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Leveraged buyout

Private markets education

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- Leveraged buyout is the largest segment of private market strategies, as measured by assets under management.
- Buyout managers utilize leverage to take a controlling position in mature companies with the aim of growing earnings through value-add initiatives.
- Success in value-add initiatives typically drives return premiums above public markets over a long time horizon.

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Summary

- The aim of leveraged buyout (LBO) investing is to use leverage to purchase a controlling interest in a company with the intention to improve profitability and exit at a higher multiple.
- Target firms are typically mature companies late in their lifecycle with predictable cash flows.
- Buyout managers focus on enacting transformational change. Successful execution of these programs can improve earnings growth and exit opportunities.
- Potential sources of value-add include optimizing revenue growth, expanding margins, employing leverage, sale of non-core businesses, and management overhaul.
- Typical exit avenues include sale to a strategic partner, to another buyout fund, or initial public offering.
- Buyout delivered a median 16.3% pooled vintage year internal rate of return (IRR) and 1.92x total value to paid-in (TVPI) multiple over the 1993–2018 period. The standard deviation of vintage year IRR was 6.5% and 0.24x on a TVPI basis.
- Buyout strategies outperformed public markets by more than 695 bps when observing MSCI ACWI public market equivalent (PME) returns for funcs launched betwe 1993–2018.
- Buyout returns are generally linked to economic cycles, with valuations, earnings growth, credit availability, and dry powder all influencers of returns.
- While returns are generally linked to equity markets, buyout funds expand investors' universe with exposure to active control transactions where fund managers have the flexibility to implement company-specific long-term change, some of which may not be macro dependent.
- With significant differences in manager performance, key risks to leveraged buyouts include leverage, operational execution, and exit timing. Other, more general private market risks also apply, including significant illiquidity of fund vehicles, limited control, and high fees.

This report is part of a series of short primers on specific private market strategies. You will find more information on the client portal. You can also contact your advisor for assistance.

Leveraged buyout key statistics

16.28%	Median pooled IRR
~695bp	Median annualized IRR outperformance vs. public markets
1.92x	Median pooled TVPI (total value to paid in) multiple
-1.17	Lower quartile IRR*
35.84	Upper quartile IRR*
0.20	Correlation to public markets

Source: Based on historical data for funds launched between 1993 and 2018 using Cambridge Associates data, UBS estimates, as of August 2022. *Quartile IRR's reflect minimum and maximum value across vintage years.

What does the leveraged buyout strategy do?

Leveraged buyout (LBO) is the most active private equity strategy by historical assets under management (AUM) and the most familiar to investors. The aim of LBO investing is to use leverage to purchase a controlling interest in a company with the intention to improve profitability and exit at a higher multiple.

Target LBO investments

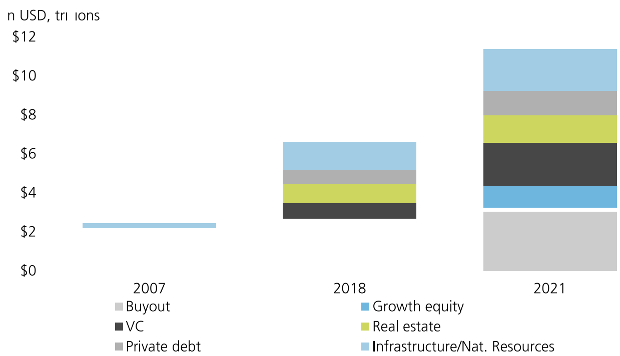
- Target firms are typically mature companies late in their lifecycle with predictable cash flows, tangible assets, and limited capital expenditures or working capital requirements.
- Target firms can be private, public, state-owned, spin-offs, family businesses, or secondary buyout companies from other private equity firms.
- Sector expertise is critical both at the macro level to identify underappreciated market areas, and at the micro level to find individual companies that offer better investment opportunities.
- Once a target is identified, sponsors carry out a purchase price analysis using assumptions about comparable valuations, leverage levels, and the potential future exit value of the investment.
- Buyout portfolios tend to be more concentrated (between 10 and 15 companies) compared to other strategies.

