

Private Equity Investing in a New Paradigm: Dislocation Creates Opportunity

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KEY TAKEAWAYS

- ➔ A paradigm shift happened in 2022, as the Fed ended almost 15 years of loose monetary policy. Private equity has weathered the ensuing financial storm well on a relative basis. But we see both short- and long-term implications of this paradigm change on PE investing.
- ➔ In the short- and medium-run, the extensive dislocation in asset prices has rendered capital structures of many corporations inadequate for the new economic environment. We expect many will be forced to de-lever.
- ➔ As a result, we see opportunities in distressed situations as well as strong potential for take-private and carve-outs, as companies will be compelled to seek a buyer or divest non-core assets to shore up their balance sheets.
- ➔ Relative to other asset classes, PE tends to outperform in times of volatility, and some of the best private equity vintages have emerged during economic and market downturns. Selectivity, however, is paramount.
- ➔ The consequences of the paradigm shift for the long run are also key. With tailwinds of steadily rising multiples removed, opportunities in PE will likely become more difficult to exploit. We discuss a framework that can generate sustainable potential alpha in PE investments.

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Introduction

A paradigm change took place in 2022. The end of almost 15 years of loose monetary policy eroded lofty risk-asset valuations, ended the abundant and cheap financing investors had grown used to, defied long-standing asset correlations, and challenged traditional asset-allocation models.

As this paper will show, private equity, as an asset class, has managed to weather the financial storm on a relative basis, showcasing its resilience in times of rising inflation and volatility. That said, we believe the 2022 paradigm shift has deep roots and both short- and long-term implications for private equity (PE) investors going forward.

In the short- and medium-run, the massive dislocation experienced in risk-asset prices has created a particularly attractive opportunity for value-oriented private equity investors today.

As we will discuss in detail, long-duration asset valuations—traditionally derived from discounted cash-flow models—have come under pressure as discount rates rose quickly after the Federal Reserve tightened monetary conditions. The combination of rising borrowing costs and eroding equity has rendered many corporate capital structures—built on years of low rates and designed for a world of continued cheap financing—too debt-heavy for the new economic and business reality.

As a result, many corporations will have to restructure their balance sheets (i.e., they will have to de-leverage), a process that, in our view, creates an array of opportunities for price-minded private-equity investors, especially those with the ability to secure financing at a time when capital remains scarce.

Specifically, we see opportunities in distressed situations—defined here as companies with good businesses and attractive growth prospects but whose balance sheets are over levered. Restructuring the balance sheet adds

flexibility for the company to invest in the business and position itself to realize its growth potential. We also see strong promise in take-privates and carve-outs, as companies—unable to raise equity on favorable terms on their own—will be forced to seek a buyer or divest non-core assets to shore up their balance sheets.

Relative to other asset classes, private equity tends to outperform in times of volatility, and some of the best private equity vintages have emerged during economic and market downturns. Selectivity, however, is paramount, as this paper will demonstrate.

The consequences of the paradigm shift for the long run are also important. With the tailwinds of steadily rising multiples removed from the market, opportunities in PE will likely become much more difficult to exploit, and returns will likely diverge to a much greater extent from strategy to strategy.

In this light, this paper makes the case that a strong foundational framework is critical to generating sustainable potential alpha in private-equity investments going forward. Gone are the days of momentum-driven strategies. Gone are the days of transactions propped up by cheap and plentiful debt capital. As we will illustrate in detail, we believe that future success stands on a combination of strong attention to purchase price, flexibility to deploy capital across the capital structure, creativity and flexibility in sourcing deals, and an unwavering focus on operational improvements.

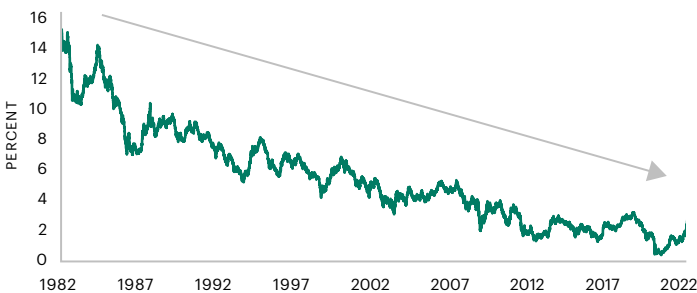
In summary, we believe that the recent correction—as painful as it has been—represents a healthy evolution of the business landscape and can pave the way for a normalization of monetary policy and a more sustainable business environment. In this light, we strongly believe that investors able to deploy capital today can benefit from a historic opportunity in private equity.

The end of cheap money ushers in a paradigm change

After the Global Financial Crisis (GFC) of 2008, the Federal Reserve pursued an expansionary monetary policy for nearly 15 years to bolster economic activity following the massive de-leveraging process in the aftermath of the GFC and the shutdowns triggered by the COVID-19 pandemic, prolonging the life of what turned out to be a 40-year bull market in rates (**Exhibit 1**).

Exhibit 1: Years of cheap money supported a decades-long bull market in rates

40-YEAR BULL MARKET IN RATES
10Y Rates



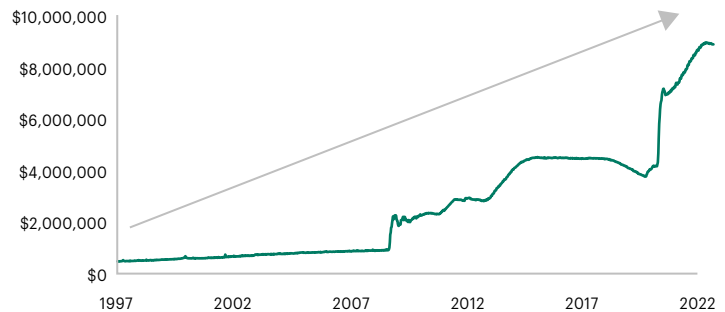
Source: Apollo Chief Economist as of September 2022.

In addition to lowering the fed funds rate to near zero, the central bank also embarked on a period of quantitative easing (QE), which paved the way for a sharp expansion of its balance sheet from less than \$1 trillion in 2009 to roughly \$9 trillion in 2022 (**Exhibit 2**). Throughout that period, inflation remained remarkably low and stable, averaging an annual 1.5% in the decade leading up to January 2022.

Low borrowing costs and modest inflation created a supportive environment for increased corporate investment and strong real Gross Domestic Product (GDP) growth. As a result, public companies in the US experienced a long period of higher-than-average earnings expansion. For example, the firms in the S&P 500 Index saw average annual earnings growth jump from 6.1% in the period between 1961 and 2008 to 11.6% in the interval between 2008 and 2021.

Exhibit 2: Quantitative easing put the Fed’s balance sheet on steroids

Total Assets of the Fed (\$ millions)



Source: Apollo Chief Economist as of September 2022.

The environment encouraged risk taking on the part of investors, fueling a strong rally across many risk assets and generating an “everything bubble” that was particularly visible in soaring public-equity and venture-capital valuations (**Exhibit 3**).

Exhibit 3: Low rates and high risk appetite created an “everything bubble”

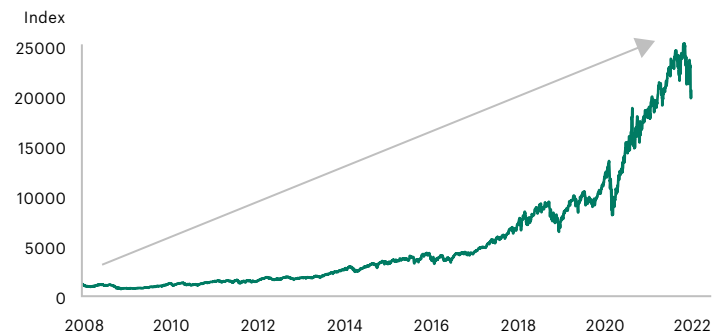
PUBLIC EQUITY VALUATIONS

S&P 500 Forward P/E



VENTURE VALUATIONS

Refinitiv Venture Capital Index

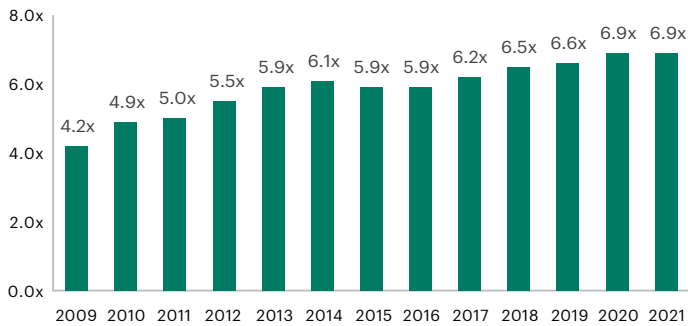


Source: Apollo Chief Economist as of September 2022.

