PitchBook Data, Inc.

John Gabbert Founder, CEO

Nizar Tarhuni Senior Director, Institutional Research & Editorial

Dylan Cox, CFA Head of Private Markets Research

Institutional Research Group

Analysis

Wylie Fernyhough, CFA
Senior Analyst, Private Equity Lead
wylie.fernyhough@pitchbook.com

Jinny Choi
Analyst, Private Equity
jinny.choi@pitchbook.com

Dominick Mondesir
Senior Analyst, EMEA Private Capital
dominick.mondesir@pitchbook.com

Data

TJ Mei
Associate Data Analyst

pbinstitutionalresearch@pitchbook.com

Publishing

Designed by **Mara Potter**

Published on May 31, 2022

Contents

How PE Firms Will Navigate Today's Complex Macro Environment

Assessing fund performance, deal activity, exits, and more

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Key takeaways

- The current high inflation and rising interest rate regime will be broadly negative for fund performance and portfolio company valuations. Higher discount rates put downward pressure on all assets. This is especially true of higher growth companies, and we have seen this ring true in Q1 2022 fund returns that have been made public.

- Deal activity will slow but not stop. Despite higher financing costs and lower public comps creating a more challenged dealmaking environment, sponsors are sitting on more than $1 trillion in dry powder and are highly incentivized to deploy it.

- PE firms will have to adapt where they source deals and the types of companies in which they invest. Companies able to successfully pass on inflationary input costs will command a premium. Additionally, with public markets swinging downward more quickly than private markets, take-privates and PIPEs present a huge opportunity. Pressure on some stock prices may boost corporate carveout activity as well.

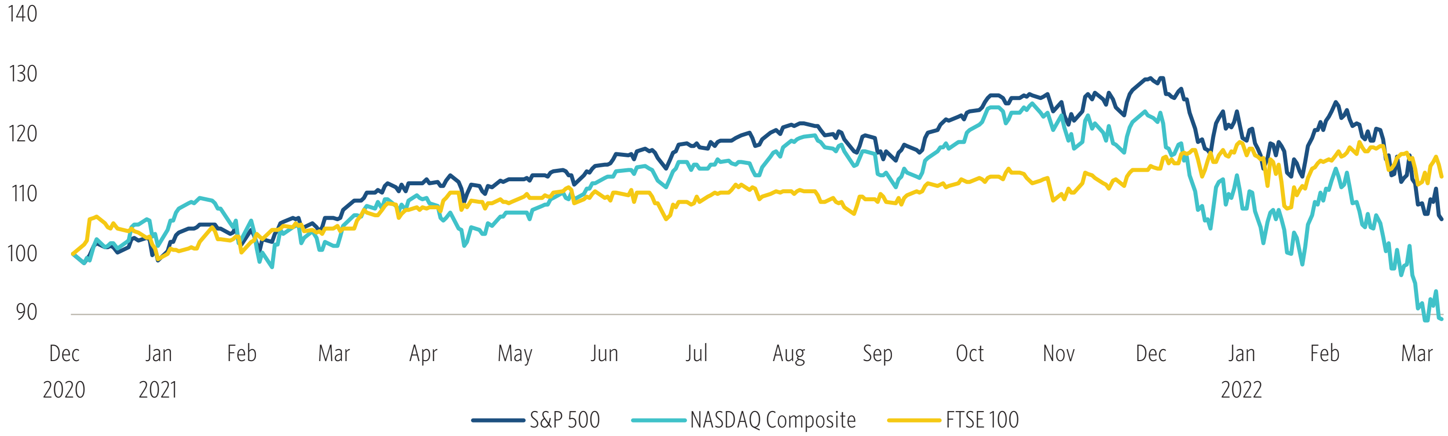
- Exit activity is set to slow more quickly than deal activity because most firms are not forced sellers. With volatility at elevated levels and prices depressed, public markets are an unattractive exit opportunity in most cases. Sales of portfolio companies to other sponsors or corporates will be the primary paths to exits in 2022.

- Holding times will push upward. This will cause sponsors to tap GP-led secondaries transactions, company and portfolio recapitalizations, and partial liquidity events at an increased rate.

Introduction

The global macroeconomic backdrop is perhaps the most fraught since the global financial crisis. Inflation is raging as supply chains adjust to shocks, including the COVID-19 pandemic, much of the Chinese economy shutting down, a swift expansion in e-commerce shopping, and more. Moreover, Russia's invasion of Ukraine has complicated supply chains and has further fragmented regional power centers around the world. Against this backdrop, we have seen the US Federal Reserve (Fed) raise interest rates quickly despite many stock indexes cratering. Valuations for venture capital (VC)-backed companies have rapidly sunk, and negative pressures across the board are pushing down on private equity (PE)-backed portfolio companies. Investors are asking how all of this, and more, will affect their current and prospective PE investments.

