans, pools and portfolios of loans, receivables, real estate, machinery or other tangible financial commitments. Investment thesis may be predicated on an attractive spread given the nature and quality of the collateral, the liquidity characteristics of the underlying instruments and on issuance and trends in collateralized fixed income instruments, broadly speaking. In many cases, investment managers hedge, limit or offset interest rate exposure in the interest of isolating the risk of the position to strictly the yield disparity of the instrument relative to the lower risk instruments.

HEDGE FUND INDICES
TERM
DEFINITION
**HFRI Relative Value:
Multi-Strategy Index**

Multi-Strategies employ an investment thesis is predicated on realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. Strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. In many cases these strategies may exist as distinct strategies across which a vehicle which allocates directly, or may exist as related strategies over which a single individual or decision making process manages. Multi-strategy is not intended to provide broadest-based mass market investors appeal, but are most frequently distinguished from others arbitrage strategies in that they expect to maintain >30% of portfolio exposure in 2 or more strategies meaningfully distinct from each other that are expected to respond to diverse market influences.

**HFRI Fund Weighted
Composite Index**

The index is a global, equal-weighted index of over 1,500 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.

Barclay CTA Index

A leading industry benchmark of representative performance of commodity trading advisors. There are currently 510 programs included in the calculation of the Barclay CTA Index for 2019. The Index is equally weighted and rebalanced at the beginning of each year.

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