Leverage, holding period, and exit

- Overall, returns are driven by leverage, multiple expansion, and earnings growth. Earnings growth is a critical driver as it can influence both a higher exit multiple and the ability to pay down debt.
- Debt is usually tranched between senior and junior debt, and is sourced from banks, institutions, or private debt funds.
- Leverage levels typically range between 50% and 75%. Assets and cash flows are used as collateral.
- The holding period for a particular investment can range from 2–5 years, with the total fund duration typically 10 years with two one-year extensions.
- During the holding period, macro dynamics as well as operational value-add projects (covered in the next section) can influence earnings.
- Sponsors have three main avenues to exit investments: trade sale to a strategic partner (i.e., a firm in a similar line of business), secondary buyout (i.e., sale to another LBO fund), or via an IPO.
- LBO firms typically favor trade sales as they can help speed up the exit process given familiarity of the business, and achieve higher exit valuations due to perceived synergies.

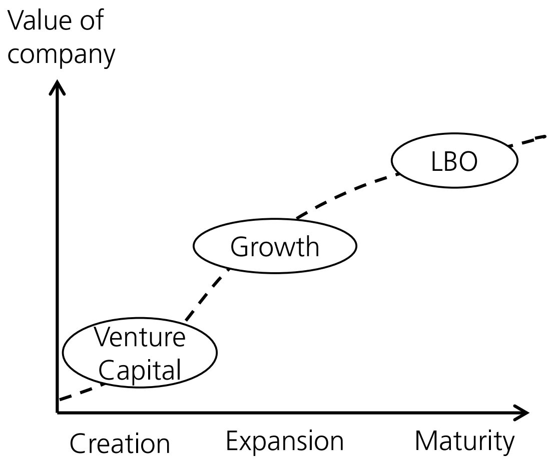
Fig. 1: The private market industry has grown rapidly in the last decade

With over USD 3tn, leveraged buyout represents about 30% of total private markets AUM



Source: Pitchbook. Total exposure (unrealized value + dry powder) as of year-end, data as of August 2022.

Fig. 2: Investing in a company's life cycle
Buyout investors typically seek to invest in mature businesses



Source: UBS

Sources of value-add

By utilizing their operating experience and network of executive professionals, buyout funds seek to add value for investors by sourcing and enacting transformational change through control positions in mature companies.

- **Improving revenue growth:** Buyout managers look to uncover underperforming businesses and improve existing ones. Levers include price increases, entering adjacent and underserved markets, and refocusing product development.
- **Expand margins**: Buyout managers that excel in implementing lean operations can drive earnings growth that is less dependent on the macro environment. Improved procurement practices, supply chain management, and capacity utilization are examples used to expand gross margins. Eliminating redundant administrative functions can further reduce common costs across portfolio companies.
- **Sale of non-core businesses:** Buyout managers can shed non-core assets to refocus management toward primary businesses. Proceeds may be used to pay down debt to further increase equity value.
- **Sourcing proprietary deals:** Buyout funds with extensive sourcing capabilities and a pipeline of proprietary deal flow can improve deal speed and quality versus relying on a competitive auction process.
- **Optimizing capital structure:** Successful buyout managers can skillfully deploy or reduce leverage to optimize capital structure and enhance returns, using ongoing cash flows to pay down debt and increase equity value.
- **Management overhaul:** Buyout managers may overhaul existing management teams by utilizing their network of executive professionals to source talent.
- **Managing exit process**: Buyout managers need to adeptly assess the timing and exit method to maximize realized gains.

Performance analysis

Introduction to vintage year returns

- Private market returns are assessed using vintage year performance, which reflects the sum of all cash flows (contributions, distributions) from funds incepted in the referenced year.
- For example, if hypothetical fund ABC reported vintage year 2005 IRR of 15%, ABC was incepted in 2005 and the IRR reflects all investment activity performed over the course of its lifecycle: contributions and distributions made in 2005, 2006, 2007, etc., until the end of the fund.
- If hypothetical fund XYZ reported vintage year 2008 TVPI of 1.3x, the fund returned USD 1.30 for every USD 1 invested through the duration of the fund's life (2008–2018).