Similarly, those conditions created a tailwind for private equity, with cheap financing enabling momentum-based PE strategies to support higher leverage levels and expanded multiples. As illustrated in **Exhibit 4**, leverage in US buyout deals went from 4.2 times in 2009 to 6.9 times in 2021, a stunning 64% increase. Accordingly, multiples also expanded, with PE companies paying an average of 12.7 times EBITDA (earnings before interest, taxes, depreciation, and amortization) in late 2021 from 8.6 times in 2009 (**Exhibit 5**).

Exhibit 4: Lower borrowing costs enabled PE firms to support higher levels of leverage...

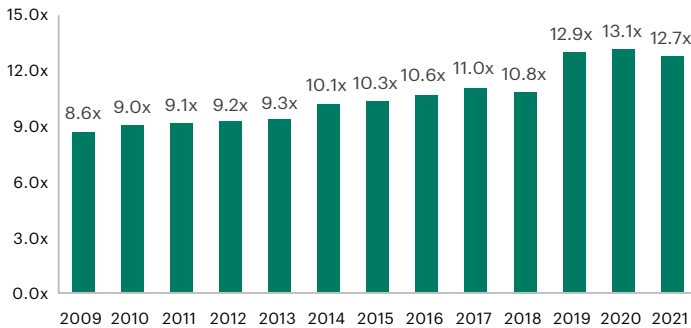
US BUYOUT LEVERAGE



Source: Refinitiv

Exhibit 5: ...while paving the way for strong multiple expansion

US BUYOUT MULTIPLE



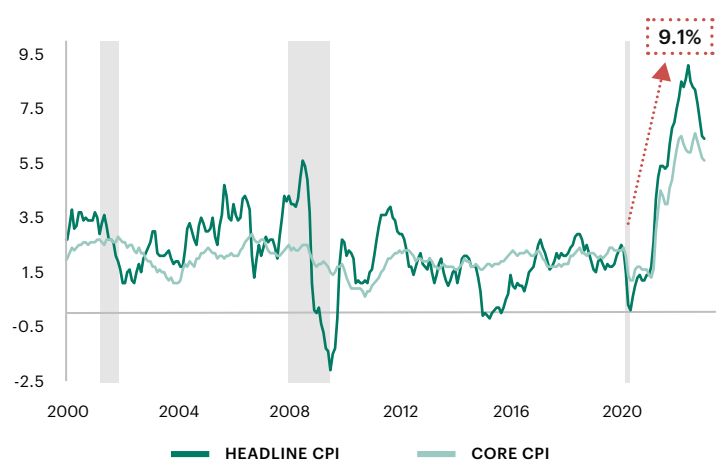
Source: Refinitiv

2022: WHAT A DIFFERENCE A YEAR MAKES

Those inflated conditions could not last forever. In fact, the conditions in 2022 were virtually the opposite of what they had been in the previous decade: Inflation surged, the Fed started raising rates and shrinking its balance sheet, the 40-year bull market for rates came to a spectacular end, borrowing costs soared, financing became scarce and expensive, and valuations were structurally lower. These effects rippled throughout all capital markets, impacting public equities, momentum-based private equity (in particular), credit, and virtually every other asset class (**Exhibits 6 and 7**).

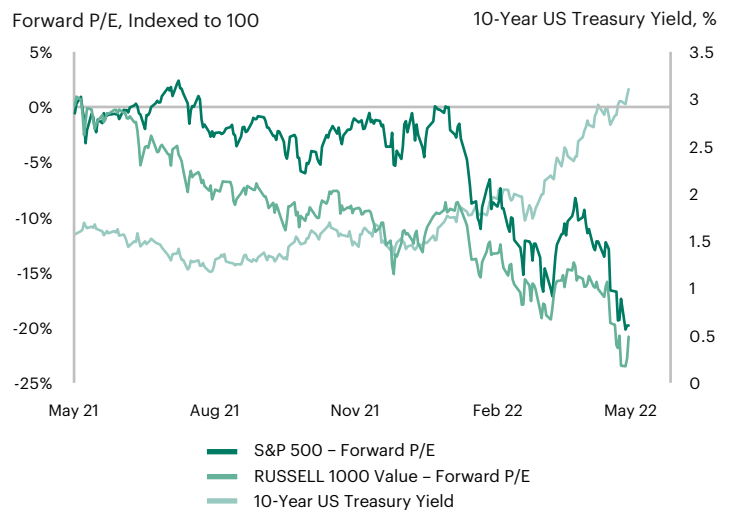
Exhibit 6: Inflation surged in the aftermath of the COVID-19 pandemic...

YoY % Change in the US Consumer Price Index (CPI)



Source: Apollo Chief Economist, as of January 2023

Exhibit 7: ... while rising rates prompted a brisk re-pricing of asset valuations



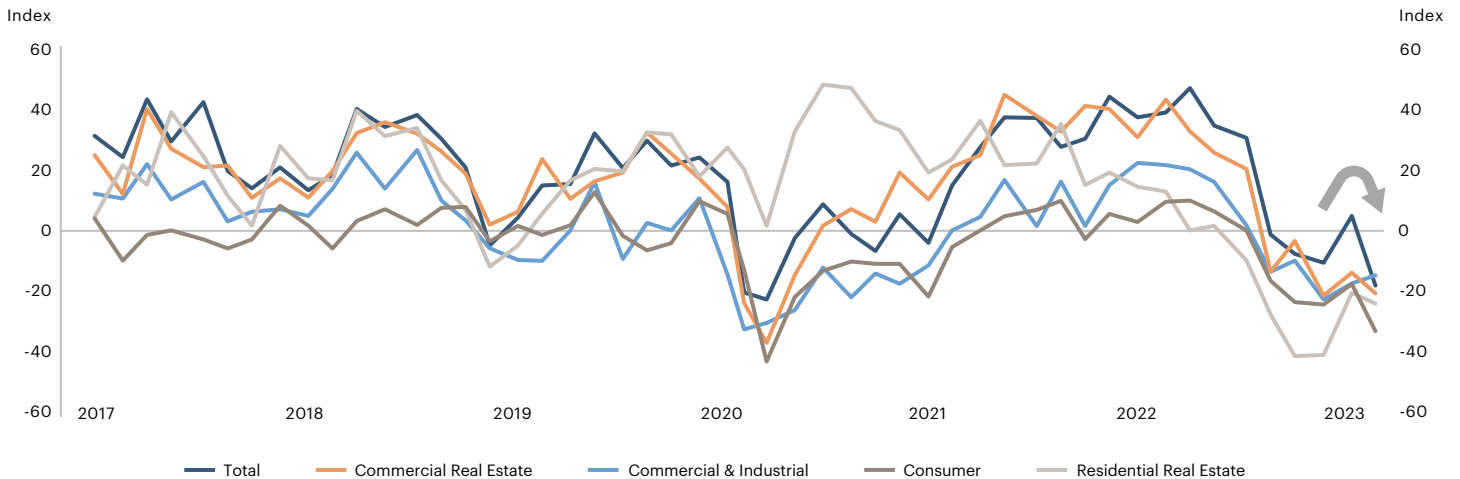
Sources: Apollo Chief Economist and CapitalIQ as of May 2022.

Making matters worse, financial conditions tightened further after the failure of Silicon Valley Bank (SVB), a leading bank catering to venture capital-backed startups, in March 2023. SVB's demise—prompted by a bank run fueled by fears of further losses on uninsured deposits after SVB had suffered significant losses on their securities portfolio—sparked a contagion effect. The banking sector in general came under pressure, especially regional banks, as depositors shifted funds into large institutions, leading to the shutdown of Signature Bank and the regulators' seizure and subsequent sale of First Republic to JPMorgan Chase & Co. The crisis also spread to weaker but systemically important banks, like Credit Suisse, which was purchased by larger rival UBS through a deal brokered by the Swiss government in March.

The pressure on banks exacerbated the impact of higher borrowing costs on public and private markets, as financial institutions—leery of deposit outflows—tightened lending standards further, prompting a stern cutback in credit available to individuals and corporations as well as for real estate financing (**Exhibit 8**). Our estimates suggest that the tighter credit conditions post SVB were tantamount to a 1.5% increase in the fed funds rate.¹ Additionally, consumer sentiment deteriorated quickly. Almost 15% of the respondents to the University of Michigan's Current Conditions survey in February 2023, for example, considered it to be a "bad time for people to buy major household items." As shown in **Exhibit 9**, these are worse levels than those experienced during the 2008 GFC.

