

# Look Forward

Private Markets

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**S&P Global**

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arkets are entering a moment of fundamental transition. Private markets have moved off the sidelines and into the spotlight across multiple industries and sectors. While public markets remain essential to the global economy, many companies today have

grown to dominant market positions without ever engaging with public financing.



Private markets are opaque by design. The record growth in global private equity dry powder — approaching \$2 trillion by the end of 2022 — created a need for more data, tools and insights. Whether we are talking about private debt or private equity, venture capital or energy infrastructure, the scale of private market financing has reached a point where knowledge of these markets is essential.

In this second issue of *Look Forward*, our economists, analysts, researchers, and data experts analyze the private markets landscape and forecast new developments.

As with our past *Look Forward* reports, this private markets report is a product of the S&P Global cross-divisional Research Council. The Council identified interconnected themes that are shaping private markets during this period of rising interest rates — Private Lending Risk, Private Equity & Venture Capital, and Energy & Natural Resources — as well as providing a Market Overview.

We will build on this work and will continue to provide essential intelligence on private markets. This is underpinned by our data and analysis across private companies and private credit, and our workflow solutions for valuations and portfolio monitoring. We will build on our partnership with Novata to examine the intersection of private markets and sustainability. And we will continue to bring trusted insights to the industry — through conferences such as Interact London and Interact New York, and through thought leadership like our *Look Forward* reports.

In moments of upheaval and transition, the following articles are designed to build understanding about growing private debt and private equity markets.

A handwritten signature in black ink, appearing to read 'Adam Kansler'.

**Adam Kansler**, President  
S&P Global Market Intelligence

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# Private Markets: Still Waters Run Deep

As credit headwinds intensify, private markets will need to show their resiliency under pressure.

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## **Highlights**

Pursuit of higher yields, lower volatility and uncorrelated returns has led investors deeper into private markets over the past decade. Inflation, higher interest rates and slowing economies will test both public and private markets, but the latter's key risk factors — illiquidity and opacity — may leave investors lost at sea.

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**T**he spotlight is now firmly on private markets, but their position in the financial markets and their relationship with the public markets is the result of decades of evolution. The maturation and diversification of capital raising in the past 30 years reflect how public and private markets have come to work in tandem to fund businesses in all stages of development — from startup to establishment, and even in distress.

The broadly syndicated loan (BSL) market opened bank-based private lending as an alternative to the public fixed-income and equity markets in the 1990s. As the BSL market grew — first through the tech boom of the 2000s, then through the pre-financial crisis market (which unlocked the European market), and finally through the bull run of the past decade plus — it enabled private equity and private companies to raise increasing amounts of funding for ever-larger buyouts. Excluding their ratings, private companies have been able to remain private while maintaining access to capital markets.

Interdependence between arrangers, borrowers and investors has grown, further fueling private market growth. The bank-dominated investor base diversified to include institutions through the growth of prime rate funds, credit funds and the market for collateralized loan obligations (CLOs).

Private equity has been integral to the growth of institutional money over the past 15 years. Firms have raised a monumental amount of capital, especially since the 2010 Dodd-Frank Act, which accelerated the shift of funding to nonbanks. Private equity growth nourished private markets of all types: private lending, real estate, infrastructure and now a growing investment in energy and natural resources.

The growth in private equity supported the expansion of middle-market businesses through investor funding structures including private credit funds, business development companies (BDCs), middle-market CLOs and now interval funds. When it involves institutional investors, nonbank lending has been brought into the capital fundraising process on near-equal terms to banks. Private equity's existing role in the BSL market eased this expansion as it had already acted both as a sponsor of large corporates and as an investor through its institutional manager presence.

The challenge now is that as private markets grow, so does their relationship with retail markets, resulting in increased regulatory scrutiny. As the global economy navigates difficult times, there is a significant risk of losses in private markets through defaults and restructurings. Opacity in private markets makes it difficult for institutional investors to assess risks in real time, and it is even more difficult for retail investors.

## Rising Tides Lift All Boats

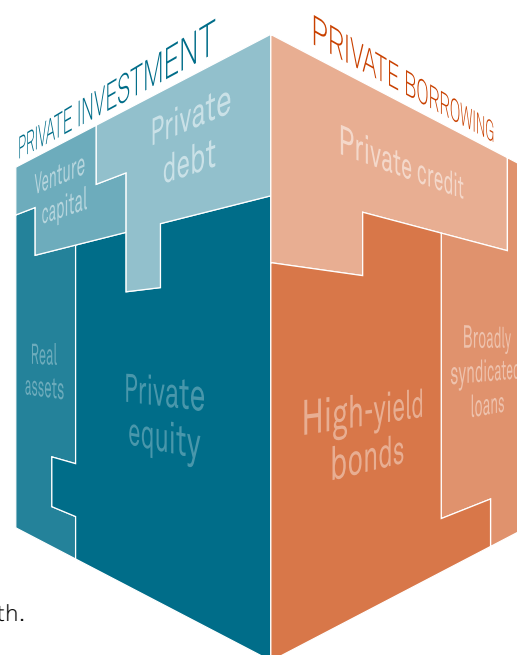
Over the past decade, private markets have become an integral part of the capital markets. Depending on a borrower's characteristics — size, strategy, sector, location — private markets can offer a more customized funding option that supports companies in earlier stages of growth. Private market investments tend to be buy-and-hold, meaning they have a long-term investment horizon and a flexible funding structure, and they can support total return strategies and better tolerate business models that are cash flow-negative in the early years.

Private markets have supported the growth of innovative and transformative business models in healthcare and technology. They have enabled the scalability and maturation of niche middle-market business models such as pet services; heating, ventilation and air-conditioning services; or landscapers, through accessible capital funding and consolidation. In the past year, as liquidity dried up in the public markets, they have allowed the credit markets to remain open and functioning. This is largely because, while “private credit” is often described as a clearly defined type of funding, lines between public and private have been blurring for decades. They remain very different markets, especially regarding transparency and liquidity.

Primary and secondary market transparency varies across the “public to private debt” spectrum. Public companies that raise funding through public bond or equity offerings are the most transparent. They must maintain publicly available financial statements, and their secondary markets are highly liquid. This allows managers to actively manage their portfolios amid a consistent flow of information about the ongoing health of public companies.

Private companies that raise funding through BSLs, a form of private debt, are not required to maintain publicly available financial statements, but they need their BSLs to be rated by a nationally recognized statistical rating organization. This rating may be the only publicly available indication of a borrower's credit health. Most of the BSL market has predictable secondary market liquidity and independent mark-to-market pricing available to provide transparency on the secondary market.

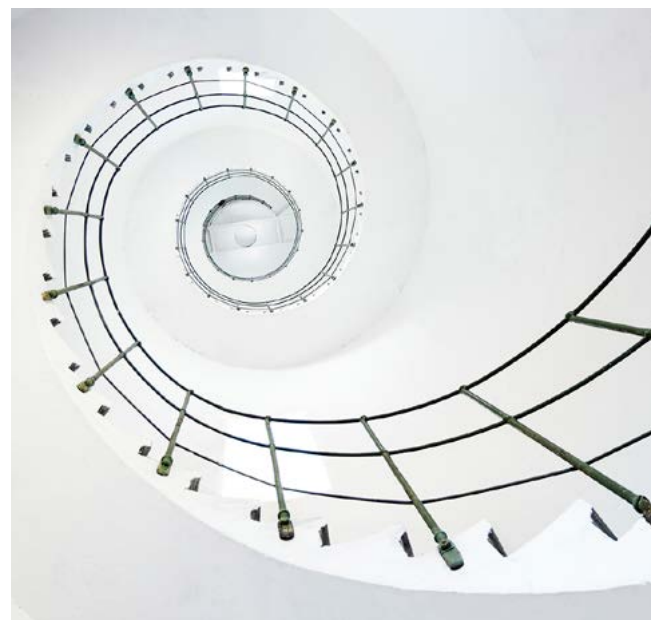
Private credit is at the opposite end of this spectrum. This debt is not traded in a secondary market: Loans are negotiated directly between lender and borrower, and there is little information publicly available on individual borrowers' credit health.



The growth in private lending was particularly marked over the past decade as investors sought yield and returns. Low interest rates allowed the capital markets to raise debt at historically low rates and encouraged investment in a growing number of investment vehicles geared for both institutional and retail markets. Alternative asset funds — including private equity, private debt, venture capital and real assets — have expanded due to this massive injection of investment capital. Investments made by these funds range from early- to late-stage companies, senior secured debt to equity, and project finance to corporate finance.

But private markets are exactly that — private — and tracking the flow of private equity funding through to investments is akin to navigating a labyrinth in the dark. Visibility is low, and twists and turns are numerous. It is hard to predict where the funding will end up and how much will be allocated.

The boom in private markets, especially in private lending, in the past decade was fueled by low interest rates and strong economic growth. The switch to higher-for-longer rates with elevated inflation and the continued risk of recession raises the specter of defaults for all borrowers — especially private markets. The opacity of private markets and the lack of a secondary market and short-term liquidity may be an issue.



## Public Markets as the Wellspring of Private

The interplay of public and private lending in today's credit markets traces back to the evolution of floating-rate bank loans into BSLs. Floating-rate bank loans blossomed in the 1990s following the creation of prime rate funds. These funds grew on the view that they would provide superior returns to money market funds; despite being speculative-grade corporate loans, their senior secured position made them relatively low risk. Prime rate funds were originally in closed-end funds, limiting and controlling redemptions due to their illiquidity, but they eventually became more widespread through open-end funds. Though market conditions were ripe for corporate borrowers, the increasing demand through investor vehicle structures was a key driver of BSL market growth.

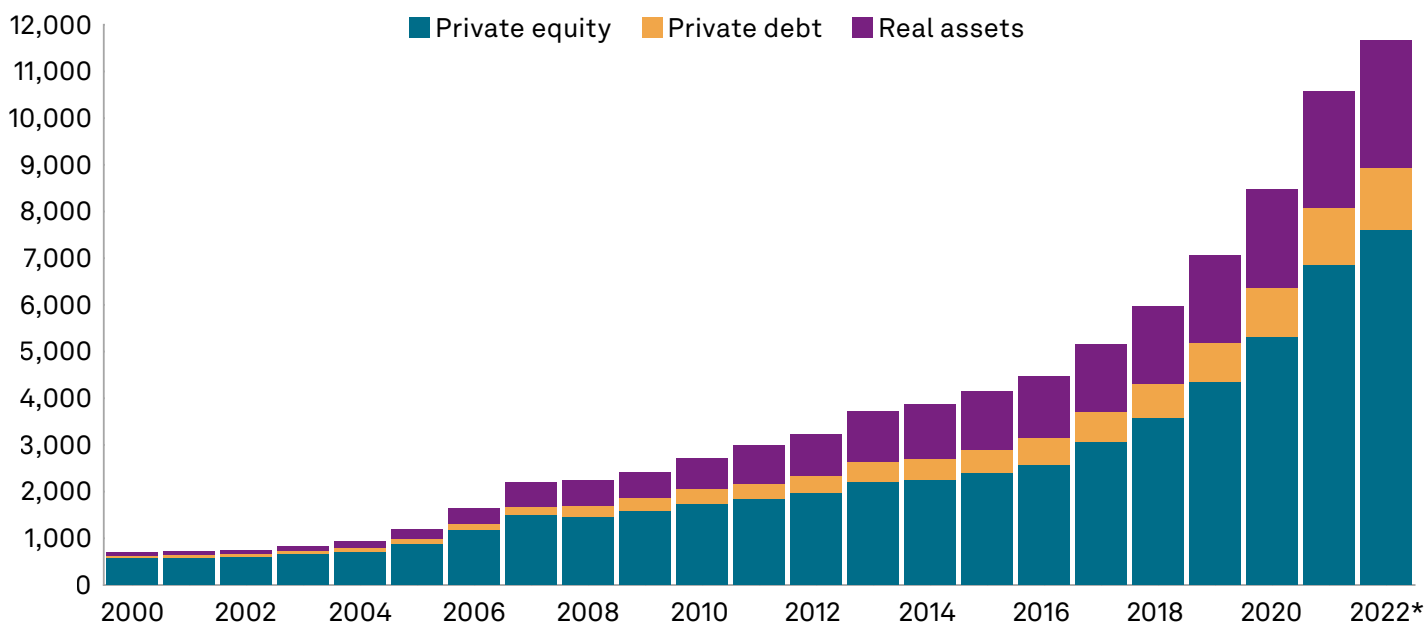
Alternative asset managers have created new funds devoted to private debt over the past decade, adding scale in the industry to compete with BSLs. Along with high yield and BSLs, private equity managers have tapped into private credit as a source of debt funding that offers both scale and flexibility. Pitchbook LCD estimates the par value of the institutional BSL market in the U.S. is roughly \$1.4 trillion, compared with over \$1.5 trillion for high-yield bonds, and Preqin estimates the size of private debt assets under management at a comparable \$1.3 trillion. These three sources of funding underpin the U.S. leveraged finance market.