Table 1: Median pooled performance for vintage years 1993–2018

	Global Buyout	Global Growth	US Venture Capital
Median Pooled IRR (%)	16.28	14.73	24.35
Std Deviation IRR (%)	6.48	10.69	28.75
Median Pooled TVPI	1.92x	1.97x	2.54x
Std Deviation TVPI	0.24x	0.56x	1.43x

Source: Cambridge Associates, UBS. Data as of August 2022.

Historical performance and comparisons versus public market returns

- Using Cambridge Associates data, buyout delivered a median 16.3% pooled vintage year IRR and 1.92x TVPI for funds launched between 1993–2018.
- The standard deviation of vintage year IRR was 6.5% and 0.24x on a TVPI basis between 1993–2018.
- Global buyout strategies outperformed public markets when observing PME (public market equivalent) returns. With the median MSCI ACWI PME of 9.3%, buyout outperformed global listed equities by over 695 bps per year over the 1993–2018 period.
- Buyout returns have consistently outperformed the MSCI ACWI PME in all 26 vintage years observed, indicating a durable return premium historically.

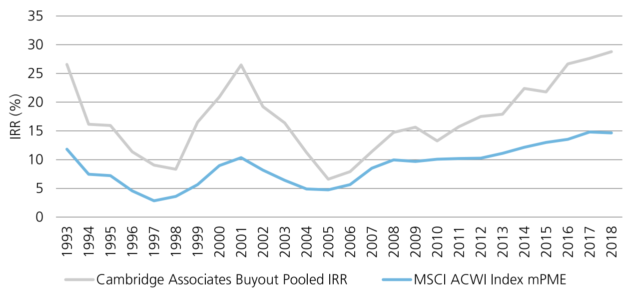
- We observe significant differences in lower quartile versus upper quartile returns, indicating elevated dispersion between fund managers and highlighting the importance of manager due diligence.

How do buyout returns compare versus other private equity strategies?

- Buyout strategies generated attractive median IRR compared to growth equity yet lower than venture capital strategies, with TVPI multiples lower than that of growth equity and venture strategies.
- Buyout funds target mature companies with recurring cash flows. As a result, buyout returns exhibit lower variability versus other private equity strategies when observing the standard deviation in IRR and TVPI multiples.
- Per vintage year, buyout funds also show fewer outliers compared to growth equity and venture capital.

Fig. 3: Buyout pooled IRR vs. MSCI ACWI PME

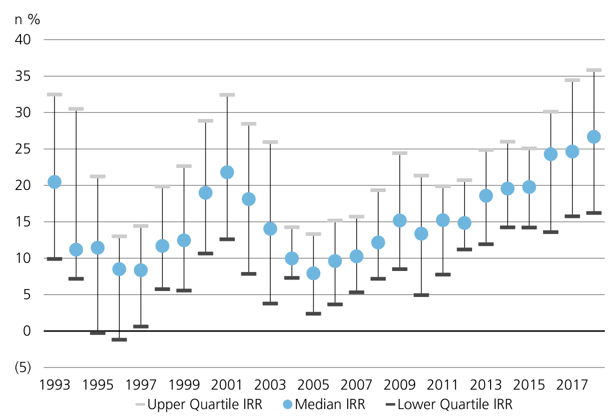
Buyout has outperformed public markets across vintage years 1993–2018



Source: Cambridge Associates, UBS. Data as of August 2022.

Fig. 4: Buyout return dispersion per vintage year

High level of dispersions within each vintage year shows importance of manager selection



Source: Cambridge Associates, UBS. Data as of August 2022.