Select stock indexes rebased to 100 in September 2020

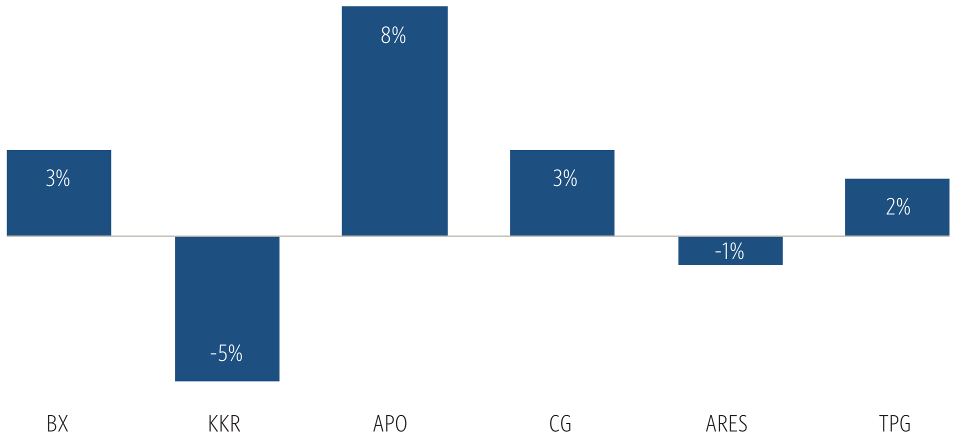


Source: PitchBook | Geography: Global
*As of May 19, 2022

Valuations and fund performance

Rising interest rates will have deleterious effects on asset prices—it is only a matter of the extent. The US Fed raised short term rates by 50 basis points in May, and market expectations point to an approximately 3% fed funds rate by year end 2022. Assets with high duration will be most negatively affected. Profitable companies at lower multiples have seen less downward pressure on their valuations than have high-growth companies where profits are many years off. The most expensive stocks are down to a far greater degree than the cheapest ones. Similarly, many VC-backed companies are being pummeled. With public comps down and discount rates up, PE portfolio companies, too, are under pressure. Blackstone (NYSE: BX) and KKR (NYSE: KKR), which have invested heavily in more quickly growing sectors, posted -3% and –5% gross PE returns, respectively, in Q1 2022. Meanwhile, Apollo (NYSE: APO), which is known for its value investment philosophy in its PE strategy, fared much better, registering an 8% gain in the quarter. Apollo XI bought into its companies at an average 6.5x EV/EBITDA valuation, well below the 10x to 14x at which many others of a similar size transacted in recent years. In the coming quarters, companies that had invested most heavily in the high-growth technology sector may face the largest valuation and performance headwinds.

Q1 2022 gross PE fund appreciation



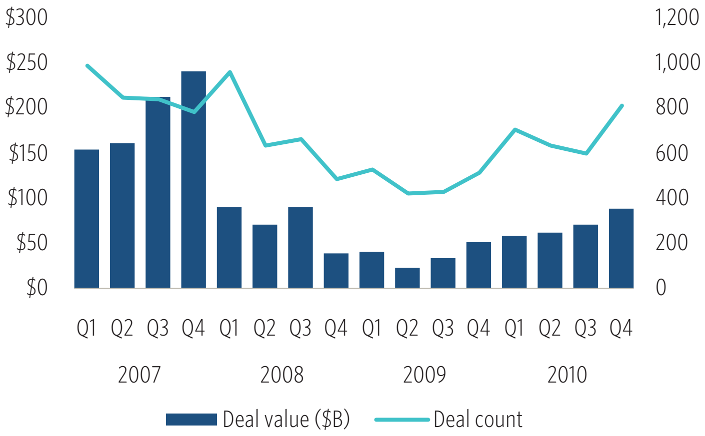
Source: Public filings | Geography: Global
*As of March 31, 2022
Note: TPG Capital portfolio had 2% value creation in the quarter outside of a number of significant exits.