Over the past decade, private markets have grown substantially. The Dodd-Frank Act spurred the initial transition from banks, and then the low interest rate environment nurtured growth. For companies, becoming, or staying, private was more appealing after the Sarbanes-Oxley Act lifted the financial reporting requirements — and expense — for public companies in 2002. Startups have since opted to stay private for longer, and private equity managers have found no shortage of companies willing to go from public to private.

While private debt was an established source of funding for the middle market, it gained further traction among lenders, investors and borrowers after the global financial crisis. For lenders, the Dodd-Frank Act stiffened the capital charges to banks for underwriting loans to riskier companies. Banks pulled back from lending to small to middle-market companies, creating opportunities for nonbank lenders to fill the gap. Between 2010 and 2022, the AUM of private equity and private debt funds grew by about 4.3x each, to \$7.6 trillion and \$1.3 trillion, respectively. Much of this growth took place after 2019.

## The Gradual Growth of Private Markets Gained Momentum During the Pandemic

Assets under management trend of alternative assets, 2000–2022 (\$B)



Data compiled Feb. 24, 2023.

\* As of end-June 2022.

Assets under management represents the total value of dry powder and unrealized value. Real assets includes real estate, natural resources and infrastructure funds.

Source: Preqin Pro.

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For investors, higher yields and the perceived lower volatility of private assets — a direct result of illiquidity and the lack of secondary market pricing — proved appealing. For borrowers, the ease and certainty of execution of funding from direct lenders made private credit an attractive alternative to the BSL market. During times of dislocation and uncertainty, when financing was challenged in the broadly syndicated and bond markets, private debt dry powder remained a source of capital that could be quickly deployed to support deals.

Investors increased their alternative asset allocations and, flush with dry powder, global private equity- and venture capital-backed M&A transactions surged to a decade-long high in 2021, with over \$600 billion in volume from more than 3,700 deals. Private equity and private debt are particularly intertwined. Private equity firms typically evaluate financing options for their sponsored companies from the high-yield, broadly syndicated private credit market, where the debt resides on the sponsored company's balance sheet. Over the past 10 years, we have seen a

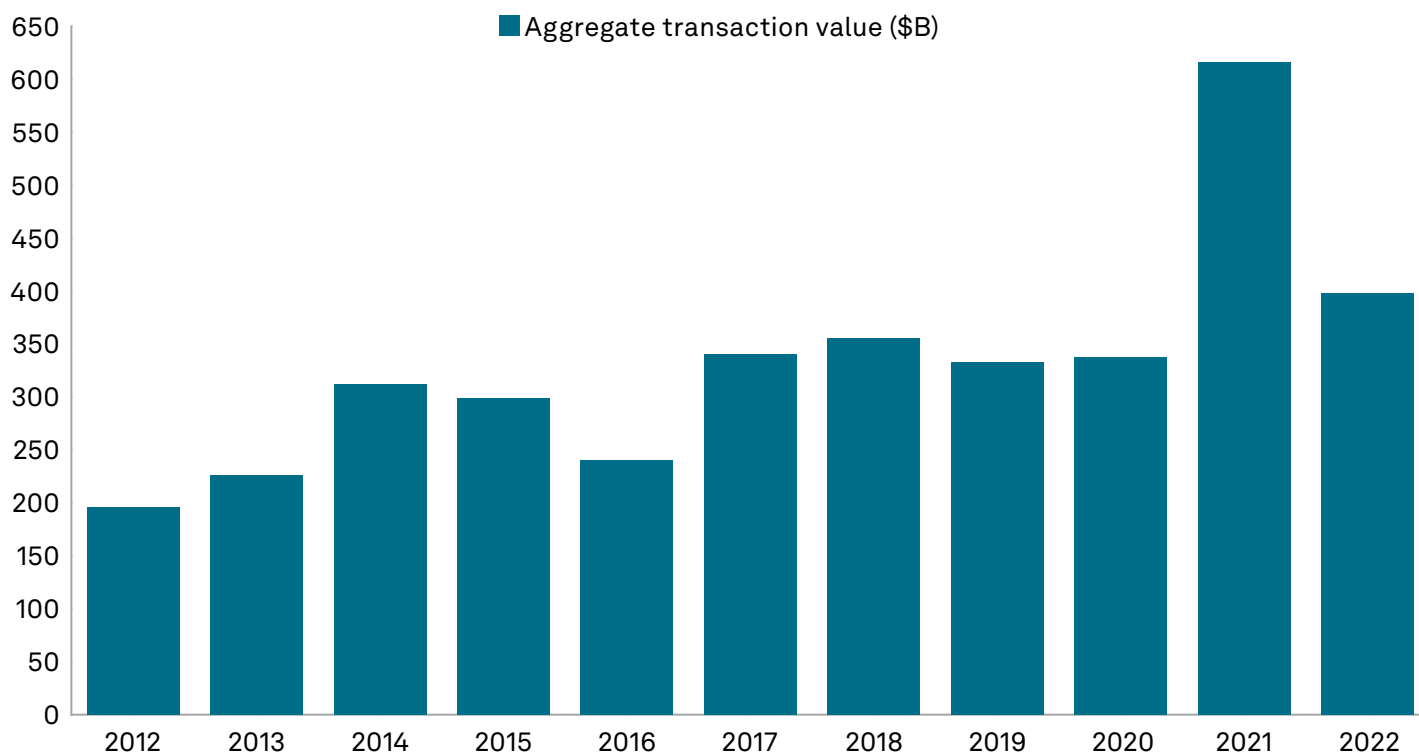
convergence between the broadly syndicated and direct-lending markets as sponsors and borrowers increasingly consider both when they evaluate funding sources.

As the private debt market has grown, small groups of lenders (clubs) have been able to extend larger loans — including multi-billion dollar financing packages.

Deal volume pulled back by 35% in 2022 to about \$400 billion. Even with this sharp retreat, M&A volume remained elevated, at its second-highest level since 2012. As investors tried to find their footing in uncertain market conditions in 2022, deal financing grew more difficult. Private equity firms now face longer hold times and fewer exit routes. Volatile markets have dampened lucrative IPO exits, while challenging financing conditions have made secondary buyouts more difficult. While these exit paths may be limited, some specialist firms are finding success with consolidations, such as in the tech sector. However, longer hold times will potentially drag down new private equity fundraising.

## M&A Fell in 2022 Following 2021's Surge

Global private equity-/venture capital-backed M&A investments, 2012-2022



Data compiled Feb. 23, 2023.

Analysis includes global whole-company acquisitions, minority stake acquisitions and asset acquisitions announced between Jan. 1, 2012, and Dec. 31, 2022, where the buyer/investor in the deal is or includes a private equity or venture capital firm. Excludes terminated deals.

Source: S&P Global Market Intelligence.

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## Rough Seas Ahead

Growth in the private markets over the past decade coincided with a period of exceedingly low interest rates. Low financing costs made more private equity take-private deals viable, and borrowers could more easily meet interest expenses when their cost of debt was low. With benchmark rates such as the London interbank offered rate; its replacement, the secured overnight financing rate; and the Federal Funds Rate pushing 5% leveraged borrowers could face a reckoning about their ability to service their debt. This will test managers and their investments as well as the private market framework that guides investors in troubled times.

For private equity and private debt funds, rough seas will lead to divergences in the performance of funds by vintage or by manager. Vintages that deployed large amounts of capital just before the sharp increase in rates appear to be on a shakier footing than those that invested when rates were higher and multiples were lower.

On the funding side, just as borrowers were growing accustomed to having more funding options on offer from high-yield bonds, BSLs and private credit, investors' pullback from risky assets in 2022 limited financing options for many weaker borrowers. For some, private credit may have been the only remaining source of funding. And the cost of that funding was on the rise.

Higher rates have already added new sources of competition to the private market. Investors may not be so willing to search for yield in the private markets if they can find more liquid and lower credit risk assets that offer an acceptable yield.



The days of midmarket loans automatically being marked at par are over. This is no longer acceptable to limited partners or auditors as principal-based guidelines from the International Private Equity and Venture Capital Valuation and the American Institute of Certified Public Accountants have been updated, and there have been material changes to accounting standards, i.e., due to IFRS 9. Investors at all levels want to know what their investments, and the underlying collateral, are worth in both the short and long term. But within current guidelines, private market asset prices may be stickier than those of their publicly traded counterparts.

Mark-to-market valuations of public equity are done in real time, based upon trade data. The valuation of bonds is based on real-time trade data too, while that of BSLs is often based on indicative bids from traders. The fair value for private credit reflects the lack of a secondary market.

Under the principal-based approach, private asset managers have some discretion in how they tackle valuation or the valuation services they use. Valuations for performing deals involve determining an appropriate discount rate for the riskiness of the cash flows the loan is projected to produce, along with adjustments for illiquidity premiums, duration basis, credit quality basis and different levels of covenants. For nonperforming deals, the net recovery approach can also be used to estimate fair value. The net recovery approach is applied by performing a waterfall propriety analysis.