Leveraged buyout and the business cycle

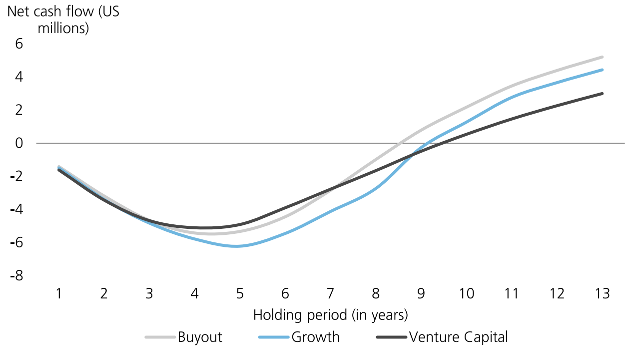
- Buyout returns are generally linked to economic cycles, with valuations, earnings growth, credit availability, and dry powder all influencing returns.
- The IPO and M&A environment can affect exit opportunities for buyout managers.
- Buyout returns were the highest soon after public market peaks (2001 and 2009 vintages). These periods exhibited lower purchase price multiples, cost of capital, and competition for deal flow.
- Buyout returns were the lowest a few years before the dot-com bubble (1998 vintage) and global financial crisis (2005 vintage). These periods exhibited higher purchase price multiples, higher cost of capital, and heightened competition for deal flow.
- Buyout managers have fared well versus public markets before and during prior market peaks.
- When observing performance before the financial crisis, buyout returns in 2006–2007 vintage years outperformed the MSCI ACWI PME by around 260bps. Additionally, before the dot-com bubble in 1999–2000, these vintage years outperformed the MSCI ACWI PME by around 1,100bps.
- When observing performance during the financial crisis, buyout returns in the 2008 vintage year outperformed the MSCI ACWI PME by near 500bps. Additionally, during the dot-com bubble in 2001–2002, these vintage years outperformed the MSCI ACWI PME by some 1,300bps.

Buyout in your portfolio

- Buyout funds can add differentiated sources of return as they expand investors' universe with exposure to managers that have flexibility to implement company-specific, long-term change. These changes may or may not be linked to the economic environment.
- Buyout funds can earn a premium above public market returns for providing long-term capital, enabling this active approach to sourcing, executing, and managing control equity investments.
- Buyout funds are longer-term investments that can take 8–9 years to break even when measuring historical cash flows. This duration is about a year shorter than that of growth equity and venture capital funds, as those strategies invest in earlier-stage companies that could take longer to develop and realize value.

Fig. 5: Cumulative net cash flows of various private equity strategies ("J" Curve)

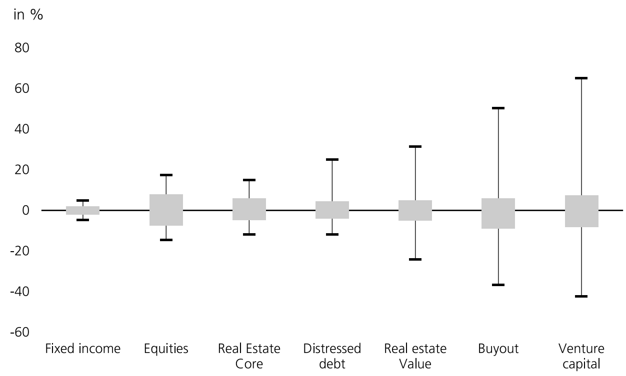
Buyout strategies typically first to break even versus other PE strategies



Source: Preqin, UBS. Figures normalized to USD 10m commitment.

Fig. 6: Public vs. private manager fund returns

Buyout similar to other private equity strategies as it exhibits higher dispersion compared to traditional markets



Source: Pitchbook, Bloomberg, UBS. Dispersion of fund returns relative to median performance. Data references 1995-2018 for private market funds, 1995-2021 for traditional equity and fixed income funds, as of August 2022.

Risks

- Risks of investing in underlying companies include substantial deal-related leverage, portfolio companies' potential inability to service this debt, and deal timing.
- Risks of investing in buyout funds include blind pool structure, potential for unwanted or unintended sector risks or concentration, and competition for investment opportunities from strategic buyers and other buyout firms.
- Given the complex nature of pooling together financial, business, and managerial resources, there are execution risks in enacting transformational change.
- Ability of private equity funds to exit portfolio company investments and return capital to investors is dependent on prevailing equity market conditions.
- Other, more general private market risks also apply, including significant illiquidity of fund vehicles, limited control, disclosure, and transparency on underlying holdings, and high fees. These risks cannot be fully eliminated, but can be reduced through extensive institutional due diligence and rigorous investment and monitoring processes.