Deals

PE deal activity will slow but not stop

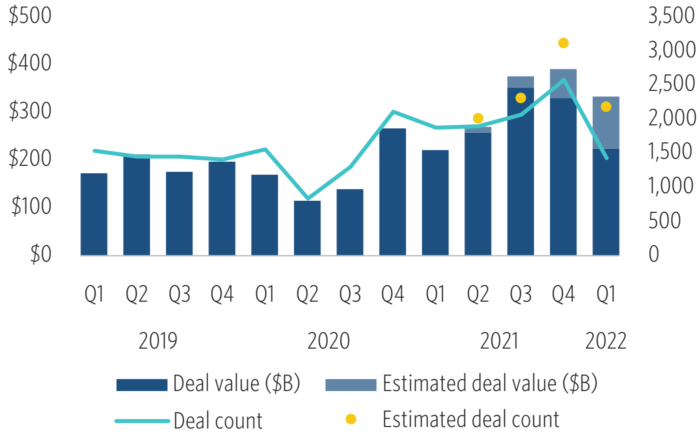
PE deal activity—both value and count—will slow from their records in 2021 but will remain historically strong. The catalogue of negative near-term risks to the global economy are now well known: the war in Ukraine, continuing supply chain disruptions, tight labor market, persistent high inflation, central bank tightening, and the enduring impacts of the pandemic. In an ordinary market, any one of these items could reduce global growth, but these are extraordinary times where global growth is trending down, volatility is high and rising, and monetary policy is compellingly tighter. As PE-backed assets tend to have gross domestic product (GDP)-linked growth profiles, the sharply slowing global economic activity—which is currently seeing most major economies including the US, Europe, China, and the UK tracking towards GDP growth 50% lower than 2021—means PE deal activity will no doubt suffer. Several central banks including the Fed and Bank of England (BOE) have mentioned there will be "some pain," and PE will not be immune. One big difference between now and previous volatile environments is the sheer volume of dry power on hand. However, dry powder is down year-over-year as sponsors deployed capital at a record pace in 2021. PE firms are paid to do deals, and with more than $1 trillion of equity capital on the side lines, GPs will find ways to deploy it.

US PE deal activity during the GFC



Source: PitchBook | Geography: US
*As of March 31, 2022

US PE deal activity during the pandemic



Source: PitchBook | Geography: US
*As of March 31, 2022

GPs tend to track companies for several years before they execute upon a deal. The volatile macroeconomic environment presents opportunities for sponsors to do deals with companies on their target list. Extortionate valuations of previous years were arguably the biggest roadblocks for companies on this list; however, with falling prices, deals could be struck. In addition, other companies will reach out to sponsors for defensive capital during the market turmoil, especially publicly traded groups, as stock prices quickly decline. Public companies that have seen share prices battered will feel pressure to free up capital and shore up balance sheets, likely leading to a lift in carveout activity. Similarly, take-privates and PIPEs (private investment in public equities) will be popular. Hellman & Friedman's $1.4 billion investment that netted them 7.5% of Splunk (NASDAQ: SPLK) in early March 2022 is a standout example.

Higher financing costs for sponsors

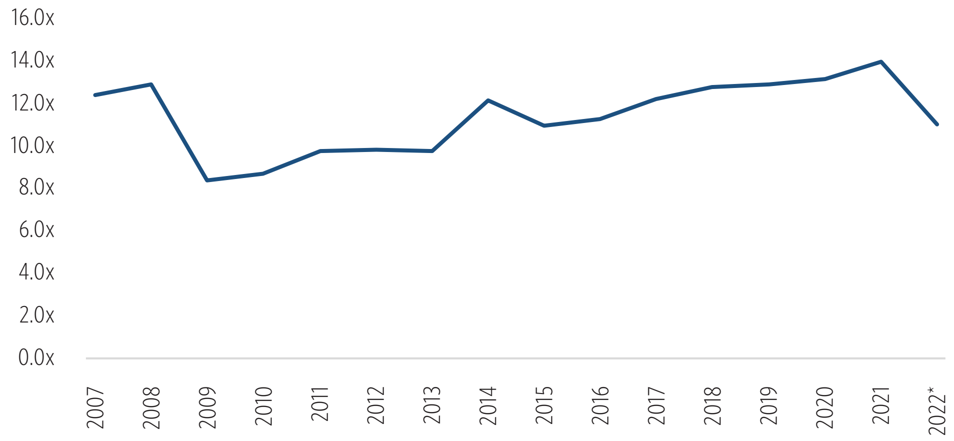
The current inflationary environment represents the largest risk to PE dealmaking in the short-to-medium term for a few reasons. Expectations that inflation will remain elevated this year have pushed central banks to start aggressively increasing interest rates back to their neutral levels (2.5% to 3.0% in the US), which has major implications for PE financing costs. The UK recorded a CPI (Consumer Price Index) of 9% in April—its highest level since records began in 1989—which has pushed the BOE to execute its fourth consecutive interest rate increase since December 2021, causing the UK's interest rate to range from 0.75% to 1.0%—its highest level in 13 years. The US CPI hit 8.5% in March—its highest level since the early 1980s—which pushed the federal reserve to increase short term interest rates by 50 basis points to a range of 0.75% to 1.0%, its largest hike in two decades. And in the Eurozone, inflation reached 7.5% in April, notching a record high for the sixth month in a row. The European Central Bank (ECB) is a clear laggard and has yet to start its hiking cycle; however, recent reports suggest the ECB could raise interest rates by 50 basis points in July and stop its quantitative easing (QE) program in Q3.