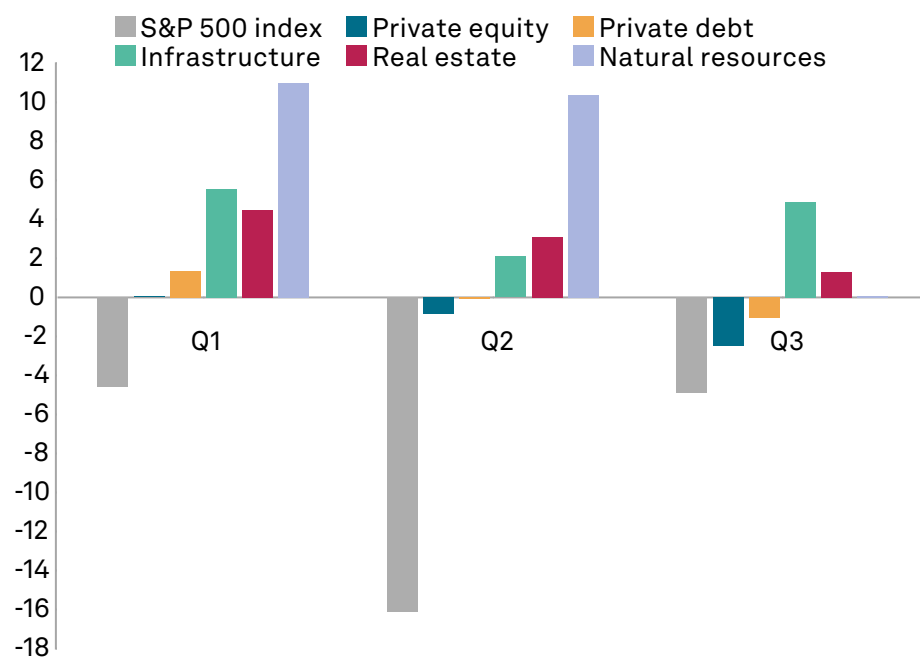
Although public equity and bonds experienced steep declines in 2022, private market returns were more stable.

While the S&P 500 index retreated in each of the first three quarters of 2022, declining by 24%, the Preqin private equity index declined by just 3% in the same period. Returns for private credit funds, many of which invest in middle-market companies' senior secured debt, were flat because a gain in the first quarter of 2022 was offset by a decline in the third quarter of that year. Total returns for real asset funds, which target investments with steady cash flows that are backed by tangible assets, were positive in each quarter.

Divergences between public and private market asset pricing can lead to a rift between markets. For example, Blackstone's real estate-focused BREIT fund restricted investor withdrawals after monthly and quarterly withdrawal limits were reached. These withdrawals gained steam as other public real estate funds showed steeper losses than BREIT.

### Private Asset Classes Showed Steadier Returns

2022 quarterly total returns (%)



Data compiled Feb. 24, 2023.

Private capital indexes include: Preqin Private Equity, Preqin Private Debt, Preqin Real Estate, Preqin Infrastructure and Preqin Natural Resources.

Sources: Preqin Pro; S&P Global Market Intelligence.

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## Looking Forward: Fair Winds and Following Seas

Private markets have become increasingly integral to financial markets and the real economy, as evidenced by the breadth of private equity-sponsored companies and their prevalence among speculative-grade-rated companies. The versatility and certainty of private credit has transformed it into a competitive source of funding for the leveraged finance market. The sea change of higher-for-longer interest rates poses a new test that separates winners from losers.

As water always finds its level, private markets will too. There will be losses, but the participants are seasoned, experienced parties, and private markets are now an embedded part of the capital-raising process. They support startup firms through custom funding solutions, longer-term commitments and closer relationships, and they can also take on the role of banks in larger corporate funding due to their liquidity and sophistication. Although rising rates may expose hazards in both private and public credit markets, we expect private markets are here to stay. They are likely to remain an integral source of funding for the future, meeting the needs of new and innovative growth models, such as cleantech and healthcare, as well as those of traditional large corporate M&A. ■



### Learn more

[Middle Market CLOs Face Unexpected Headwinds Amid Rising Private Debt Demand](#)

[Darkening Economic Clouds And Rising Rates Shroud The Outlook For Private Debt](#)

[Private Debt: A Lesser-Known Corner Of Finance Finds The Spotlight](#)

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# Rising to the Challenge: Slowing Investment Cycles Test Private Equity Strategies

Changing market dynamics are influencing investment strategies and shifting funding patterns.

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Longer hold times for private equity portfolio companies are placing a renewed emphasis on value creation. The power of multiple expansions to boost investment performance is fading as the outlook for growth dims. Skilled, active private equity fund managers stand to accelerate ahead of the pack.

Economic uncertainty cuts both ways for private equity: Even as it undermines portfolios, it creates new opportunities for investment at lower entry points. The seeds of private equity's best vintages are often planted in trying times. Deep sector expertise will be crucial as firms scout for deals.

The global private equity industry entered 2023 with its largest-ever stockpile of dry powder, a positive sign as it sails into a potential recession. But fundraising is getting harder, and lengthening investment cycles could make the problem worse by slowing distributions to investors.

## The Groundswell: Private Equity Rises Up

Over the past decade, the private equity market more than tripled in size and demonstrated itself to be a substantive and compelling alternative asset class as returns outperformed public markets by a considerable margin. During this time, general partners (GPs) raised ever-growing funds and returned to market for the next fund at a more rapid pace and larger size. At the same time, investors poured more money into the asset class.

## Highlights

Private equity crossed a threshold in 2022, exiting an era of exuberance and entering a new period of uncertainty. Record inflation, surging interest rates and a foggy economic forecast put the brakes on private equity dealmaking, which had accelerated to its fastest-ever pace by the end of 2021. Now, lengthening investment cycles pose new challenges to buyout fund managers.



The appeal of private equity investing is that it is a medium- to long-term investment provided in return for a stake in companies that are not listed on a stock exchange. Typically, private equity investments are made by primary funds managed by a GP at a private equity firm and invested in by limited partners (LPs). Unlike a public equity investment, private equity capital is called from LPs over time as GPs find investment opportunities, while distributions are made as investments are exited.

GPs generally invest their own money in a fund alongside their LPs. They make all the investment decisions and are responsible for raising capital from LPs or fundraising. With minimum investment amounts sitting at about \$25 million, LPs tend to be large institutions such as pension funds. They have no influence over investment decisions despite the long commitment periods.

A typical private equity fund has a 10-year life cycle with a fundraising period of 12-18 months, an investment period that tends to span the first five years, a hold period that takes it up to year eight and a harvest period in which the GP looks to exit the investment by way of an IPO or trade sale and distribute returns to LPs.

Despite the long-term investment horizon, nimble and quick execution is the hallmark of private equity. Private equity funds generally have well-defined investment strategies, but their execution can easily flex and adapt to best take advantage of investment opportunities. Additionally, while private equity buyers have long been known as financial asset flippers, over the past decade firms have begun pursuing more complicated portfolio strategies that leverage their growing expertise and relationships to become sector consolidation powerhouses, a position traditionally dominated by corporate strategic buyers.

Strategic flexibility combined with predictability of terms and readily available capital are among the factors giving private equity players the edge, as exemplified by the development of the technology and renewable energy sectors.

Private equity buyers have been able to pursue these opportunities in technology partly because plummeting stock prices and heightened regulatory scrutiny are making M&A much harder for industry giants who have historically played the consolidator role. In fact, private equity buyers led seven of the 10 biggest information technology M&A deals in the US and Canada last year, the highest share recorded in the past 22 years, according to S&P Global Market Intelligence data. The biggest private equity purchase was a \$17.18 billion deal by a company owned by Vista Equity and partners. Tibco Software Inc.'s acquisition of digital workspace provider Citrix Systems Inc. underscored private equity firms' buying power and showed how funds are expanding technology companies they already own via bolt-on acquisitions.

In contrast, Microsoft Corp.'s \$69.99 billion bid for games-maker Activision Blizzard Inc. has yet to clear antitrust hurdles about a year after the deal was announced. And depressed stock prices have made it harder to finance deals with equity. Meanwhile, specialists such as Thoma Bravo and Vista Equity— which focus on cybersecurity and enterprise software, respectively — took advantage of tech giants' inability to do deals and emerged as effective consolidators.

Since 2017, Thoma Bravo has spent at least \$37 billion on cybersecurity companies — more than 10 times the amount invested by Palo Alto Networks Inc., the largest industry buyer in the period, according to 451 Research data. Vista Equity mirrored Thoma Bravo's strategy in key enterprise software segments. The US-based private equity fund has made more than 40 acquisitions in the enterprise resource management space over the past five years, according to 451's M&A Knowledgebase.

Rising rates are affecting the financials of North American renewable energy and infrastructure developers and electric utilities. However, private equity firms have yet to see a material impact on deal activity. Private equity has been able to replace some deal leverage with equity, increasing power purchase agreement (PPA) prices, becoming more flexible regarding exit strategy and looking ahead to take advantage of additional production and investment tax credits in the US Inflation Reduction Act.

Even if valuations decline, the energy transition's growth and value opportunities will continue to boost the amount of private capital chasing renewable energy and infrastructure deals. Rising prices for renewable energy PPAs are helping private equity firms protect returns in a high interest rate environment.

Large private equity firms continued to strike deals in 2022 despite the deteriorating macroeconomic outlook. JP Morgan's investment management arm's leveraged buyout of South Jersey Industries Inc. for nearly \$8 billion, announced in February 2022, was the year's biggest private acquisition in the sector, according to S&P Global Market Intelligence data.

A growing number of US investor-owned utilities, including Dominion Energy Inc., Duke Energy Corp. and FirstEnergy Corp., are considering selling — or actively shopping for — renewable assets or minority stakes in regulated subsidiaries to minimize future external capital market needs, creating possible buying opportunities in 2023.

### Hurricane Swells Ahead

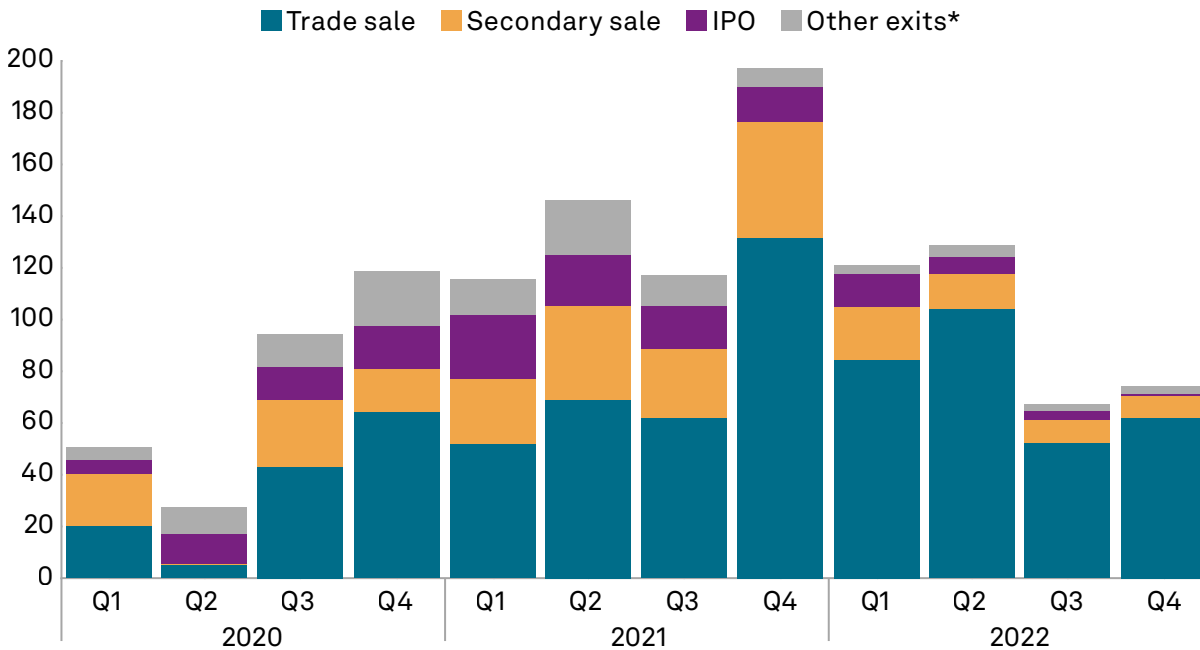
The majority of private equity growth has been in a long, low interest rate environment. Even the pandemic did not hold it back. After a brief pause in 2020 due to the onset of COVID-19, the industry roared back, setting new annual records for exits and entries. Fundraising for private equity and venture capital firms topped \$1 trillion in 2021, another high-water mark for the year.