Exhibit 8: Bank lending plummeted after SVB's failure, exacerbating already tight conditions

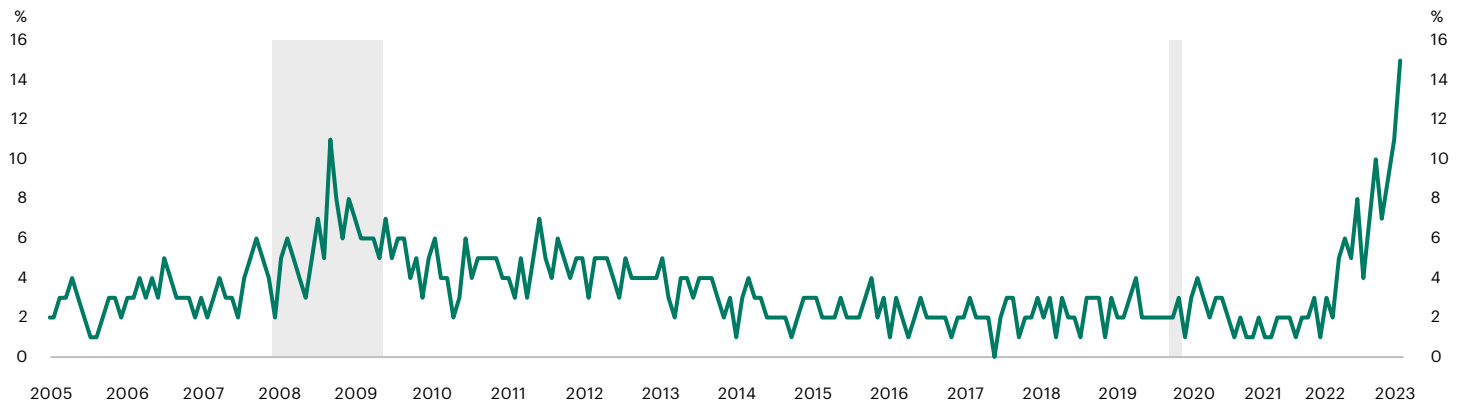
BANK LOAN VOLUMES



Source: Banking Conditions Survey, Federal Reserve Bank of Dallas, Apollo Chief Economist. Note: Data collected March 21–29, and 71 banks and credit unions headquartered in the Eleventh Federal Reserve District responded to the survey.

Exhibit 9: Consumers see current conditions for purchasing large items increasingly negative due to tighter credit

CURRENT CONDITIONS FOR BUYING LARGE HOUSEHOLD GOODS: RESPONDENTS WHO CONSIDER THEM AS "BAD"



Source: University of Michigan, Haver Analytics, Apollo Chief Economist.

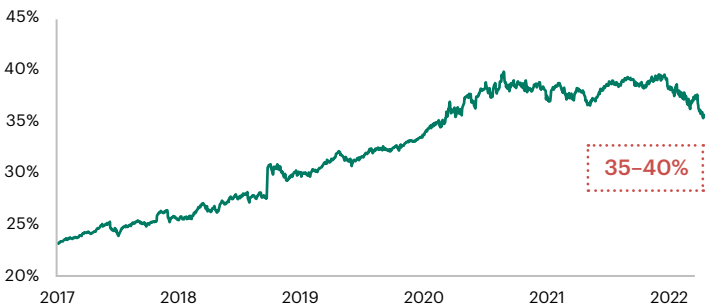
¹Apollo Chief Economist estimates, as of March 18, 2023.

Although the changing conditions in 2022 triggered a massive correction in risk-asset valuations, they were not enough to erase financial markets' dramatic overweight in long-duration equities. As shown in **Exhibit 10**, the technology sector of the S&P 500—widely known for its growth orientation and, therefore, extreme sensitivity to changes in discount rates—increased its share of the overall index from roughly 25% in 2017 to 35 to 40% in 2022.

The phenomenon was even more pronounced in private markets, as momentum-based PE sponsors targeted more growth-oriented, long-duration sectors, essentially pursuing a leveraged beta strategy. In fact, allocation of US private equity shows that the technology sector alone accounted for about 35% of all private equity deal volumes over the last couple of years (**Exhibit 11**).

Exhibit 10: Public markets are still massively overweight long-duration equities...

TECH SHARE OF S&P 500



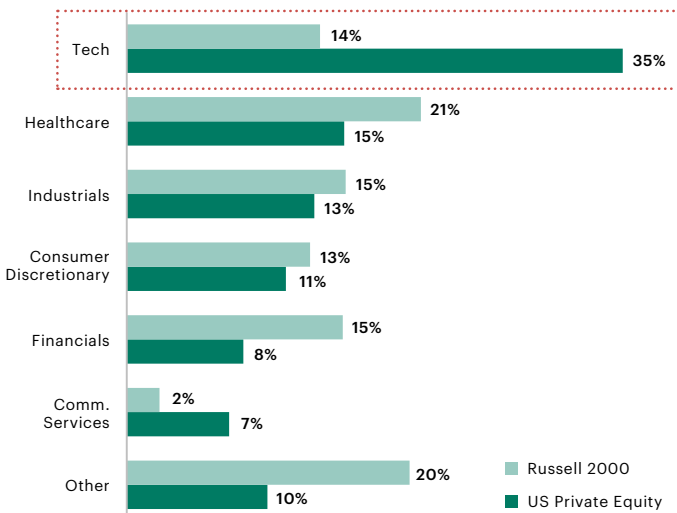
Sources: JP Morgan Investment Research, Apollo Chief Economist as of May 2022.

Investments under this strategy generated strong returns throughout the accommodative market conditions since the GFC, but they are now under significant pressure from lower valuations, resulting in unsustainable leverage and erosion of equity value.

In fact, we have seen this movie before (**Exhibit 12**). Continually chasing growth and generating returns throughout the cycle through multiple expansion is not a sustainable investment strategy, in our view.

Exhibit 11: ...as are momentum-based private equity sponsors

PRIVATE VS PUBLIC SECTOR WEIGHTS



Sources: JP Morgan Investment Research, Apollo Chief Economist as of May 2022.

Exhibit 12: Beware of chasing growth: We've seen this movie before

THROUGH CYCLES, PURCHASE PRICE MATTERS MORE THAN INVESTING IN "THEMES"



Source: Bloomberg, as of December 2022.

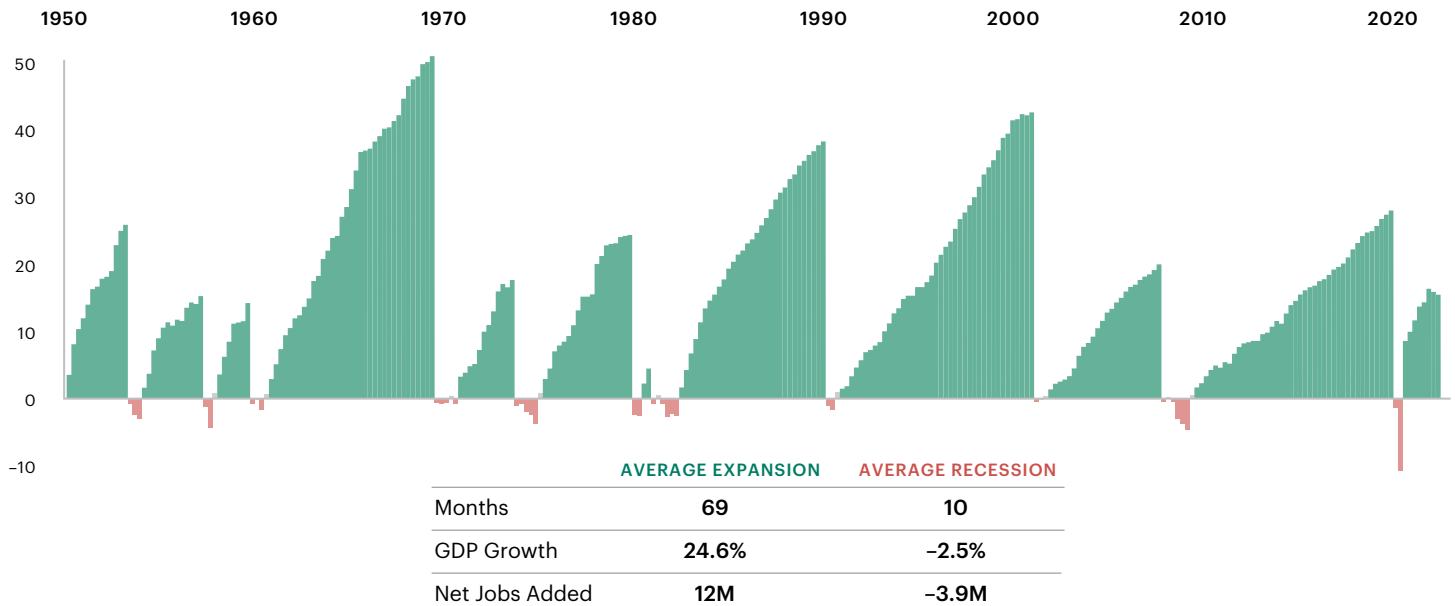
When one looks at investment returns in the rearview mirror, it is important to think about the conditions that stimulated those returns and to ask: Are those conditions likely to exist going forward? And how does one position oneself for a changing world? Economic cycles are an inevitability, with periods of peaks and troughs everlasting in history (**Exhibit 13**).