The rise and expectation of further interest rate increases has quickly lifted financing costs on the US junk bond market, a key source of debt financing for PE deals. US five-year high yield credit spreads have now surpassed their 2018 highs to reach 490 basis points (bps)—their widest level since November 2020. It now appears they are headed toward the panic 600-bps level seen in 2016. Leveraged loans, which are floating rate in nature, have also become more expensive as rates have. As private equity and leverage go hand in hand, the rising cost of borrowing will erode PE fund returns. While we understand multiples in some sectors have softened, entry points for sponsors have still become more expensive with rising debt costs. Additionally, PE-backed companies' interest expense will increase in many cases because the use of leveraged loans has been so common in recent years. Higher interest expense lowers free cash flows and cash-on-cash returns. Until inflation eases in a ''clear and convincing'' manner, coming back to a target of around 2%, central banks will be forced to remain hawkish and continue their path of monetary tightening through interest rate hikes and balance sheet reduction.

ICE BofA US High Yield Index option-adjusted spread

Source: FRED | Geography: US
*As of May 23, 2022

Median global PE buyout EV/EBTIDA multiples



Source: PitchBook | Geography: Global
*As of March 31, 2022

PE asset valuations will soften

The high inflation environment will also have a downward effect on PE valuations, although it will take time for the full extent to show up in the data due to private market data collection lags and quarterly mark-to-market of private assets. Q1 2022 marks are already posting negative performance figures for many PE funds. With central banks behind the curve and lacking the tools needed to fight issues such as supply chain disruptions, coupled with high volatility, we see PE valuations generally mirroring the public markets and moving downward. Larger portfolio companies are valued based on their public comps, and rising interest rates lead to higher discount rates and lower prices—all else equal—across the board. PE-backed assets will be repriced to reflect a market of higher risk, higher interest rates, less liquidity, and lower expected earnings. This will provide opportunity and risk for GPs, as multiples will be lower on entry, but also lower on exit.

Generally, in the liquid markets, the "Rule of 21" indicates the market's P/E multiple and CPI inflation should add up to 21. By this measure today, and despite the recent pullback, the market still looks heavily overvalued, as the SPDR S&P 500 ETF (SPY) has an average P/E ratio of 26x, and US inflation is at 8.5%. In the private markets, the comparable measure is the "Rule of 12" which uses the EBITDA multiple. Once again, by this measure the market looks heavily overvalued as the median European EV/EBITDA multiple stood at 12.5x in 2021, while European inflation was around the 7% mark.

PE valuations have continued to increase over the past decade due in part to low inflation and the zero-interest-rate environment, but this trend has reversed and will show in the data in the coming quarters, given the severe tightening and vulnerability of all risk assets in PE portfolios; this has been especially apparent in high-growth technology companies, which are disproportionately more sensitive to discount rate hikes and dips in growth, as the bulk of their value derives from future expected earnings. Historically, sponsors would mostly execute leveraged buyouts for mature slow-growing assets with stable and predictable earnings streams; however, the past decade has seen PE firms aggressively pivot toward fast-growing technology assets, with the sector accounting for 23% of European PE deal volume in 2021, up from 12% a decade ago. In the US, the sector accounted for 22.5% of US value in 2021, 12.0% in 2011.The very firms that have posted outstanding returns and driven much of the rise in technology dealmaking may now be more susceptible to falling valuations across portfolios.