The party ended just a few months into 2022 with the onset of the Russia–Ukraine war, which rattled supply chains and fed a global wave of inflation. In June, the US Federal Reserve unveiled a 75-basis-point rate hike, followed by other central banks, bringing the era of cheap money to a halt. Suddenly, debt became harder to come by and more expensive, and it was clear that the shift that undermined the economics of the traditional leveraged buyout was here to stay for the foreseeable future.

By year-end, private equity activity was down across several key metrics including entries into new investments, fundraising and exits. Collectively, private equity firms posted almost 20% fewer technology deals in the second half of 2022 compared with the same period in 2021. The nature of acquisitions changed, with smaller bolt-on deals accounting for 71% of all private equity buys in the space in 2022.

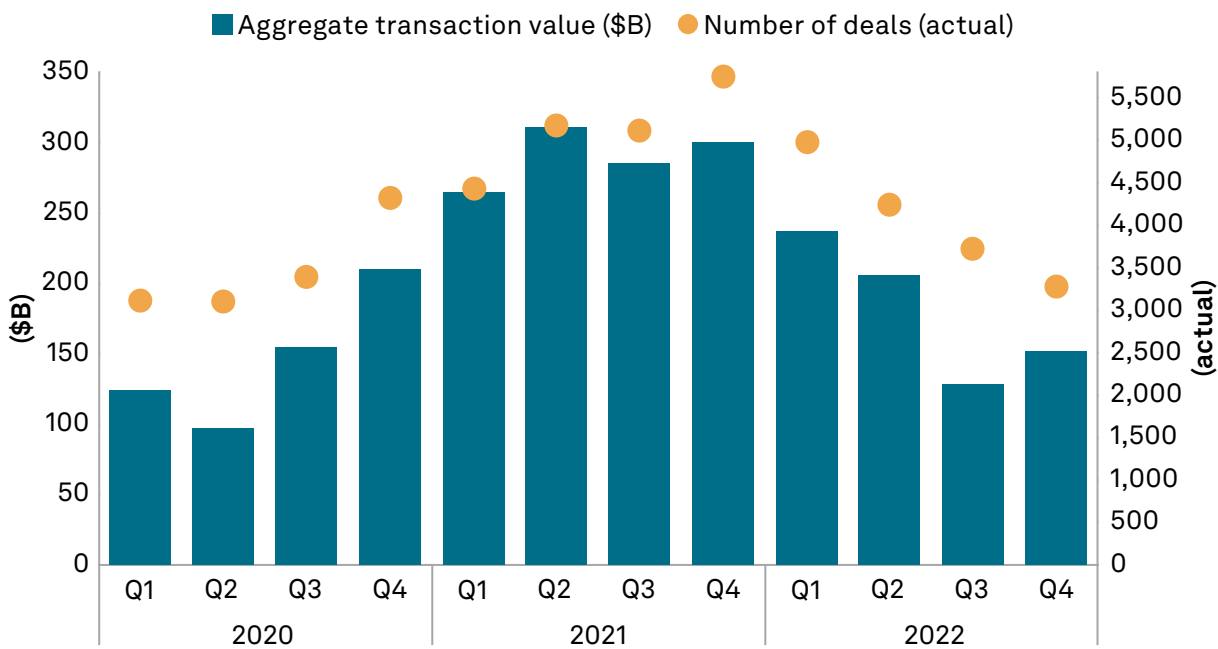
The difficulty in financing larger deals is a critical driver of the drop, as is the pressure to boost return profiles with smaller, more affordable transactions following the spate of large-scale, expensive deals that defined 2021 and early 2022.

Private Equity Exits by Type (\$B)



Data compiled Jan. 4, 2022.  
 Includes bankruptcy or write-off, private placement or follow-on, sale to management, and unspecified exits.  
 Source: Preqin Pro.  
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Private Equity Entries Fell Off in 2022 as Global M&A Markets Seized Up



Data compiled Feb. 23, 2023.  
 Analysis includes global whole-company acquisitions, minority stake acquisitions, and rounds of funding announced between Jan. 1, 2020, and Dec. 31, 2022, where the buyer/investor is or includes a private equity or venture capital firm.  
 Excludes terminated deals, asset deals, debt and early-stage funding rounds.  
 Transaction value is as of announcement date.  
 Source: S&P Global Market Intelligence.  
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It was a swift end to a roughly decadelong run for private equity when broad-based economic expansion lifted fund performance. Cheap debt and steadily rising corporate valuations permitted private equity firms to use large amounts of leverage to go after expensive targets and financially engineer a good exit.

Those firms that surfed a rising economic tide may be in trouble now that slower growth and rising interest rates have changed the calculus for private equity. Portfolio companies carrying heavy debt loads are less able to pivot in the face of changing macroeconomic conditions. They may lose out as competitors gobble up market share.

Private equity firms that were more disciplined in applying leverage stand to be rewarded for their restraint. Portfolio companies with the capacity to add more leverage can act aggressively, scooping up add-ons as large corporates shed noncore assets.

The challenge for the private equity industry in the coming years will be how to exit these enlarged platforms at a profit. Overall exit activity slumped by nearly one-third from a record \$576.37 billion in 2021, totaling \$391.44 billion for the year, according to Preqin. Larger companies are inherently more difficult to sell, and industry buyers are unlikely to escape regulatory scrutiny any time soon. The IPO market may also take a while to rebound, given rampant inflation and volatile markets.

### Riders on the Storm

As credit headwinds continue, private equity is preparing investment strategies for an even longer investment cycle as continuation funds are on the rise. Longer investment cycles mean that private equity firms have more time to play out their value-creation strategies with portfolio companies.

While the outlook on interest rates remains uncertain, the possibility that they could remain higher for longer is already prompting changes within the private equity ecosystem. Investment strategies must adapt as the tolerance for cash flow-negative business models rapidly wanes, and this shift will impact sectors such as technology that have long focused on total return. The growing position of private equity as a consolidator to create a better, more nimble industry may change.

Digital transformation remains a key value-creation theme across sectors. Bolstering supply chains is a rising priority amid geopolitical tumult. And as portfolio company hold times lengthen, fund managers are placing a renewed emphasis on fostering a strong corporate culture. They are acting on perceived links between investment performance and lower rates of employee turnover and attrition at a portfolio company.

But private equity's challenge does not boil down to management acumen alone. In addition to guiding portfolio companies through this uncertain period, fund managers are tasked with finding new deals — a growing challenge amid a broader slowdown in M&A activity. That is where sector expertise comes into play.



Downturns are expected to produce a crop of spinoffs and divestments as large corporates refocus on their core strategies. Fund managers with an inside-out understanding of their sector will be among the first to spot those buying opportunities. But just as important is their understanding of long-term, sector-specific trends and the ability to visualize a path to growth. That means looking beyond near-term uncertainty to the end of private equity's typical three- to five-year investment cycle.

Sector experts can also use their unique insights to break through the M&A logjam.

Inflation, geopolitical turmoil, labor and supply challenges, and a cloudy economic forecast are pulling down corporate valuations and driving a wedge between buyers and sellers. Sellers have been slow to accept lower valuations, and buyers generally are not willing to pay 2021 prices in an economic landscape that now looks very different. Combined with tighter lending standards from banks, that bid-ask spread slowed M&A activity in 2022.

In this slower dealmaking environment, fund managers with deep sector insights are at an advantage. They can leverage those insights to find a price that brings reluctant sellers to the table.

Conventional wisdom in private equity is that economic downturns produce some of the industry's best vintages. Corporate valuations dip, allowing private equity to enter new investments at a discount. With any luck, the economic cycle will have shifted when it comes time to exit after private equity's typical three- to five-year hold period for portfolio companies. Faster growth boosts valuation multiples and returns on investment. ■



### Learn more

[Private equity faces valuation challenge in rocky year](#)

[PE firms evolving to become strategic consolidators in key tech subsectors](#)

[PE appetite for renewables grows as market conditions hinder deal rivals](#)

[Slower pace of private equity-backed M&A expected to continue](#)

[Longer hold times put private equity strategies to the test](#)

[Private equity LPs weigh trade-offs amid fast fundraising cycle](#)

[Steep drop in private equity fund launches in 2022](#)

[Private equity exits plummet in 2022](#)



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# Private Lending: Time to Adjust the Sails

Inflation, higher interest rates and slowing growth represent the first real test of the resiliency and mettle of today's private lending market

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## Highlights

Private markets have grown exponentially over the past decade, affecting a wide array of investments. Leveraged finance has felt a significant impact because of the growth of private lending and the interconnectedness of public and private lending. Credit markets now face some of the most challenging financial and economic conditions in over a decade. It is likely that transparency and liquidity — two factors that differentiate public and private lending — will be critical to how investors and private equity weather the storm.

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Low interest rates have fueled the growth of debt markets, both public and private, over the past decade. This is reflected in the surge of private equity, which has largely fueled the expansion of the leveraged finance (levfin) market across public and private lending. Private equity funds raised \$1 trillion of capital in 2022, more than double 2013's tally of \$458 billion, according to Preqin estimates.

Private equity has also fueled the growth of M&A in the large corporate and middle-market segments over the past 20 years. Coupled with the growing size of investments, this has made private equity-sponsored companies more prevalent among the issuers we rate as they have taken on larger and larger investments, utilizing the broadly syndicated loan (BSL) market for funding. Sponsor-driven activity has propelled BSL volume to support M&A and sustained borrower funding needs for dividend recapitalizations and general corporate purposes.

Borrowers and lenders alike face challenging markets and economic headwinds from high inflation, rising interest rates and slowing global growth. These challenges are compounded for private credit investors by the market's lack of transparency on financial performance and credit risk.