With that in mind, we believe successful PE managers in the new investment paradigm will:

- Focus on absolute instead of relative value, with an emphasis on cash-flow fundamentals supported by conservative leverage, a strategy that has historically been sustainable across multiple market environments,
- Have experience investing across changing market environments and the ability to embrace the complexity and volatility that comes with the cycles, and
- Have remained disciplined with regard to purchase price and leverage, and thus are not reliant on supportive macro environment to drive returns.

Exhibit 13: Despite painful recessions, expansions have been more powerful

CUMULATIVE GDP GROWTH (%)



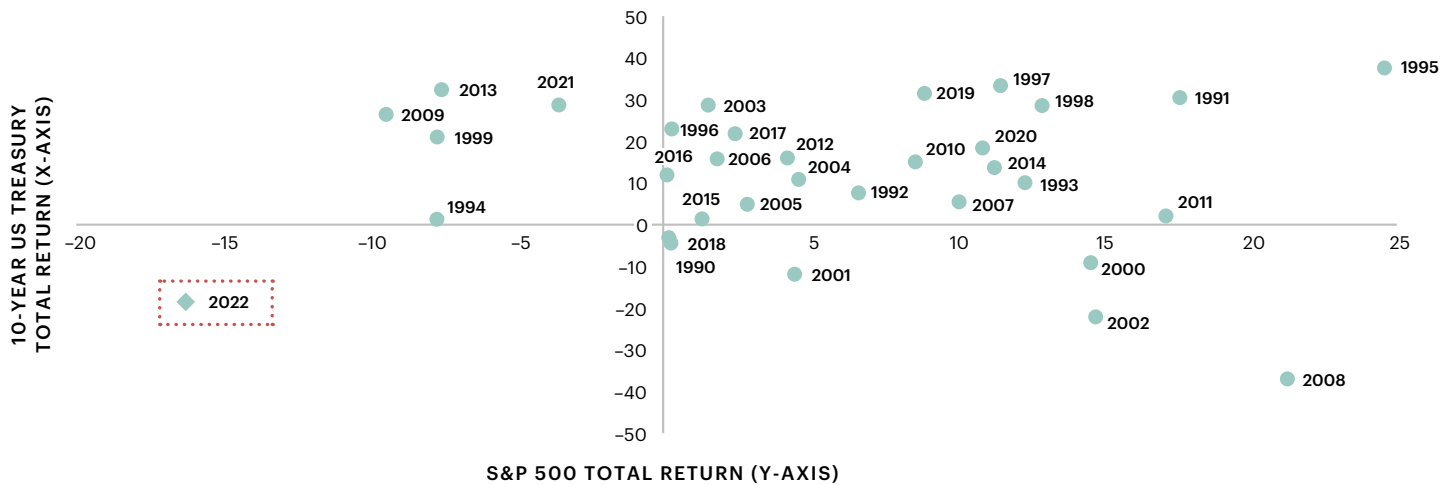
Sources: Capital Group, National Bureau of Economic Research, Refinitiv Datastream. Chart data is latest available as of 8/31/22 and shown on a logarithmic scale. The expansion that began in 2020 is still considered current as of 8/31/22 and is not included in the average expansion summary statistics. Since NBER announces recession start and end months, rather than exact dates, we have used month-end dates as a proxy for calculations of jobs added. Nearest quarter-end values used for GDP growth rates.

Why invest in PE in times of dislocation?

The events covered in the first section of this paper have many investors wondering what to do next in this new investment paradigm. 2022 was, after all, one of the worst years on record for financial market returns, as public equities and bonds registered simultaneous declines (**Exhibit 14**), leaving very few places to hide. In fact, a traditional allocation of 60% public equities and 40% public bonds had one of the worst years on record (**Exhibit 15**).

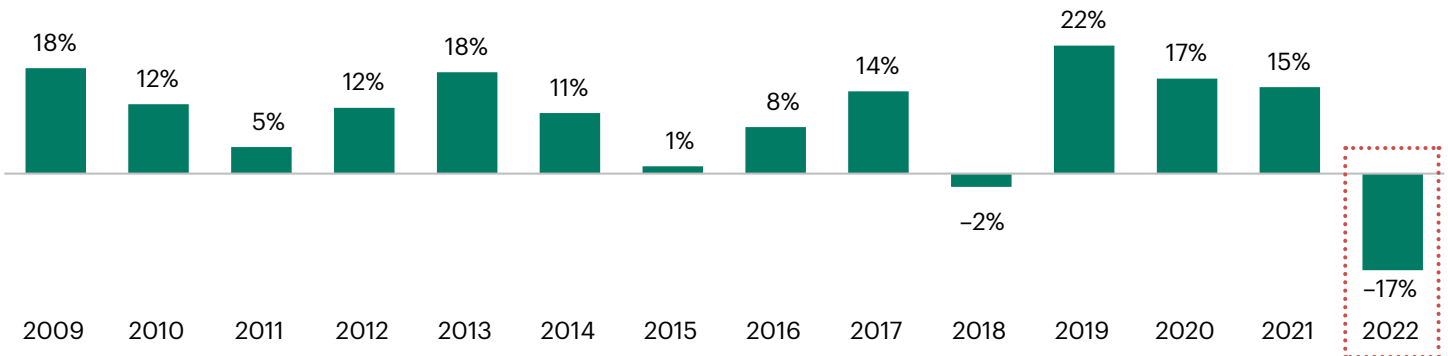
Exhibit 14: For the first time, the S&P 500 and the 10-year Treasury both lost more than 10% in a single year...

S&P 500 AND 10-YEAR TREASURY ANNUAL PERFORMANCE (%)



Source: CapitalIQ, Pitchbook LCD Database, Apollo Chief Economist as of December 2022.

Exhibit 15: ... while a 60/40 portfolio posted one of the worst performances on record

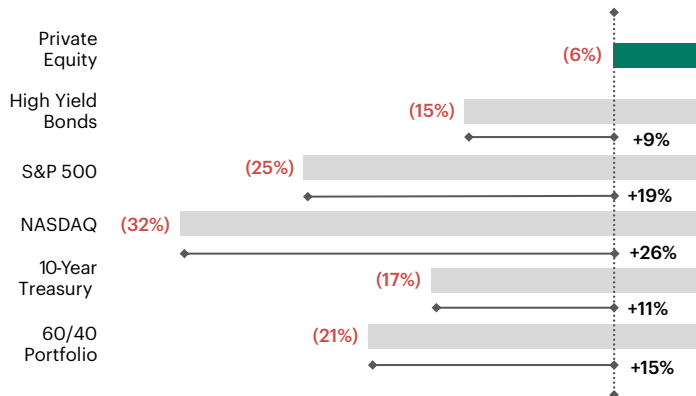


Source: CapitalIQ, Pitchbook LCD Database, Apollo Chief Economist as of December 2022.

Meanwhile, private equity has been quite resilient relative to other asset classes in the midst of all the dislocation. As illustrated in **Exhibit 16**, the industry, on average, has generated excess returns versus many other asset classes during the current period of volatility.

Exhibit 16: Private equity has remained resilient in times of volatility

PRIVATE EQUITY VS MARKET (YTD Q3'22)



As of September 30, 2022.

Sources: Bloomberg and Cambridge Associates for US Private Equity Index. 60/40 represents a US portfolio of 60% public stocks and 40% public bonds.