PE asset selection and underwriting criteria will shift

The high inflation landscape also has consequences on PE asset selection. The rotation out of high-growth companies has been aggressive because global growth optimism has hit all-time lows, according to a BofA Global Fund Manager Survey.[1] This will push sponsors toward assets in a given sector that display significant inflation-hedging capabilities and pricing power. The growth-at-all-costs mantra of 2021 has materially cooled, with sponsors more focused on fundamentals and profitability levels of companies. Having deep subsector expertise, understanding sweet spots, and forecasting where disruption will come from in a particular sector have never been more important for sponsors. GPs will need to quickly assess how profit pools are shifting, cost structures are developing, consumer behaviors are changing, and supply chain needs are evolving to pick the winners in a subsector.

Sponsor underwriting criteria will also shift, with a greater focus on portfolio company input costs, pricing power, balance sheet strength, margin protection, secular demand changes, and exposure to geopolitical risks. Higher inflation is now hard-wired into routine PE deal decisions, and companies lacking the ability to pass on higher costs to the consumer are likely being shunned by dealmakers. Moreover, despite low unemployment levels, material squeezes on consumer incomes and discretionary spending are being seen, driven by soaring energy and food prices. This could be particularly challenging for European PE firms, with UK inflation expected to hit around 10% in the coming months and the prospect of Europe cutting Russian energy supplies. This could push PE firms to rotate out of consumer-facing businesses as a recession beckons and into more defensive assets such as energy, and healthcare.

Take-privates will be a standout theme

For a few reasons, sponsors are likely circling many take-private opportunities for companies that are cyclically—but not secularly—under pressure. First, the rapidly changing liquidity paradigm through interest rate increases, soaring inflation, and quantitative tightening is causing substantial downside volatility in public markets, which is breeding massive opportunities for sponsors to cheaply buy assets. At time of writing, the Cboe Volatility Index (VIX) has an enormous reading of 33, which is near YTD highs.[2] Until inflation eases, which would push central banks to reverse course, volatility is expected to persist in liquid assets. Second, opportunistic sponsors will look to take advantage of quickly falling valuations. Through late May 2022, the NASDAQ 100 has declined nearly 30%, while the EURO STOXX 50 is off more than 15% and S&P 500 has fallen nearly 20%. We are currently witnessing one of the most aggressive selloffs in recent years, especially in high-growth technology companies. This has caused the NASDAQ's trailing 12-month (TTM) PE ratio to drop to around 28 at time of writing—down from 36 one year ago.[3] Carlyle's (NASDAQ: CG) $4.2 billion take-private of ManTech (NASDAQ: MANT) and Thoma Bravo's $6.9 billion deal to acquire SailPoint (NYSE: SAIL) illustrate sponsors' appetite for reasonably priced public technology companies.

1: "BofA Says Fund Managers Most Gloomy on Record on Recession Woes," Bloomberg, Nikos Chrysoloras, April 12, 2022.
2: As a rule of thumb, a VIX reading below 20 suggests a stable and low-risk environment.
3: "WSJ Markets," The Wall Street Journal, May 23, 2022.

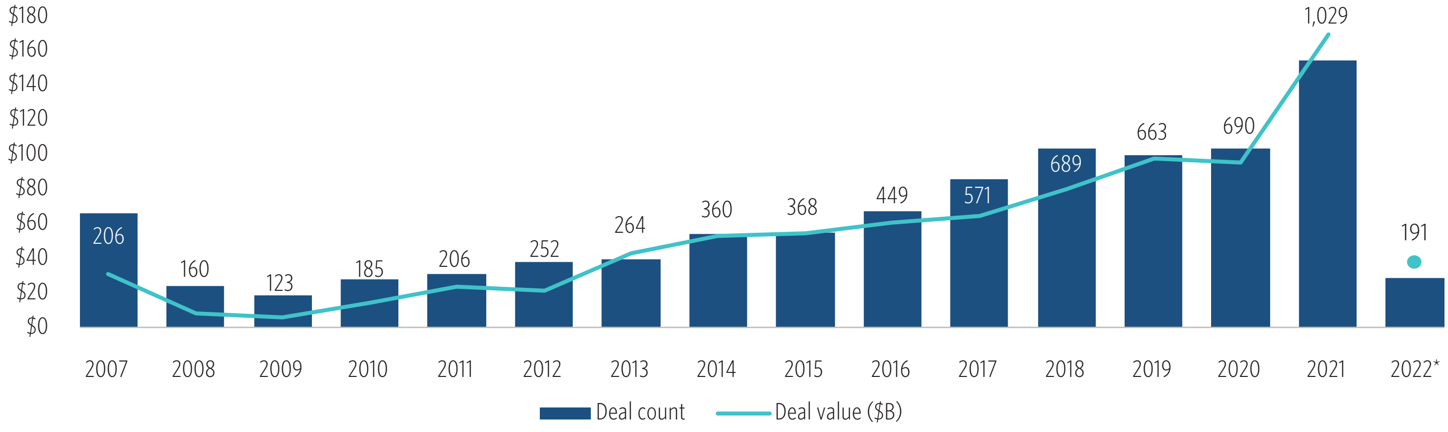
Third, one of the big differences between now and 2008 is the sheer volume of dry powder that sponsors have on hand, which must be deployed. Despite the hawkish policy environment and the very real risk of recession, sponsors will continue to be persistent in deploying large sums, and take-privates offer great opportunities. Even with the costs of non-investment grade debt rising, financing is expected to remain broadly available through private credit funds and syndicated loans to support such deals. The recent proposed de-listings of Twitter (NYSE: TWTR), UK-based ContourGlobal (LON: GLO) and New York-listed GreenTree Hospitality Group (NYSE: GHG) highlight this very trend. In addition, the proposed take-private of UK-headquartered Homeserve (LON:HSV) by Brookfield Asset Management, which is slated to be the largest UK-based PE take-private this year, highlights sponsors' appetite for delistings.