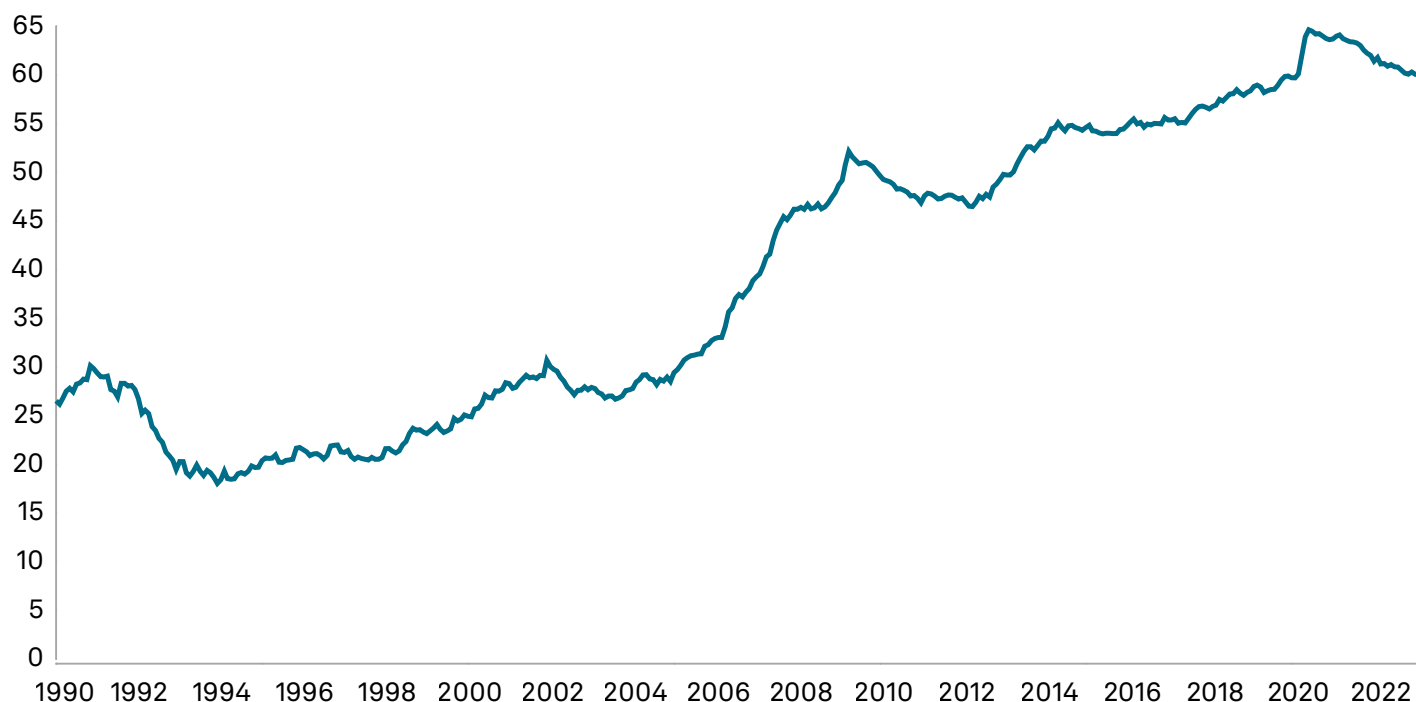
S&P Global Ratings helps in this area by offering insights on private borrowers through public ratings, as well as through credit estimates on private borrowers in middle-market collateralized loan obligations (CLOs) and credit ratings on alternative asset managers and business development companies (BDCs).

### Ratings as a Beacon of Information

Private borrowers with public ratings are an established part of the levfin markets. Most private issuers of BSLs are assigned credit ratings, which provide public indicators of credit health. Currently, companies wholly or partially owned by a financial sponsor make up about half of US and Canadian speculative-grade (rated BB+ or lower) corporate borrowers publicly rated by S&P Global Ratings.

### Growth of B Ratings Partially Reflects Prevalence of Private Equity

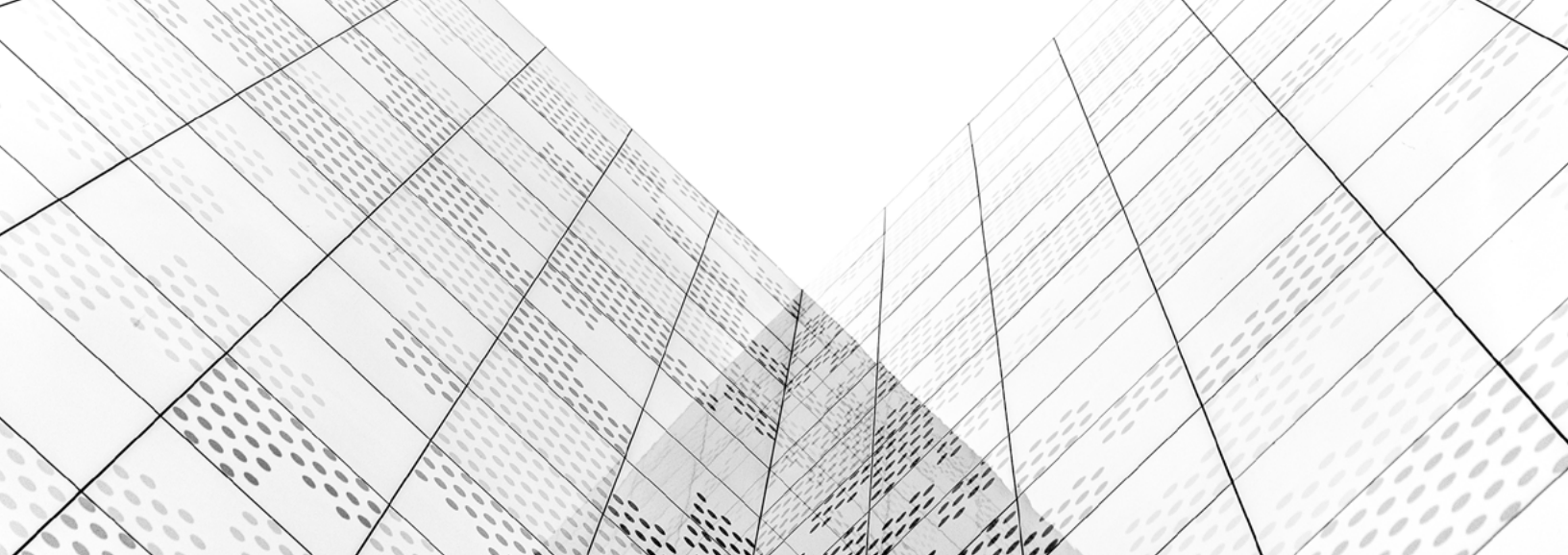
B and below (as % of speculative-grade ratings)



Data as of Feb. 28, 2023.

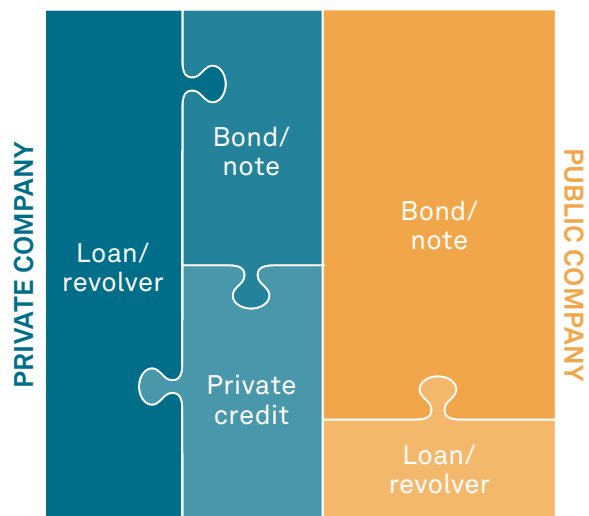
Sources: S&P Global Ratings Credit Research & Insights; S&P Global Market Intelligence's CreditPro®.

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Sponsor-owned companies tend to be at the lower end of the rating scale, in part because our methodology includes the assumption that financial risks for a sponsor-owned company are commensurate with those of highly leveraged companies. In our view, it is not uncommon for private equity investors to extract cash in ways that increase a companies’ financial risk, potentially leading to deterioration in credit quality and higher leverage. As a result, the prevalence of private equity-owned companies is more pronounced at the low end of the rating scale. About 75% of borrowers rated B and below (about 50% of all speculative-grade corporate borrowers) are fully or partially private equity owned.

### Leveraged Finance: Privately Held Companies Rely More Heavily on Loans and Private Credit Than Public Companies



As of Feb. 28, 2023.  
 Debt funding to privately held and publicly traded borrowers, including bonds, notes, term loans and revolvers rated BB+ or lower, and unrated private credit.  
 Sources: Preqin Pro; S&P Global Market Intelligence; S&P Global Ratings Credit Research & Insights.  
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Private borrowers have different debt mixes in their capital structure than public borrowers. They rely on BSLs, revolvers and direct-lending loans, while public companies use BSLs, revolvers, bonds and notes. Even for issuers with public ratings, market transparency varies greatly between public and private borrowers as primary and secondary markets for BSLs and high-yield bonds generate considerable market insights and trading data that offers technical insights.

Private credit markets are structurally different from BSL markets because they are largely unrated and lack transparency on credit risk throughout the life of the deal. There is limited standardization to documentation, which is now prevalent in the BSL market as well.

The lack of a secondary market means the valuation infrastructure for private credit views its risk over a long-term period. Speculative-grade bonds have real-time pricing and trade data widely available. BSLs have readily available, independent mark-to-market pricing. By contrast, private credit is valued using fair value.

As a result of the “buy-and-hold” private credit strategy, reported valuations of private debt were comparatively stable in 2022 despite volatility in publicly traded fixed-income markets being at its highest in more than a decade.

Even with this stability and the continued strength of the direct-lending market, we expect credit conditions to worsen in 2023. Private and public borrowers must contend with higher interest rates, inflation and higher operating costs. A recession and reduced demand could also hurt revenues, earnings, cash flows and companies’ ability to service payments. The impact will be worse if the downturn is deep or protracted.

One advantage for private borrowers entering tougher times is their close working relationship with lenders. Direct lending typically involves one lender per deal or just a small club, in contrast to the dozens found in BSL syndications. Financial maintenance covenants remain common in these deals, and direct lenders have shown a willingness to get involved with sponsors and troubled borrowers to negotiate debt workouts during periods of credit stress.

These relationships helped to minimize traditional payment defaults by private borrowers during the COVID-19 pandemic. Lenders agreed to modified terms of payment and the suspension of covenants in return for sponsors injecting capital and accepting tighter loan documents. However, the recession in 2020 was exceedingly brief. It is difficult to say whether there would be similar behavior during a protracted downturn in which more distressed entities needed rescue.

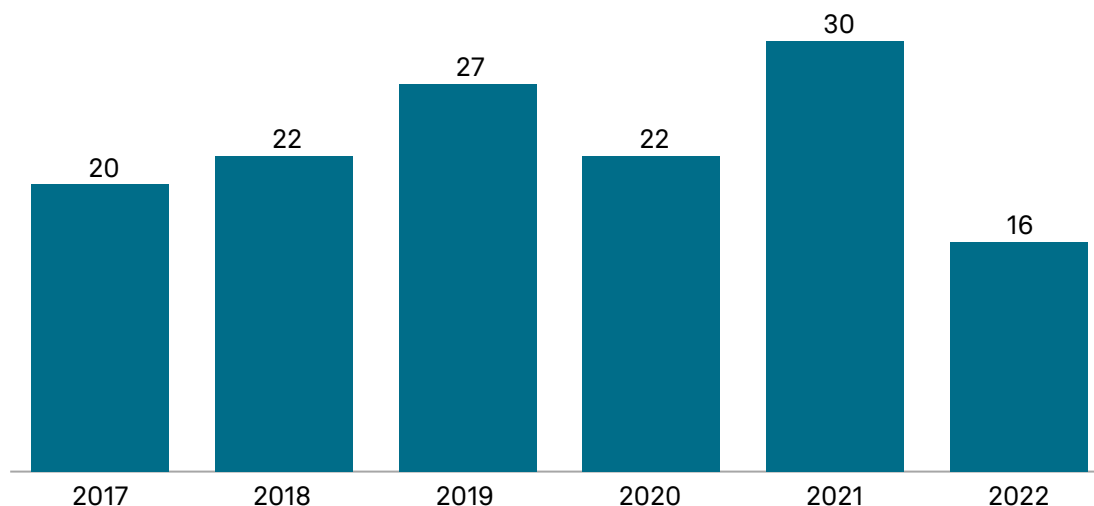
Furthermore, some direct lenders could face concentration and vintage risk as they have been easing lending standards, increasing loan sizes and relaxing covenants for years. While these lenders may have recently adopted a more defensive posture to reduce risk in current deals, stricter lending standards could hamper the availability of private credit more broadly, potentially cutting off a critical source of funding for some borrowers.