For a more complete analysis, we also wanted to understand the impact of the 2022 dislocation on the long-term performance of private equity when compared to public equities, as well as the asset class's behavior during different inflation regimes.

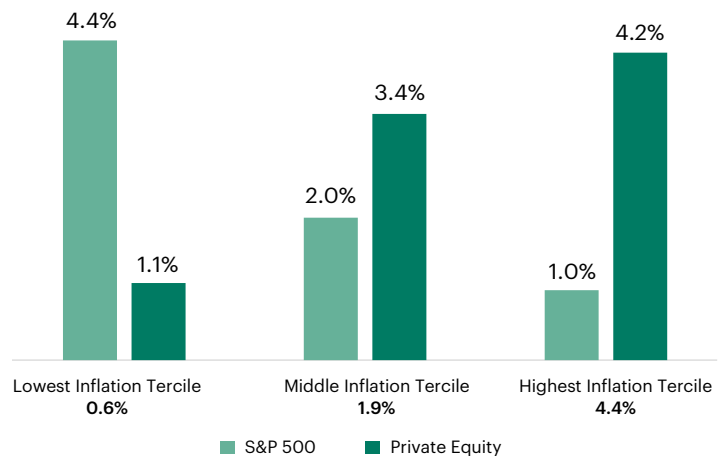
To achieve that, we broke down the period between the first quarter of 2008 (early stages of the GFC) and the third quarter of 2022 (latest data available as of this writing) into terciles of inflation, with the highest tercile representing the period of highest inflation.

As shown in **Exhibit 17**, private equity (as measured by the Preqin PE Index) has performed well in periods of rising prices, outperforming public equities (as measured by the S&P 500) by 320 basis points in the highest-inflation tercile of the analyzed period. It also performed well in periods of moderate inflation, beating public equities by 140 basis points in the period.

During the entire analyzed period, PE's correlation to inflation was a mere -0.06 against public equities' stronger -0.24 (the higher the negative correlation, the higher the odds that the asset class will underperform as inflation rises). We believe the analysis provides strong evidence that PE plays an important role in mitigating the pernicious effects of higher inflation on investors' portfolios.

Exhibit 17: PE outperforms public equities in times of rising inflation

QUARTERLY RETURNS OF PUBLIC EQUITY VS PRIVATE EQUITY BY INFLATION TERCILE, Q1 2008-Q3 2022



Source: Preqin, Bloomberg, US Bureau of Labor Statistics for Consumer Price Index, Apollo Analysts; as of September 30, 2022.

Private equity has performed well in periods of rising prices, outperforming public equities. It has also outperformed in periods of moderate inflation.

We also extended our analysis to understand PE’s returns and volatility against public equities as well as correlation between the two asset classes since the GFC. The results of this analysis are shown in **Exhibit 18**: Private equity has outperformed the S&P 500 by a margin of 320 basis points, with a standard deviation of 9.1% versus 17.8% for public equities. In the same period, PE’s correlation to public equities was 0.79. We believe the results underscore private equity’s diversification benefits and long-term appeal to both institutional and individual investors.

Exhibit 18: Historically, PE has shown higher returns and lower volatility compared to public equities

Jan 2008– Sep 2022	S&P 500 Total Return	Preqin Private Equity
Average	8.4%	11.6%
Standard Deviation	17.8%	9.1%
Correlation to Equity		0.79

Source: Preqin, Bloomberg, Apollo Analysts; as of September 30, 2022.

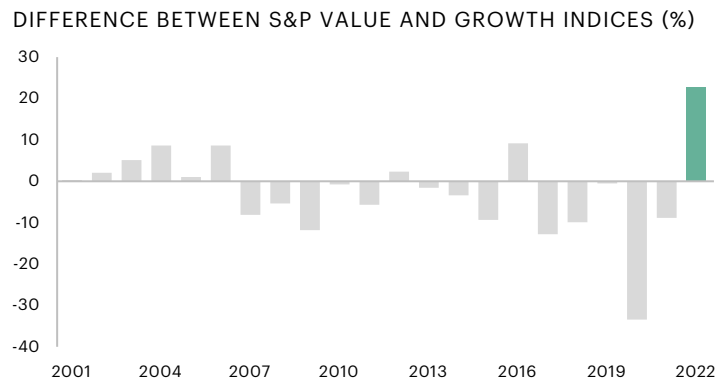
To be sure, momentum-driven PE strategies might still face some difficult times ahead as the companies in their portfolios adjust to the new paradigm of higher rates and more expensive money. However, managers who kept their discipline and did not overpay for assets are likely to experience lower asset-price volatility during periods of poor financial market returns and high inflation, providing downside protection, and potentially increasing risk-adjusted return.

In fact, we believe those managers should be in a privileged position to benefit from the opportunities generated by the recent massive dislocations in financial markets. In the remainder of this section, we cover our views on the short- and medium-term opportunities created by the new investing paradigm for PE investors.

DISLOCATION CREATES OPPORTUNITY

The dislocation of 2022 has finally triggered a long-awaited reversion towards value investing, after years of growth outperformance (**Exhibit 19**). That has important implications for investors, both in the public and private arenas. As private equity investors, we see strong potential for take-private (or buyout) and carve-outs deals, as well as opportunities in distressed situations. As financing remains scarce, however, the ability to secure credit will be crucial, and selectivity will be paramount. We explore these opportunities through end of the chapter.

Exhibit 19: The long-awaited reversion towards value has occurred



Source: CapitalIQ, Pitchbook LCD Database, Apollo Chief Economist as of December 2022.

Historically, private equity has outperformed the S&P 500 by a sizable margin with lower volatility, underscoring its diversification benefits.

Opportunistic buyouts and carve-outs

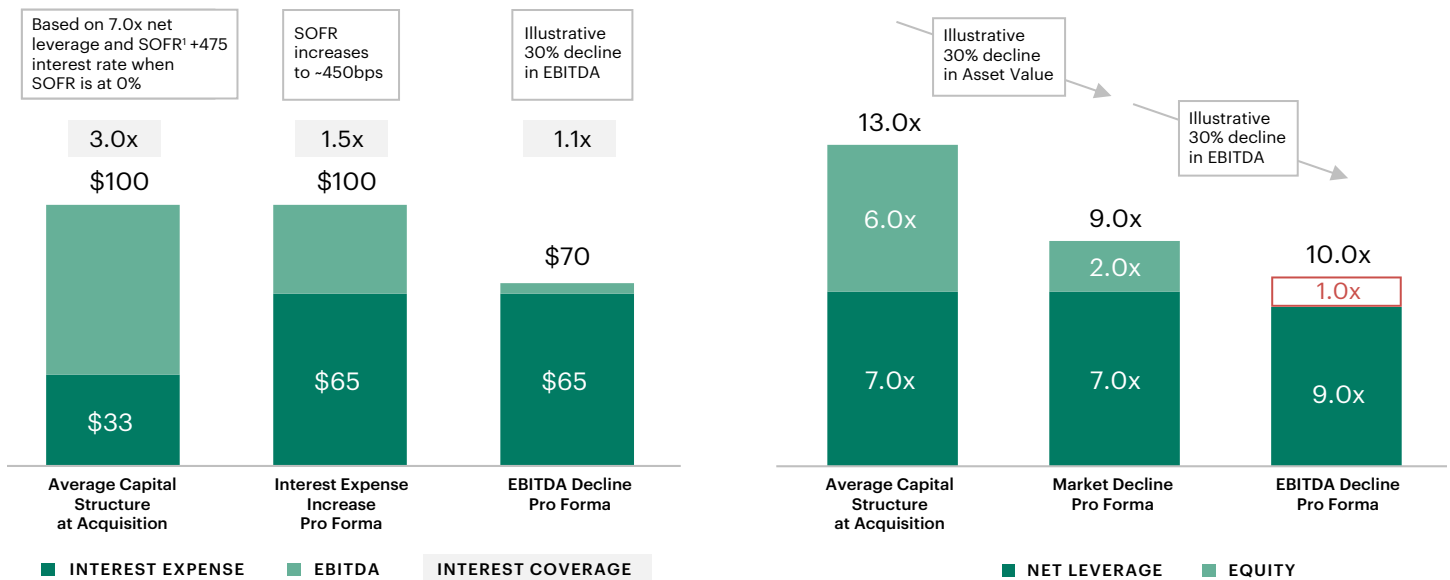
As shown previously, long-duration equity valuations—traditionally derived from discounted cash-flow models—have come under substantial pressure as discount rates rose quickly after the Fed tightened monetary conditions. The combination of rising borrowing costs and eroding equity has rendered many corporate capital structures—built on years of low rates and designed for a world of continued cheap financing—too debt-heavy (**Exhibit 20**).