Lastly, several companies that went public in the IPO and special purpose acquisition company (SPAC) frenzy of 2021 were a little too early and are now being punished. For instance, Sweden-based Desenio (STO: DSNO) listed in 2021 at around SEK 89 per share but now trades in the SEK 5 per share range, having lost 79.7% of value YTD. More public companies will tap the private markets for liquidity after deeming they're better off away from the quarterly reporting pressures and analyst scrutiny in what appears to be a more challenging market.

Software will persist in PE

Growth in technology and digitalization across industries drove PE to record deal and exit activity in 2021, only to face several headwinds early in the new year. Fears of rising interest rates led tech stocks to tumble throughout 2022, putting pressure on the lofty valuations enjoyed by the sector for the last several years. Continued market turbulence coupled with major tech companies missing earnings targets spurred major selloffs in the stock market throughout Q2 2022. Growth-oriented tech companies fell out of favor as higher interest rates reduced net present value of expected earnings that relied heavily on future profit growth. Some tech stocks traded at single-digit multiples on EBITDA and low double digits on earnings, a sharp turn from the bull market tech has enjoyed for the last decade.

Software PE deal activity



Source: PitchBook | Geography: US
*As of March 31, 2022

PE activity in IT, however, will not be severely impacted despite concerns that deals would be stunted from market uncertainty and value dislocation between buyers and sellers. While the pullback in public comparables drove down valuations in private markets, PE capital still flowed into the sector, with US PE deal activity in IT pushing forward with a greater deal value in Q1 2022 than in Q4 2021. Strong tech companies are well-positioned to withstand inflationary pressure with pricing power and stable cash flow growth, and there is still excess dry powder for PE firms to fund companies through economic cycles. Additionally, PE firms are adjusting to the current macroeconomic headwinds by pursuing companies at lower valuations. Some investors, especially middle-market PE firms, even see the market turbulence as a buying opportunity to secure reasonable valuations in a sector where they have been frothy. Reluctance from prospective sellers to accept lower valuations as the new normal could impede some deal activity for the time being, but we think the expectation gap between buyers and sellers will close soon.

The appetite for tech deals will remain strong as investors focus on attractive secular growth prospects amid adjusting valuations. PE is focused on long-term growth, and with deep consumer reliance on tech and the focus on digital innovation and efficiency front and center in business strategies, the opportunity set in IT will continue to be robust to draw in PE investors. For example, the global expansion of e-commerce continued to drive deals related to logistics and payments software. In April, Nexa Equity acquired Choice, an omnichannel payments software company for an undisclosed amount, and Silversmith Capital Partners invested $60.0 million of development capital in AppHub, a provider of e-commerce software for merchants. At the same time, Thomas H. Lee Partners announced plans to combine its portfolio companies, MHS Global and Fortna, to create a global e-commerce and logistics automation leader. With the merger valued around $4 billion, the combined company will provide much-needed automated services during the current boom in e-commerce, which has been bogged down by continued labor shortages and rising costs and is seeking less costly methods of operation. PE firms are also jumping to secure deals in cybersecurity, an increasingly disruptive and important industry within IT. In March, an investor group led by Advent International and Permira completed the $14.0 billion buyout of McAfee, which marked the largest deal in IT and second-largest deal in PE overall for Q1. We expect to see many more PE-backed cybersecurity deals as the market expands with increasing interest; concerns about cyberattacks only rose with Russia's invasion of Ukraine, and the Securities and Exchange Commission (SEC)'s proposed rules and disclosures regarding cybersecurity by public companies shows that the industry continues to be an important and developing area of focus. Strong trends and growth opportunities in various industries within IT demonstrate that despite the macro volatility, PE's affinity for IT will remain stable.