### Credit Estimates: A Glimpse Under the Hood of Private Credit Assets

Private credit has multiple sources of funding, including private credit funds and publicly traded funds, such as BDCs and interval funds. For the private debt market, middle-market CLOs (MM CLOs) are an important source of funding. Unlike BSL CLOs, which are collateralized by rated loans, MM CLOs are vehicles backed by loans made mostly to unrated middle-market companies. The number of US MM CLOs has expanded in recent years. A total of 156 were launched between 2018 and 2022, versus 84 between 2013 and 2017. S&P Global Ratings rated 117 MM CLOs in 2018-2022.

### Middle-market CLOs Gain Traction as Levfin Market Booms, 2017–2022

Number of S&P-rated middle-market collateralized loan obligations



Data as of Dec. 31, 2022.

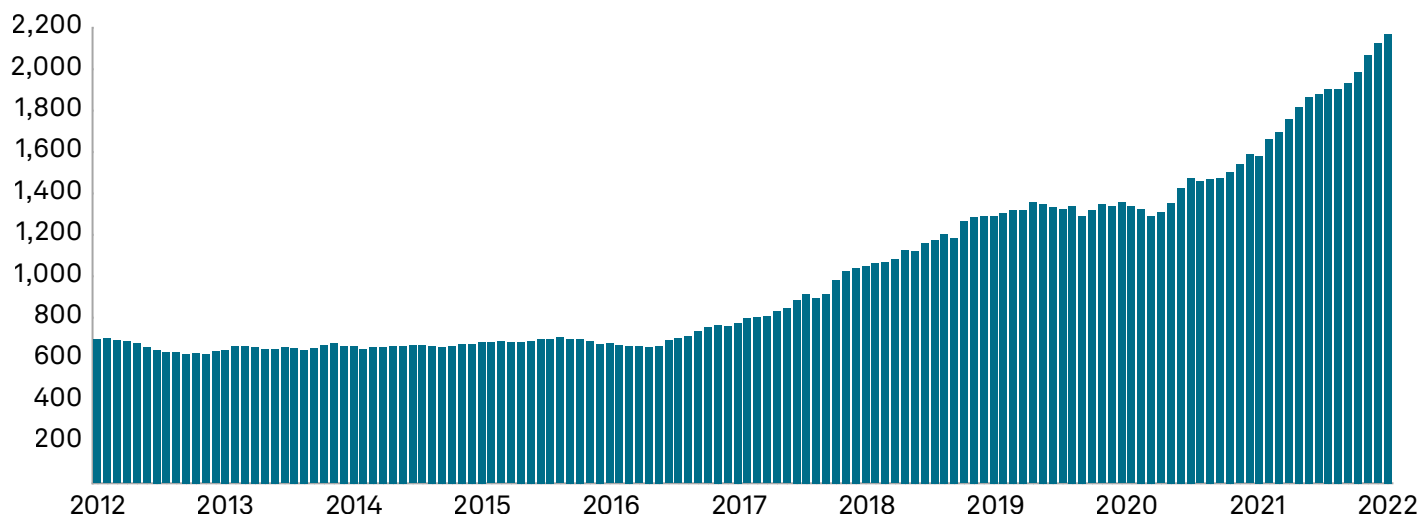
CLO = collateralized loan obligation; Levfin = leveraged finance.

Source: S&P Global Ratings.

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## Credit Estimates' Market Coverage Steadily Expands

Number of outstanding credit estimates



Data as of Dec. 31, 2022.

Source: S&P Global Ratings.

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In rating an MM CLO, S&P Global Ratings produces credit opinions on many of the underlying companies through our credit estimates scores. Credit Estimates involve a review of a company's audited financial statements, covenant-compliance certificates and credit agreements. The analysis borrows heavily from S&P Global Ratings' corporate ratings framework. In a few instances, we also perform Credit Estimates outside the context of MM CLOs.

The median EBITDA for companies with credit estimates in 2022 was about \$25 million. That is smaller than the typical middle-market threshold of about \$50 million EBITDA. Many of the assessed companies were local or regional players with limited pricing power, narrow product or service offerings and high leverage. These companies are therefore more vulnerable to economic or financial downturns than larger counterparts in the levfin market.

S&P Global Ratings had more than 2,100 outstanding Credit Estimates in North America by the end of 2022. These borrowers had \$60 billion of unrated loans held by CLOs rated by S&P Global Ratings in the fourth quarter of 2022. About \$300 billion more of these borrowers' loans were held elsewhere, likely in other private credit funds and BDCs.

It should be noted that MM CLO managers select the borrowers for Credit Estimates. This means they likely represent stronger-than-average credit quality. Still, Credit Estimates provide a window into an area of the private credit market that otherwise lacks transparency.

Most of the private debt borrowers for which we have Credit Estimates are backed by private equity, which means the financial risks are similar to those for highly leveraged companies. Therefore, about 75% of companies with Credit Estimates have a score of "b-" and about 10% are in the "ccc" range. By contrast, only 36% of rated corporate issuers in North America are at B- or lower rating levels.

Software services and healthcare are the sectors most represented by Credit Estimates, accounting for about 25% of aggregate credit-estimated debt held in CLOs. Both of these sectors appear vulnerable to current economic and credit conditions.

Software has the second-highest leverage, at 7.8x, and the second-lowest cash interest coverage, at 1.4x, among sectors most widely represented within Credit Estimates. S&P Global Ratings adjusts company-provided financials based on our methodology. For instance, acquisition and restructuring expenses are treated as operating costs, which may reduce EBITDA. Potential synergies or cost savings are also mostly ignored. Both adjustments would likely lower our view of credit metrics.

The healthcare services sector was challenged by a significant shortage of experienced medical staff. The surge pricing for traveling and temporary nurses has posed constraints for providers to staff at capacity. Reimbursements and rising labor costs place other pressures on this sector.

The sectors most sensitive to inflation include consumer discretionary products and retail. Middle-market companies typically do not have strong brand followings and may not be able to pass on additional costs to consumers to preserve profit margins. As consumer spending on goods declines, the retail and consumer discretionary sectors continue to see stress. The EBITDA margin for middle-market household durables declined to 14.6% last year from 19.6% in 2021. The margin for beverages declined to 20% from 30%.

### Private Credit: A Tool of Alternative Asset Managers

While Credit Estimates provide granular insights into the credit of private borrowers, our ratings on alternative asset managers offer views on the credit quality of some of the largest participants in the private credit market.

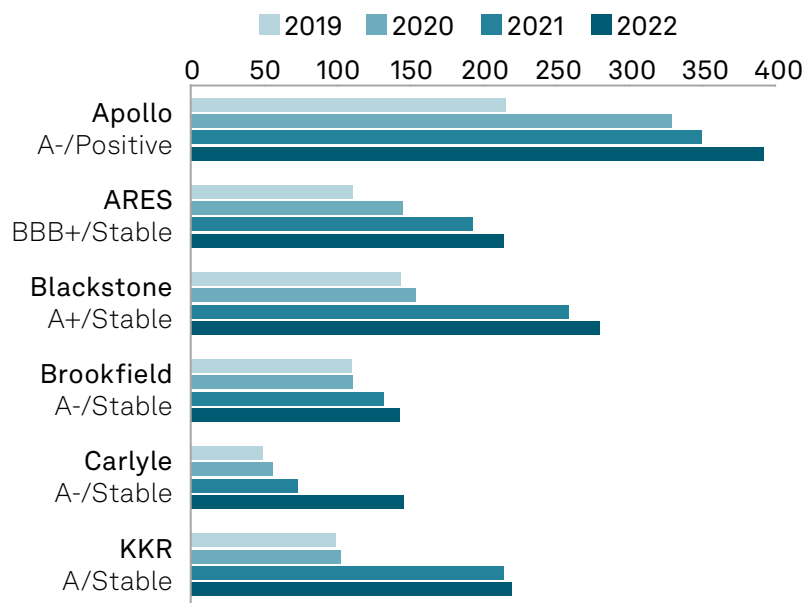
The growing alternative asset class has fueled the growth of private credit. Six of the largest alternative asset managers we rate (Apollo Asset Management Inc., Ares Management Corp., Blackstone Inc., Brookfield Asset Management Inc., The Carlyle Group and KKR & Co.) have roughly doubled assets under management devoted to credit since the end of 2019, reaching approximately \$1.4 trillion.

That boom supported our ratings on these alternative managers because it added diversity to their businesses and revenues. Investors also bear the risk of assets in funds and BDCs. Still, a significant deterioration in asset quality could tax a fund manager’s ability to deal with problem credits, pose reputational risks and even create liquidity challenges under certain circumstances. Given these vehicles’ rapid growth, we expect to see a meaningful rise in credit losses, particularly if economic conditions worsen.

These private credit funds provide a source of private debt that has grown to be comparable in size to BSL and high-yield markets in the US. The private credit assets of these six alternative asset managers compare to the \$1.4 trillion BSL market, the over \$1.5 trillion speculative-grade bond market and the roughly \$5 trillion of commercial and commercial real estate loans on the balance sheets of Federal Deposit Insurance Corp.-insured banks. (Those estimated sizes are based on data from the FDIC and Leveraged Commentary and Data from PitchBook, a Morningstar company.)

### Alternative Asset Managers Gain AUM as Private Credit Markets Grow

Select alternative asset managers’ credit assets under management (\$B)



Data as of Dec. 31, 2022.

Credit assets under management reference : Apollo defines as “yield” for Q3 2022 and as “credit” for 2021 and 2020, Blackstone as “credit and insurance,” Carlyle as “global credit” and KKR as “credit and liquid strategies” for 2022 and “public markets” for 2021 and 2020. For Brookfield, credit AUM represents fee-paying AUM (FPAUM) related to Credit Strategies division, excluding DoubleLine.

Sources: Company filings and presentations; S&P Global Ratings.

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Alternative asset managers operate private credit funds, BDCs, interval funds and MM CLOs that can fund direct lending. The ability of these managers to allocate credit across their platforms has allowed them to underwrite larger private loans.

Based on the limited disclosures available, these private credit vehicles also hold some publicly traded debt, such as BSLs, speculative-grade bonds, junior or equity tranches of structured products and even some investment-grade debt. As for much of the private markets, the line between a public or private asset can blur.