As a result, many corporations will have to restructure their balance sheets (i.e., they will have to de-leverage), a process that, in our view, creates an array of opportunities for price-minded private-equity investors, especially those with the ability to secure finance at a time when capital remains scarce.

In this environment, we see the potential for many attractive buyout and carve-outs deals, as companies—unable to raise equity on favorable terms on their own—are forced to divest non-core assets to shore up their balance sheets, ensure adequate liquidity, and strengthen their core business.

Exhibit 20: Companies today have inadequate capital structures, which were designed for a world when capital was cheap and plentiful

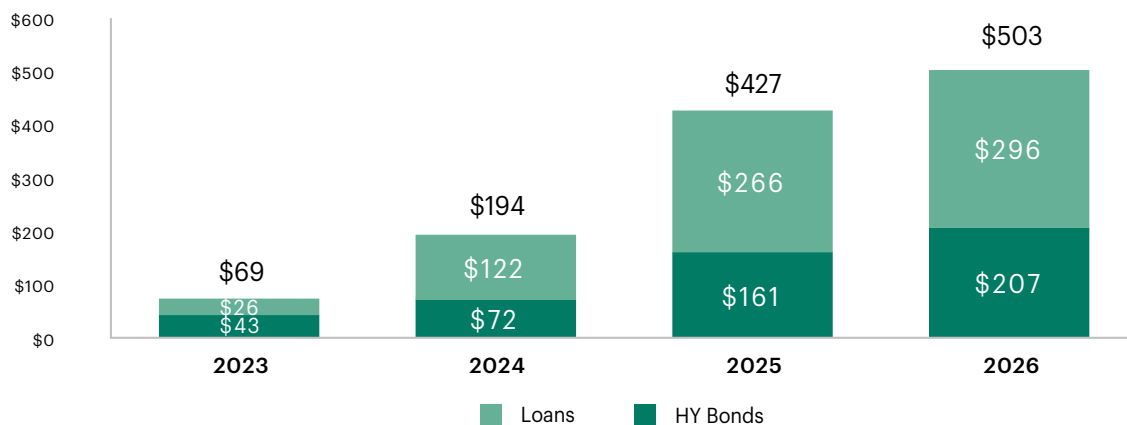
ILLUSTRATIVE ANALYSIS OF CORPORATE CAPITAL STRUCTURES UNDER DECLINING ASSET VALUE AND RISING RATE SCENARIOS



¹ Secured Overnight Financing Rate (SOFR).
Source: Apollo Analysts. For illustrative purposes only.

Exhibit 21: A looming maturity wall may force many companies into distressed situations

US LEVERAGED LOAN AND HIGH YIELD BOND MATURITY WALL (\$BN)



Source: J.P. Morgan, IHS Markit, S&P LCD, and Bloomberg. As of September 2022.

Distressed/de-leveraging transactions

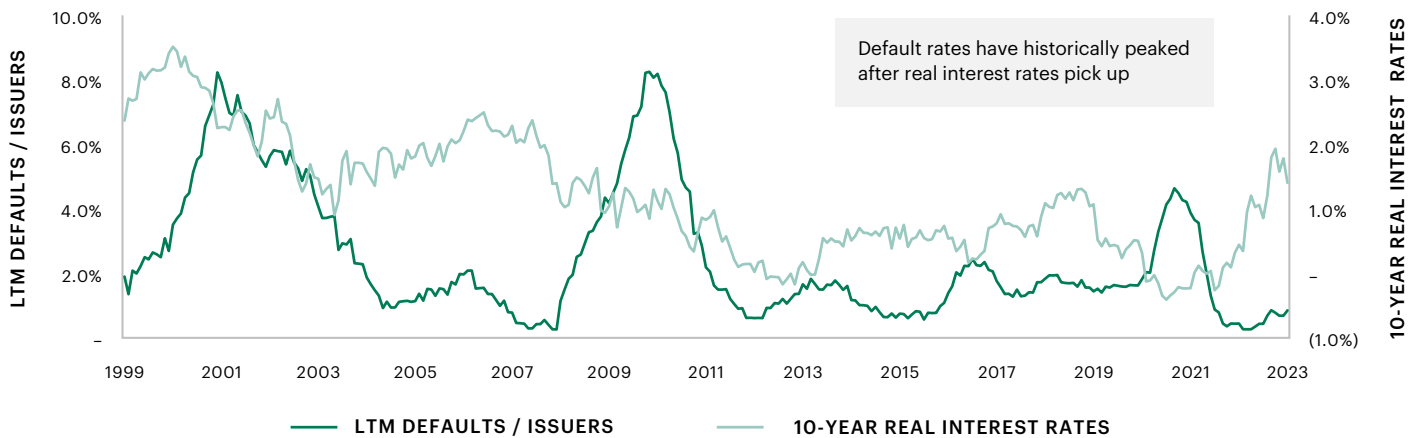
The same dynamics are at play for potential distressed/de-leveraging transactions.

As higher rates continue to take a toll on corporations with overlevered capital structures, some of these companies will struggle to service interest payments or re-finance when their current debt matures. A looming maturity wall makes these concerns all the more pressing (Exhibit 21, previous page).

Historically, corporate default rates have been highly correlated with real interest rates. Given the recent dramatic increase in real rates, we expect average default rates to increase. The 2% average annual default rate in the period following the GFC is about half the historical average. Already, the percentage of listed companies classified as “zombies”—companies with coverage ratios lower than one—is hovering between 15% and 20%, far above long-term averages (Exhibits 22 and 23).

Exhibit 22: Corporate defaults are likely to rise as borrowing costs increase

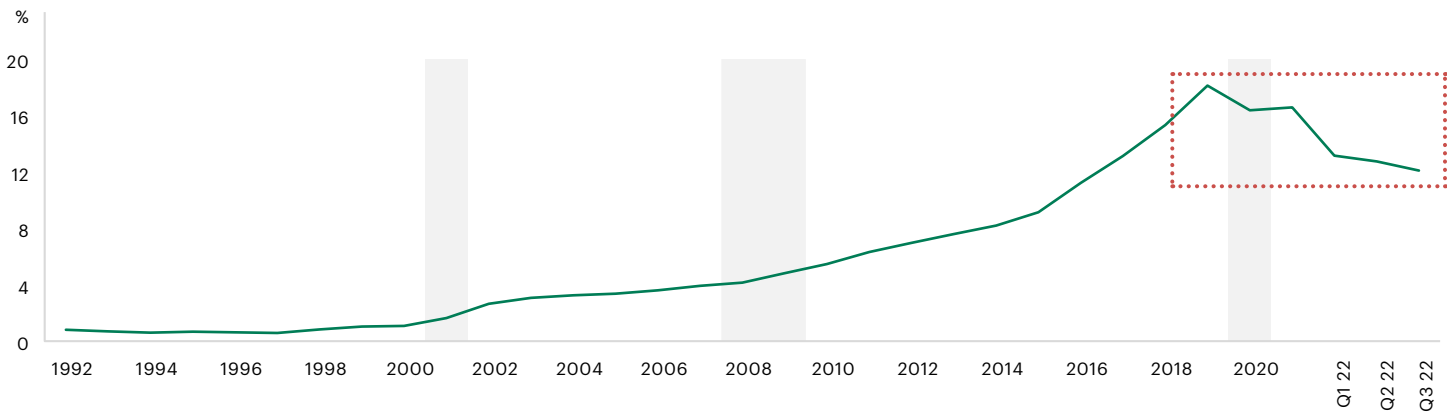
CORRELATION BETWEEN REAL INTEREST RATES AND CORPORATE DEFAULTS



Source: St. Louis Fed database (FRED), S&P LCD. As of January 2023.

Exhibit 23: Increased share of “zombie” companies may accelerate bankruptcies

SHARE OF LISTED COMPANIES WITH INTEREST COVERAGE RATIOS < 1



Source: CapitalIQ, S&P LCD, Apollo Chief Economist.

Together, these factors—combined with the fact that lower-rated firms (BBB and below) make up a significant portion of current debt outstanding, at around 15% of GDP—will likely force many companies to de-lever and free up capital that can be used to stabilize their businesses and re-orient themselves towards growth. Private equity firms can have opportunities to help companies fix their balance sheets by converting corporate debt to equity.