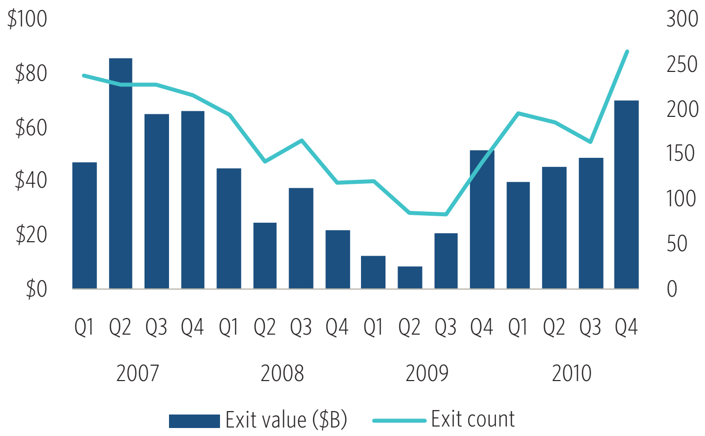
Exits

Exit activity will diminish

We expect most of the impact from the current macro environment to affect PE exit activity, with PE firms rattled by the sudden decline in valuations for many of their portfolio companies. Announced exits appear to have diminished substantially. The sharp decline contrasts with the stunning exit activity enjoyed in 2021, which logged four consecutive quarters over $150 billion in exit value. Company valuations are struggling against the harsh headwinds driven by prolonged inflation, geopolitical conflict, and subsequent market volatility, which created an unfavorable exit market beleaguered by uncertainty for sellers.

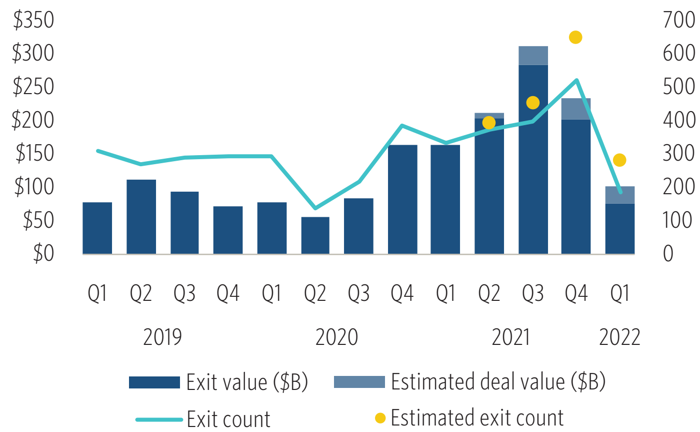
Although the decline in exits is meaningful and PE firms will continue to struggle to sell into volatile markets, we anticipate a reasonable floor from investors identifying the current environment as a buying opportunity. However, it may take a few months for sellers to adapt to the new valuation regime. Exits will continue through other sponsors or corporates looking to take advantage of the market disruption and lower prices, especially those that still have high levels of dry powder to deploy into a suddenly cheaper market.

PE exit activity during the GFC



Source: PitchBook | Geography: Global
*As of March 31, 2022

PE exit activity during the pandemic



Source: PitchBook | Geography: Global
*As of March 31, 2022

The harshest hit to the exits will be the decline in public listings, which drove much of the impressive exit activity seen in 2021. Public listings have all but disappeared as PE firms hold on to their portfolio companies amid steep stock market declines and valuation adjustments. US PE exits via IPOs accounted for nearly 35% of exit value in 2021, at $280.0 billion. As of the end of Q1, that value dropped to a meager $0.4 billion as PE firms suddenly grappled with the reversal of the strong bull market many had expected to exit their portfolio companies into. The VIX surged past 30 on several occasions since the start of 2022, hitting 37 in March and 36 in April. Only six PE-backed companies in the US raised a mere $0.4 billion in 2022 as sponsors are still trying to figure out how rising interest rates and uncertain markets will affect their company valuations. Several IPO launches were postponed due to market instability, such as CVC Capital Partners' plans to list itself in the summer. While IPOs may be on pause for the moment, PE firms will slowly start to list their portfolio companies once again as those that can navigate rising costs from inflation and supply chain disruptions become more apparent and as valuation expectations stabilize. Although the VIX has stagnated recently between a trading range of 25 to 35 despite the sharp fall in the S&P, some believe the VIX would have to decline to the mid-teens for IPOs to restart.[4] Public listings could also pick back up with almost 600 active SPACs looking for merger targets—nearly 90 SPACs are set to expire later this year and 318 in the first half of 2023.[5] While SPAC transactions have and will continue to face market uncertainty and regulatory scrutiny, we expect a bump in IPOs from the mountain of SPACs looking for acquisitions.