### Business Development Companies

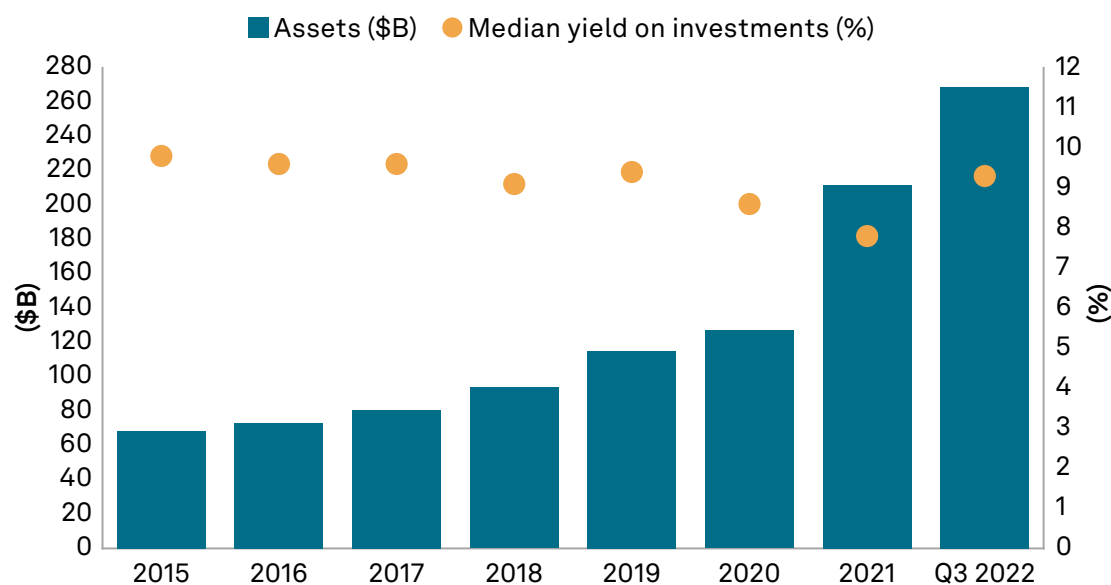
Alternative asset managers have expanded their ability to offer direct lending by forming BDCs. The number of BDCs outside of large asset managers has also grown in recent years.

There are now almost 130 BDCs, and we believe that they have invested a total of almost \$270 billion. We rate a small minority of BDCs, and these tend to be among the largest and most established. While we rate about a dozen BDCs, their investments approach \$130 billion (as of the third quarter of 2022), which is nearly half the industry total. The rated BDCs' investments have more than doubled from under \$50 billion in 2019.

All but one of the BDCs we rate are rated BBB-, even with the higher-risk nature of their assets. Credit quality for most of the BDCs we rate is supported in large part by low leverage, diversified funding mixes, limited loss experience and affiliations with broader asset managers.

### BDCs Grow and Yields Remain Stable

Business development companies\*: Estimate of assets and yield on investments



Data as of Sept. 30, 2022.

BDC = business development company.

\* Based on S&P Capital IQ and SEC data of 128 BDCs, publicly and privately held. Yield estimates exclude certain non-traded BDCs.

Source: S&P Global Ratings.

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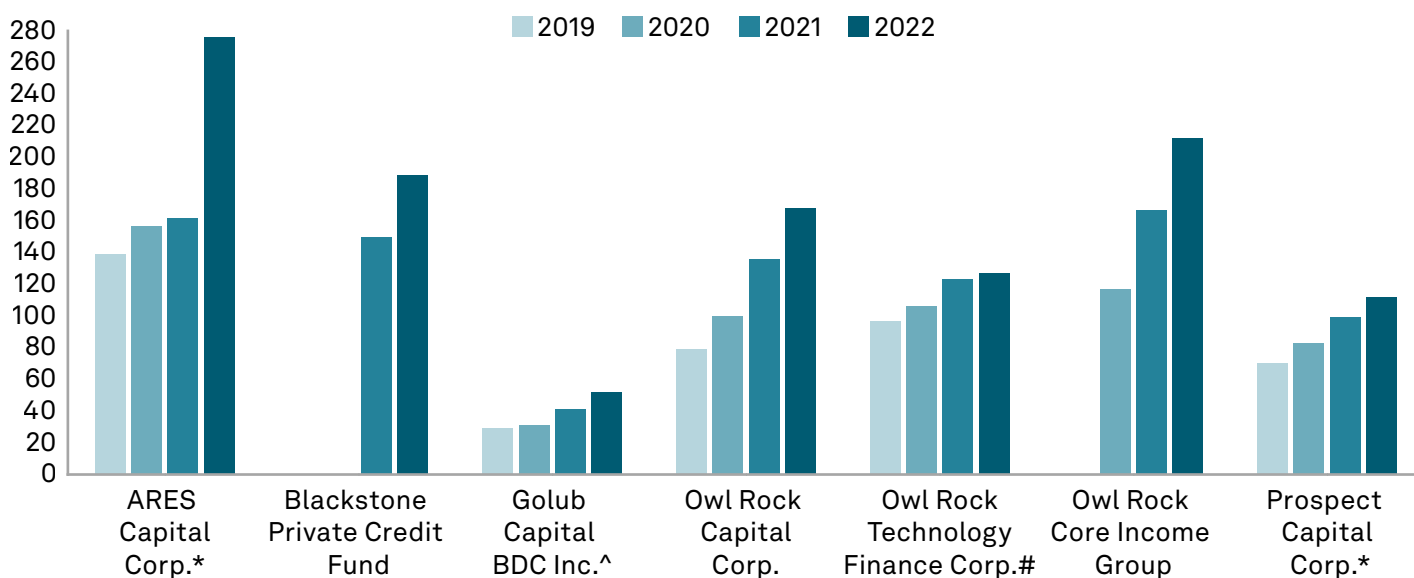
## Private Credit Trends Seen Through BDC Filings

Analyzing BDCs' financial statements and filings offers a glimpse into middle-market credit trends because these vehicles are more transparent funds. Middle-market borrowers likely account for a substantial portion of leveraged loans and other investments at many funds and BDCs.

### Growing Deal Sizes

A clear trend among the rated BDCs is a jump in their borrowers' weighted average EBITDA in 2022 [see chart]. This reflects how direct lenders have increasingly competed for larger corporate borrowers. Strong fundraising and capital raising have helped direct lenders push into this area, along with their ability to deploy large investments, with some loans exceeding \$2 billion. With financing conditions for the BSL and speculative-grade bond markets constrained by rising rates and economic uncertainties, direct lenders are finding more opportunities to lend to larger companies. This trend is reflected among the BDCs we rate; the weighted average EBITDA of several BDCs' portfolio companies notably increased in 2022.

### Weighted Average EBITDA of S&P-rated BDCs' Portfolio Companies (\$M)



Data compiled April 12, 2023.

BDC = business development company.

\* For ARES Capital Corp. and Prospect Capital Corp., all periods represent data as of quarterly period ended December.

^ For Golub Capital BDC Inc., annual periods represent data as of year-end September. EBITDA refers to Portfolio Median EBITDA.

# For Owl Rock Technology Finance Corp., EBITDA refers to weighted average annual EBITDA for its traditional financings investments.

All entities are currently rated at BBB- with a "Stable" outlook.

Source: S&P Global Ratings.

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### Riskier Asset Quality

The yield on BDC portfolio assets held relatively flat despite growing portfolios until around 2020. With the low rates and the shift to larger borrowers in 2020 and 2021, portfolio asset yields dipped below 8%. However, these yields rebounded above 10.2% last year, reflecting the higher benchmark yields of the London interbank offered rate and the secured overnight financing rate as well as a likely increase in risk. In comparison, commercial and industrial loans in aggregate on the balance sheets of FDIC-insured banks yielded less than 6% in the fourth quarter of 2022.

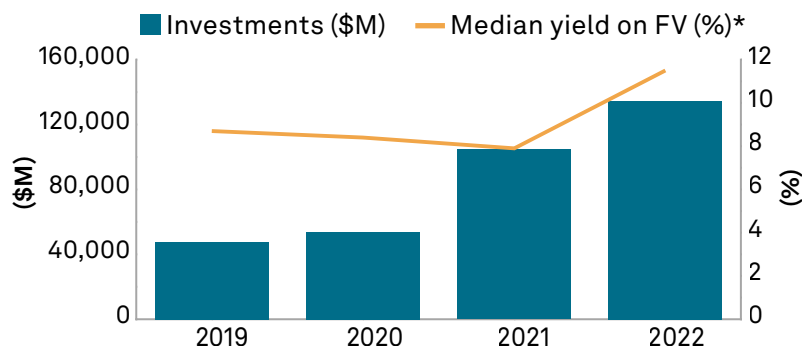


We believe that a portion of BDC portfolio companies have suffered a deterioration in leverage and interest coverage. The asset-quality risk of many private credit assets is also meaningfully higher than what banks typically carry on their balance sheets.

### Growing PIKs

Another sign of material asset-quality risk at some funds and BDCs is exposure to payment-in-kind (PIK) loans. PIK loans allow borrowers to make payments with additional debt or equity rather than cash. Some BDCs intentionally structure their investments to be PIKs for the first few years. Still, we have seen an uptick in PIK income as a percentage of gross investment income, partially because lenders have amended terms with borrowers. For some BDCs, the portion of investments making PIK payments was 10%-20% in the third quarter of 2022.

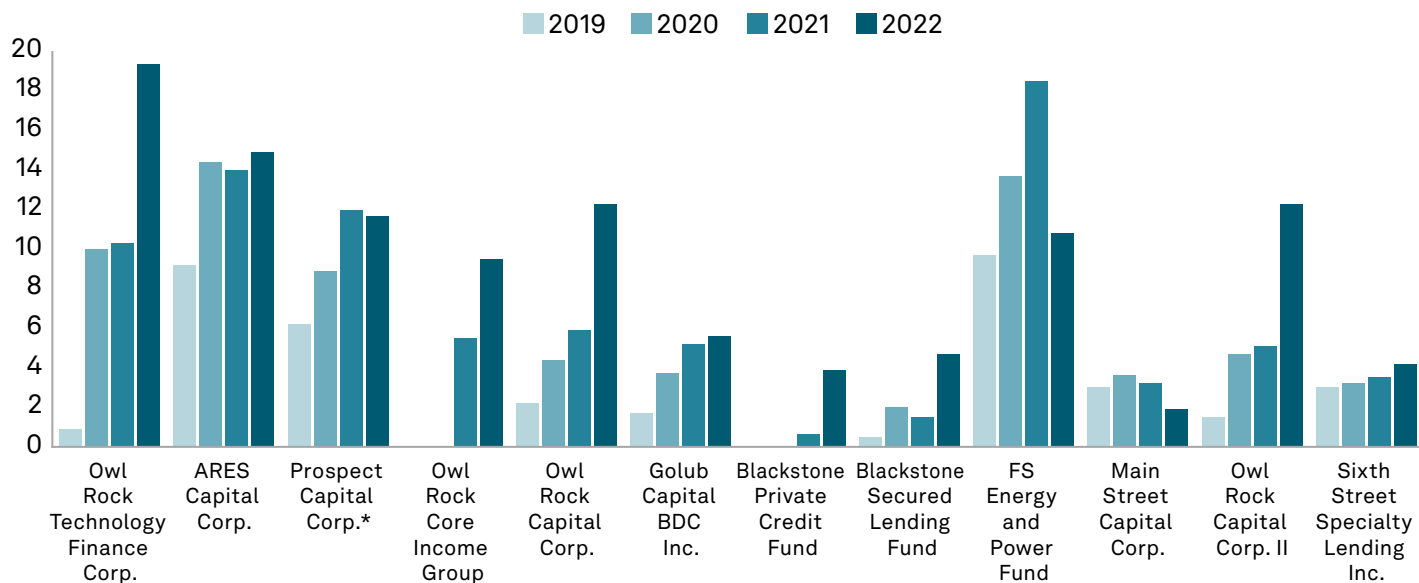
### Investments and Yield of S&P-rated BDCs' Portfolio Companies