A historic private equity vintage?

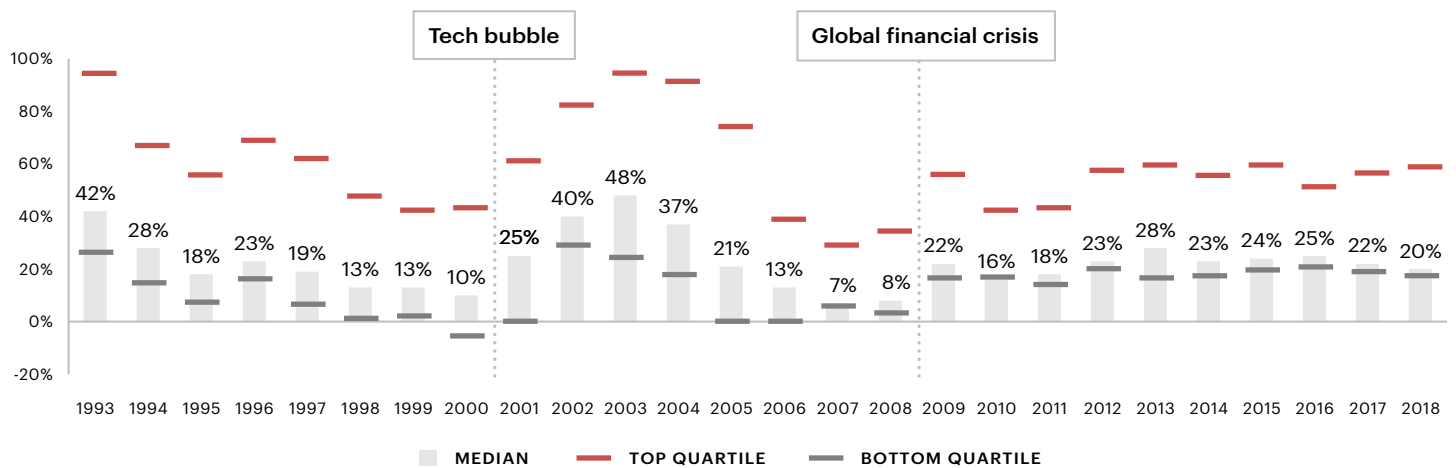
Additionally, history shows that some of the best performing private equity “vintages” have been deployed during downturns and periods of sustained volatility, like the one we are currently experiencing. As shown in **Exhibit 24**,

the strongest vintage in the past decades was invested in the wake of the crashing of the dot-com bubble in 2000/01/02. Similarly, private equity also produced strong vintages in aftermath of the Global Financial Crisis.

For the reasons laid out so far in this paper, we remain quite optimistic about the 2023 private equity vintage. But that statement does not come without a warning: As strong as the post-downturn performance was, so was the dispersion among PE sponsors. So, while post-recession returns tend to allow for outsized alpha potential, picking the right partner is paramount given the industry’s high levels of return dispersion.

Exhibit 24: Post-recession PE vintages tend to outperform, but picking the right partner is key given high dispersion

GLOBAL BUYOUT DEAL IRR BY YEAR OF ENTRY



Source: Bain, DealEdge. Data as of December 2022.

The long-run view: How to sustainably generate returns in PE

We have so far covered the genesis and impact of the 2022 paradigm shift as well as the short- and medium-term investment opportunities it created for private-equity sponsors. But the consequences for the long run are also important. With the tailwinds of steadily rising multiples removed from the market, opportunities in PE will likely become much more difficult to exploit, and returns will likely diverge to a much greater extent from strategy to strategy.

In this light, we believe that a strong foundational framework is critical to generating sustainable potential alpha in private-equity investments. Gone are the days of momentum-driven strategies. Gone are the days of transactions propped up by cheap and plentiful debt capital. We believe the key to long-term success in private equity is adhering to a framework designed to sustainably generate alpha across business cycles—in both upswings and downturns. A repeatable, multi-faceted approach to value creation is based on:

- Purchase price discipline,
- Creative sourcing,
- Value-added structuring, with strong internal financing capabilities,
- Flexibility to deploy capital up and down the capital structure, and
- A sustainable and repeatable process for operational improvements to drive value creation.

The remainder of this section discusses that framework in detail.

Purchase price discipline

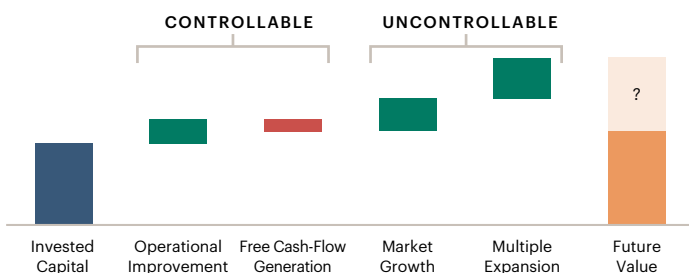
For more than a decade, buyers of private assets have faced few consequences for overpaying. Steady multiple expansion meant buyers who paid too much for an asset could still profit at exit. Going forward, we believe markets will be much less forgiving.

Purchase price discipline is a fundamental element of sustainable alpha generation, in our view. Firms that are committed to investing in undervalued companies or companies available at attractive absolute prices unlock opportunities to create value. Investing at lower multiples allows the buyer to take on less leverage. Lower leverage ratios can open the door to free cash-flow generation, which in turn enhances downside protection. Buying at an undervalued multiple also increases the odds of benefiting from pure multiple expansion at exit.

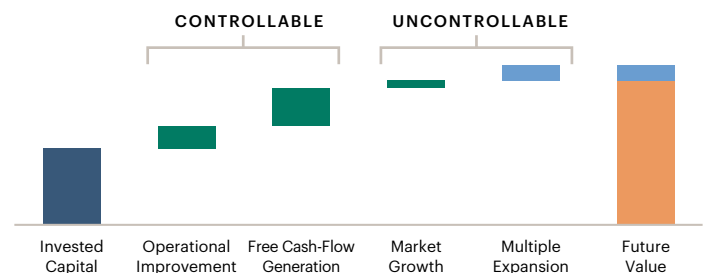
Exhibit 25 illustrates the effect purchase-price discipline can have on a private equity investment. The chart on the left depicts the approach used widely in the private equity industry in recent years. It relies on top-line growth and multiple expansion as drivers of value creation. The chart on the right we believe illustrates a more value-based investment strategy using purchase price discipline as a core tenet.

Exhibit 25: Price discipline is a core tenet for private equity

Illustrative value creation bridge for the broader market



Illustrative value creation bridge with pricing discipline



Common strategy, highly correlated to market cycles

Average Creation Multiple	~11.5x Purchase Price
Average Leverage	~6x at entry
Base Case	Reliance on continued top-line growth, persistently low rates, and multiple expansion at exit

Differentiated strategy to build value across cycles

Average Creation Multiple	~6-7x Purchase Price
Average Leverage	~4x at entry
Base Case	Underpinned by cash flow and readily achievable operational improvements

For illustrative purposes only.
Source: Apollo Analysts

The main difference between these two approaches is their exposure to uncontrollable and controllable factors. Growth-oriented investors who are willing to compromise on purchase price must count on market growth and other external forces beyond their own control to drive value at exit. In contrast, private equity firms that adhere to the value-focused strategy featuring strong purchase price discipline can create leeway to generate value through levers such as operational improvements and free cash-flow generation. Because investors directly control these factors, we believe their value creation strategy is more reliable and repeatable across the market cycle—even when external macro factors are working against them. The bottom line? Purchase price matters.

Creative sourcing

Because the most attractive investment opportunities vary over the course of the market cycle, we believe the private equity investors capable of deploying capital up and down the capital structure have a long-term competitive advantage over less flexible competitors.

In a recessionary phase, private equity investors can find opportunities to deploy capital into distressed or de-leveraging transactions in which over-levered companies need to convert debt to equity. Such situations are often complex, and therefore less competitive, providing an advantage to asset managers with scale and expertise. A recovery phase can produce opportunities for more traditional buyouts with lower leverage and lower valuations. In an expansionary era, one of the biggest advantages for private equity investors is the ability to discern fundamental from momentum-driven value. In this phase, the most attractive opportunities usually involve trading complexity for value by avoiding the chase for multiple expansion and focusing on buyouts and carve-outs with higher degrees of difficulty (**Exhibit 26**).