With public listings as a less attractive exit option in currently turbulent public markets, sponsor-to-sponsor exits and corporate acquisitions will step up to take a larger share of PE exit activity and become the main exit paths for 2022. Sponsors have more than $1 trillion in dry powder to deploy while simultaneously accelerating fundraising. These managers will find plenty of opportunities to sell portfolio companies to another sponsor looking to create additional value. Thoma Bravo's $4.0 billion sale of cybersecurity firm Barracuda Networks to KKR demonstrates sponsors' capacity and appetite to buy attractive companies from other sponsors. Sponsor-to-sponsor exits could gain more popularity as PE firms shift away from public listings to find buyers among their peers. Strategics also continued to absorb PE-backed companies—albeit at a more moderate pace compared to Q4 2021. High levels of balance sheet cash remain as a key force for corporate acquisitions, although turbulent markets and increased antitrust scrutiny have made a select number of massive companies more cautious about transactions. Q1 still saw companies from different sectors seek strategic acquisitions to position themselves for continued growth, such as Embracer Group's (STO: EMBRAC B) acquisition of Asmodée from PAI Partners for $3.1 billion in March. Embracer seeks to cement its position as the largest European gaming group by buying French board games publisher Asmodée and has been aggressively pursuing growth through acquisitions during the pandemic and throughout 2022. Such consolidation plays are rampant across industries, and we expect more exit opportunities to appear as large corporations take advantage of the current macro environment to roll up PE-backed companies that may have adjusted valuations.

Hold times will creep up

Rather than sell at discounted valuations, many sponsors will choose to hold portfolio companies longer, anticipating a rebound in pricing. Looking back at previous downturns in pricing, namely the beginning of the COVID-19 pandemic in early 2020 and during the global financial crisis (GFC), exit activity rapidly diminished and hold times ballooned. It took until 2015 for holding times post-GFC to diminish. The combination of a delay in returning capital to LPs with lower portfolio company valuations will be detrimental to fund returns. And many managers will

4: "Companies Scrap IPOs Amid Russian Invasion of Ukraine," The Wall Street Journal, Nina Trentmann, March 4, 2022.
5: SEC Unveils New SPAC Rules Targeting 'Unreasonable' Financial Projections and Requiring More Disclosures," Forbes, Jonathan Ponciano, March 30, 2022.

be unable to substantively add value during this time. A recent analysis by CEPRES Market Intelligence found that 56% of all value creation realized in PE-backed companies exited from 2016-2021 came from multiple expansion.[6] With multiples contracting and value creation lacking for many firms, this will be a trying time for some firms.

Sponsor-led secondaries and full liquidity alternatives will see further interest

In addition to holding companies longer, many firms will look to use alternative methods of delivering—or at least offering—returns to LPs in the interim. The GP-led secondaries market has dramatically expanded and evolved in recent years. According to Jefferies, this segment of the market has outgrown the LP-led side, accounting for more than half of all transaction value the past two years. Some PE firms choosing to hold on to portfolio companies may be holding assets in a fund nearing the end of its predefined life. This will be the impetus for many continuation funds, which provide exit opportunities for LPs while allowing the sponsor to retain control for several additional years. Other managers may turn to GP-led deals to crystallize value and recapitalize highly performing companies. This has the benefit of providing additional growth capital to these companies, preventing overconcentration to one or two assets in a fund, and proving the strength of a manager's returns to LPs. Perhaps the best example of these trends is Clearlake. The firm has recently upped its use of single asset GP-led deals with its Icon series. This has clearly illustrated the firm's ability to produce returns, and the firm has been rewarded by LPs. Clearlake closed on $14.1 billion—a near 100% step up from the $7.07 billion Clearlake raised in 2020—in May 2022 during one of the more challenging fundraising periods in recent years with GPs seeking far more capital than LPs can supply. This macroeconomic backdrop also means firms are likely to increase their use of recaps—of both companies and funds—and partial sales, which at least return a portion of the total EV to fund investors.

6: "Global Private Equity Report 2022," Bain & Company, 2022.