Appendix

Selected definitions

- **Correlation**: the degree to which the fluctuations of one variable are similar to those of another.
- **Leverage**: the use of borrowed capital or instruments to increase the potential return (but also potential losses) of an investment, a simple example is a mortgage used in real estate transactions.
- **Leveraged buyout funds**: a private equity strategy using borrowed capital to gain control of a company.
- **Illiquidity premia**: the premium that an investor can demand depending on how difficult it is to convert the underlying security can be converted to cash.
- **Multiples**: a term that measures some aspect of a company's financial well-being, determined by dividing one metric by another metric. The metric in the numerator is typically larger than the one in the denominator, because the top metric is usually supposed to be many times larger than the bottom metric.
- **Multiple expansion**: describes the way a particular valuation metric increases to reflect a higher value assigned to an underlying investment.
- **Value add**: describes the operational, business, or structural improvements private market managers seek through underlying portfolio investments.
- **Cash flows**: cash flow is the net amount of cash and cash-equivalents being transferred into and out of a fund.
- **Public Market Equivalent (PME):** a method that converts public market returns to a benchmark that can be compared to private market returns.
- **IRR**: a return method used to evaluate private market investments and reflects the discount rate at which the present value of an investment's future cash flow equals the cost of the investment.
- **TVPI (Total Value to Paid In**): a return metric that describes the total capital distributed back to the investor + residual value left in the fund divided by invested capital.
- **Exit**: the time period in which an investor can convert holdings into cash to be liquidated over a designated period of time.
- **IPO**: the first sale of stock by a private company to the public. Also referred to as an "initial public offering."
- **Standard deviation**: a measure of the degree to which individual values vary from the distribution mean. The higher the number, the greater the risk.
- **Dry powder**: refers to cash reserves kept on hand by a private markets firm to cover future obligations, purchase assets or make acquisitions.
- **J-curve**: illustrates a period of initial negative cash flows (contributions) towards positive cash flows (distributions back to the investor) over a period of time.
- **Sponsor**: the general partner in a limited partnership who organizes and signs up investors.
- **Secondary buyout**: describes a sale between private market firms
- **Trade sale/strategic sale**: describes a sale of a business to another business operating in a similar industry.
- **Senior debt**: loans or debt securities that have claim prior to junior obligations and equity on a corporation's assets in the event of liquidation.

- **Junior debt**: loan or security that ranks below other loans or securities with regard to claims on assets or earnings. In the case of borrower default, creditors who own subordinated debt won't be paid out until after senior debt holders are paid in full.
- **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.
- **M&A**: mergers and acquisitions is a general term that refers to the consolidation of companies or assets through various types of financial transactions. M&A can include a number of different transactions, such as mergers, acquisitions, consolidations, tender offers, purchase of assets and management acquisitions.
- **Blind pool**: money collected from several people which is put into a fund and invested for their profit. It is left unspecified which properties are to be acquired.
- **Unit economics**: a measure of direct revenues and costs on a unit basis for a particular business model.
- **Minority stake**: reflects a non-controlling interest that is less than 50% of a particular entity.
- **Spin off**: describes the separation of an independent company from a larger parent.
- **Control provisions**: designed to provide a level of influence over significant operational and business matters.
- **Redemption rights**: gives investors the right to force a company to repurchase their shares after a period of time.
- **Idiosyncratic risk**: risk associated with a narrow set of factors pertaining to a particular company. Risk that has little association with overall market risk.
- **Tag-along provisions**: provides a minority shareholder the right to join in on a sale of a company that is initiated by a majority shareholder.

Appendix

Nontraditional Assets

Nontraditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments:

(1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds;
(2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment;
(3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss;
(4) are long-term, illiquid investments; there is generally no secondary market for the interests of a fund, and none is expected to develop;
(5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer;
(6) may not be required to provide periodic pricing or valuation information to investors;
(7) generally involve complex tax strategies and there may be delays in distributing tax information to investors;
(8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- **Hedge Fund Risk:** There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non- US securities and illiquid investments.
- **Managed Futures:** There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- **Real Estate:** There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- **Private Equity:** There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- **Foreign Exchange/Currency Risk:** Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in US dollars, changes in the exchange rate between the US dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a US investor.

Appendix

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