Delivering value and performance across the cycle requires a flexible mindset and diverse capabilities. As a result, a truly sustainable private equity portfolio will look different at different stages. Changes in portfolio composition will represent the continuous deployment of capital to the most attractive opportunities at any given point in a cycle (**Exhibit 27**).

Exhibit 26: Flexibility in sourcing deals creates access to attractive opportunities across different phases of the business cycle...

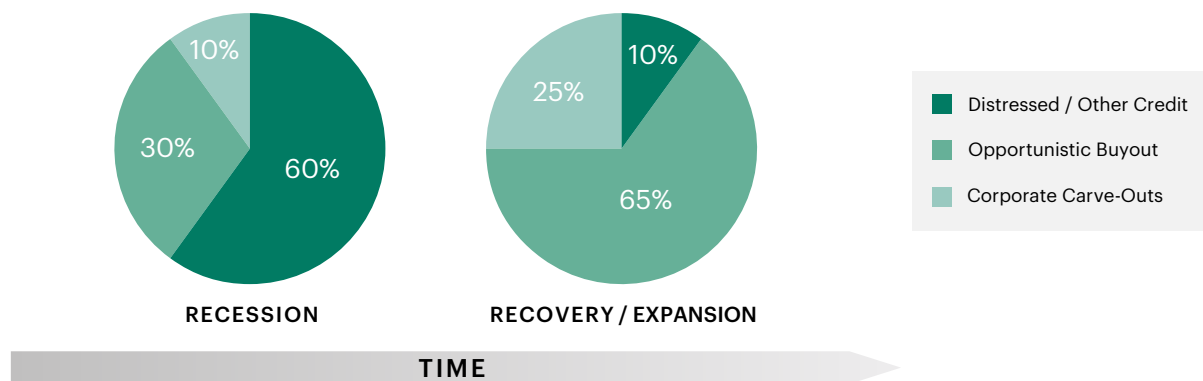
PRIVATE EQUITY INVESTMENTS ACROSS ECONOMIC CYCLE

	RECESSION	RECOVERY	EXPANSION
Liquidity	Low	Medium	High
Valuation	Low	Medium	High
Typical Private Equity Firm	Inactive	Active	Inactive or Pay High Prices
Our View	Distressed Buyouts	Traditional Buyouts	Complex Buyouts/Carve-Outs to Lower Entry Multiples

For illustrative purposes only.
Source: Apollo Analysts

Exhibit 27: ...and widens the opportunity set for investors

ILLUSTRATIVE FUND COMPOSITION BY STRATEGY



For illustrative purposes only.
Source: Apollo Analysts

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Value-added structuring, with strong internal financing capabilities

The ability to finance deals when others cannot is a critical advantage in private equity, and the current market environment provides the perfect example of how private equity firms can exploit strong internal financing capabilities to capture value in volatile markets.

Regional bank failures in the United States in the first quarter of 2023 intensified existing disruptions in credit markets, curtailing the ability of many firms to execute transactions. Private equity firms with the ability to arrange financing have a chance to step in and fill that void, and earn attractive returns on their capital. In our view, firms can get deals funded in challenging credit environments by drawing on three core resources:

- **Creative financing:** The ability to offer bespoke financing solutions for individual investments;
- **Holistic solutions:** The scale to provide complete financing solutions, including the ability to place full financing packages with speed and certainty across the capital structure; and
- **Deep networks:** Strong relationships with direct lenders to place fully private solutions or anchor syndicated deals. Having a network of direct lenders can enable firms to get deals done when credit conditions are tightest.

Even with these capabilities, financing terms will be less favorable today than they were at the start of 2022. However, depressed valuations can offset the increased cost of funds. For private equity investors, purchase price is permanent; financing is temporary. Buyers who can supply or arrange financing can take advantage of this opportunity, and refinance debt and optimize the capital structure later when market conditions are more favorable.

Flexibility to deploy capital up and down the capital structure

The ability to deploy capital up and down the capital structure enables private equity firms to unlock opportunities unavailable to many other investors.

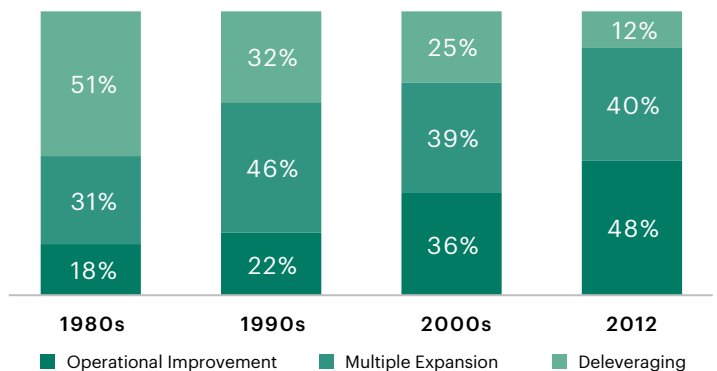
For example: As a maturity wall in corporate debt moves closer, companies with leverage levels unsustainable in the new market environment will need relief. Private equity investors capable of shifting their strategies to take advantage of these developments could obtain significant ownership stakes by purchasing their debt and converting it to equity.

Investors with the flexibility and scale needed to participate in these transactions—and at any other point in the capital structure—can dramatically expand their universe of opportunities.

A sustainable and repeatable process for operational improvements to drive value creation

In the early days of private equity, financial engineering and de-leveraging accounted for more than half of value creation in the industry. In recent years, this ratio has reversed. Today, close to 50% of value creation in private equity is attributable to operational improvements. That pendulum appears set to swing even farther in the direction of operational enhancements (**Exhibit 28**).

Exhibit 28: Operational improvement has become an increasingly important driver of value creation



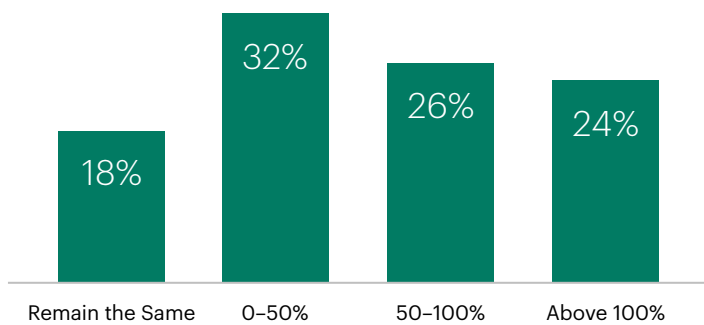
Source: Goldman Sachs, BCG, CEPRES Market Intelligence, Bain & Co.

At a time of structurally higher interest rates and increased volatility, market and valuation growth can no longer be counted on to expand multiples. Private equity investors will likely have to rely on alternative methods to create value.

Across the industry, there is currently an enormous focus on building operational capabilities and growing the size of operations teams (**Exhibit 29**). Firms and their operating partners are becoming much more skilled and sophisticated at generating value through operational enhancements using technology transformation, digitization, data and portfolio analytics, commercial excellence, environmental, social and governance (ESG), and other levers. It is not just about growing the bottom line. Firms are also investing in both organic and inorganic growth, working closely with management teams to drive strategic direction, and positioning companies for greater revenue growth and value creation.

Exhibit 29: As operational improvements gain prominence, PE firms have invested in growing their capabilities

EXPECTED GROWTH IN PE OPERATIONS TEAM SIZE IN NEXT TWO YEARS



Source: Alvarez & Marsal. As of December 2022.

Conclusion

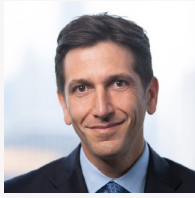
Not all markets and investing periods are created equal. We believe the end of the easy money era and the arrival of rapidly rising interest rates marks a paradigm shift with short- and long-term implications for private equity investors.

Dislocation is creating a historic opportunity for the PE industry. However, in this more challenging market environment, we believe it will be much more difficult for some managers to exploit opportunities, and there will be increased dispersion in returns among private equity investors.

In this light, investors able to deploy capital today can benefit from these opportunities, but selectivity is paramount. It is critical for both institutional and wealth investors to choose the right partners. We believe investors should consider partnering with:

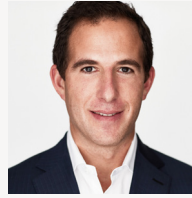
- Firms that can stay nimble and have flexibility to invest across transaction types and the capital structure.
- Investment teams that have been together and demonstrated the ability to perform well across market cycles and in various market conditions.
- Firms that have a model of value creation based on controllable inputs like purchase price, deal structure and operational enhancements, and a track record of generating alpha across market cycles.

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