Data compiled April 3, 2023.  
 BDC = business development company.  
 \* Median yield calculated based on information available in SEC filings for the below-named entities. Includes weighted average yield of debt and income-producing securities at fair value weighted average yield, average income yield, gross yield and annualized yield for some entities.  
 Companies included in calculation are ARES Capital Corp., Blackstone Private Credit Fund, Blackstone Secured Lending Fund, FS Energy and Power Fund, Golub Capital BDC Inc., Main Street Capital Corp., Owl Rock Capital Corp., Owl Rock Capital Corp. II, Owl Rock Technology Finance Corp., Owl Rock Core Income Group, Prospect Capital Corp. and Sixth Street Specialty Lending Inc.  
 Sources: Company filings and presentations; S&P Global Ratings.  
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### PIK Interest/Gross Investment Income of Rated BDCs\*

As per S&P calculations for S&P-rated business development companies (%)



Data compiled April 3, 2023.  
 BDC = business development company.  
 \* For Prospect Capital Corp., annual periods represent data as of year-end June.  
 ^ For Golub Capital BDC Inc., annual periods represent data as of year-end September.  
 All entities except FS Energy and Power Fund are currently rated at BBB- with a "Stable" outlook. FS Energy is rated at B with a "Developing" outlook.  
 Source: S&P Global Ratings.  
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## Market and Liquidity Risks

Permanent capital, long-term funds, limited reliance on short-term funding and low leverage generally help private credit funds and BDCs protect against market and liquidity risks. However, in some scenarios, private credit funds and BDCs could face pressures, particularly regarding liquidity.

Private credit funds and BDCs may make distributions and redeem some of their shares. Investors may have rights to request those distributions, but such distributions are usually not guaranteed. Fund managers intend to support distributions and share redemptions with liquidity on hand, cash flows from their investments, borrowings or assets sales. However, challenges can arise when the demand for outflows surges.

For example, in fourth-quarter 2022, Blackstone had two funds that faced a spike in redemption requests. The private credit fund BCRED received requests totaling about 5% of its outstanding shares, around its quarterly 5% limit on share repurchases. Blackstone's real estate investment trust fund also reached its redemption limit around the same time. In the case of BCRED, Blackstone said it had ample liquidity to honor the requests it received, but the REIT limited withdrawals to its quarterly limit.

In down markets, any number of situations, including investor panic, could lead to a surge in redemption requests. Some private funds and private BDCs, looking to honor requests, might sell assets, driving down the value of investments in the market.

In addition to redemption requests, private credit funds and BDCs could face claims on liquidity from their own lenders and debtholders when they employ leverage. Liquidity risk can arise for BDCs if a decline in the value of their assets jeopardizes their compliance with their asset coverage requirements. Such a violation can also trigger a violation of covenants on facilities that banks or other lenders typically extend to them. Those violations may force a BDC to repay all or part of its funding facilities, which may force it to sell assets (see "Business Development Companies' Asset Coverage Ratios Could Feel The Strain Of A Weakening Economy," Oct. 20, 2022).

## Red Sky at Dawn?

Public and private credit borrowers are both subject to today's market challenges, particularly the headwinds of unrelenting inflation and rising costs of funding. Publicly rated credits have remained stalwart over the past year, but the factors that have steadied borrowers — strong cash balances, long-dated maturity walls and a resilient consumer base — are starting to erode.

Private credit is likely feeling a similar pinch, given the increasing share of PIKs among BDC assets and steady declines in fair valuations. The pressures on traditional direct lending must also be significant as margins are thinner and leverage is higher. In addition, the investment strategy in direct lending has been very focused on total return over positive cash flow in the past decade. The headwinds of reduced profitability and higher cost of funding may blow over more borrowers than in large corporates.



We may also be looking at a red sky at night. Private equity's enormous arsenal of dry powder does mean there is significant capital to deploy in the right conditions — both par and special situations. Unlike the BSL and high-yield markets, which are more dependent on “in the moment” liquidity from investors, private capital is ready to provide funding if the moment is right. In addition, the strong working relationships between borrowers and lenders are likely very advantageous in these challenging market conditions, while the continued presence of covenants helps to manage risks.

In 2022, private credit was instrumental in keeping the complete ecosystem of credit flowing: public and private, large corporate and middle-market. It is entirely possible that it will remain the anchor of credit markets until public markets normalize and return to full strength. Still, the question is less about private equity being able to extend credit, and more about its willingness to do so. ■



**Learn more**

[Middle-Market CLO And Private Credit Quarterly: Harbor In The Tempest?](#)

[Asset Management Sector View is Mixed As Conditions Turn Choppy](#)

[Business Development Companies' Asset Coverage Ratios Could Feel The Strain Of A Weakening Economy](#)

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# The Energy Transition – Born in the Dark

Private markets are taking a leading role in investment in infrastructure related to the energy transition.

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**Highlights**

The emerging cycle of energy transition and climate investing is being “born in the dark.” While impact funds operating in public markets have attracted more than \$1 trillion in capital commitments from investors, it is the \$260 billion raised for targeted private equity funds that may have the bigger impact on the speed and shape of energy transition and climate infrastructure rollout over the coming decade.

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**B**oth traditional private equity firms and new private capital platform structures at firms such as Brookfield Asset Management or Apollo Global Management Inc. are committing tens of billions of dollars to energy transition funds and cleantech.

The prerogative of limited partners has pushed many private equity funds to invest in the energy transition. Firms have grown increasingly sophisticated and have adapted well to the evolving challenges of energy markets, adopting longer time horizons for some funds and launching multifund strategies. This enables privately- backed energy companies to maintain funding and stay out of public markets from an early, pre-revenue stage through to an investment-grade credit play.

Freed of the obligation that publicly owned companies have to regularly report on operational and financial performance, a business can focus on a longer time horizon. The absence of this data makes it challenging for investors to value these investments against other public or private companies.

Large investments made by energy companies require patient capital and a nuanced understanding of complex value chains. New energy assets have extraordinarily long tail repercussions for energy markets and the larger economy. An investment of several billion dollars in an LNG terminal, a hydrogen facility or a battery metals refining facility requires a minimum of several years of operations before investors see a return. While these assets tend to have



very long operational lives that provide long-term returns on capital, patience is not a strength of public markets. To fund these investments, private equity firms have developed longer capital cycles by maintaining ownership in energy assets at different stages of development and maturity within their portfolios.

For energy and natural resources investors, the absence of data in private markets can create unexpected challenges. Take the example of an investor trying to forecast the installation of wind and solar in various power markets around the world. The quantity of wind and solar power added to grids in global power markets has been consistently higher than consensus forecasts by a double-digit percentage in the past few years. For a firm traded in public markets by funds with energy transition mandates, capital expenditure monitored by those funds would be publicly disclosed and available within forecasts for the entire energy market. The availability of those public filings for investor use would make the ultimate flow from allocation into infrastructure deployed more transparent. The numbers are available in public filings. But when a private equity-backed company buys a thousand solar panels and puts them on the ground, an investor will not necessarily know until a power purchase agreement is made public in a regulatory filing or solar power is being delivered onto the grid. Investors or regulators who only look at public markets to anticipate supply are missing critical data. From a pricing perspective, this can lead to capital misallocation due to the inaccurate assumptions created by including certain price and asset deployment curves in models.

For energy and natural resources investors, the absence of data in private markets can create unexpected challenges.

Public equity funds that buy shares and map their environmental, social and governance performance against targets or the broader market find their investments are not easily correlated with changes in corporate capital expenditure that impact the fundamental supply-demand picture for the energy transition. Private funds seeking outsized returns by more effectively pricing cleantech and climate risk in their investments have consistently backed projects and firms that directly impact energy transition fundamentals.

Private markets and cleantech are currently a good match because of the misalignment of returns and capital requirements. Cleantech generally requires large, up-front capital expenditure based on anticipated revenue. Qualified private investors are more likely to take and be able to afford that risk. These investments do not necessarily suit the retail or institutional investor who customarily invests in the public markets. Ultimately, these dynamics may result in more of an overlap of investment activity between public and private markets as energy companies make use of both public and private capital while the markets develop.

### **Dry Powder and Bubbles in Cleantech**

Private equity funds that target energy transition and climate infrastructure investments have deployed only a fraction of the capital they have raised. Their fundraising significantly outpaces their deployment, even as investment out of funds has steadily accelerated, public sector support

has become increasingly generous and the broader fundraising environment has been difficult. Given the influx of private capital into green energy, private equity funds in this space are taking on different risks, which can contribute to lower outright returns.

General partners and limited partners in private markets are both captives of the fundraising cycle. Limited partners seek exposure to high growth areas and have allocations to private markets and energy markets. General partners either accept investment from limited partners when it is offered or risk losing potential future investment allocations to a competitor. Once a fund has closed, the private equity firm is under pressure to either invest out of the fund quickly or risk returning allocations to the limited partners.

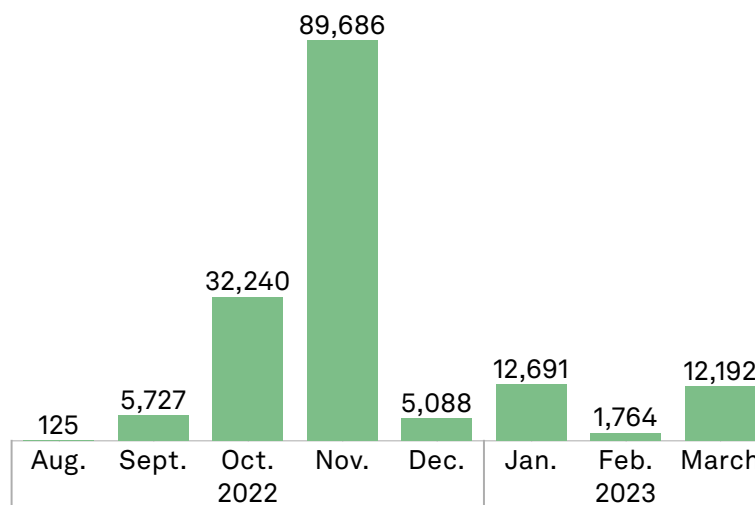
This cycle may not match up perfectly with a pool of desirable investments in the energy and cleantech sectors. The influx of private investment in these sectors over the past five years has created a substantial capital overhang referred to as “dry powder.” While an overabundance of money sounds like a good problem to have, it has caused issues for the burgeoning cleantech industry. When lots of investors are competing for the same asset, the price goes up.

Some believe this dynamic has led to a valuation bubble in cleantech. Asset valuations have undoubtedly risen quickly, scuppering a few deals in the last six months. Some cleantech transactions have been called off because the underlying price changed before the deal was completed. This is good news for private equity firms that already own assets such as wind farms, bad news for firms with money to invest and a complicated situation for firms that are both holders and buyers of cleantech assets.

There are a range of estimates for dry powder currently waiting on energy investment opportunities, and the amount of available capital is probably higher still. There is no shortage of money for cleantech investment if the market stays frothy.

Bubbles are not always bad things. For the past 30 years, there has been notable underinvestment in energy infrastructure. To some extent, current inflated prices will incentivize investment to catch up with infrastructure needs in the US and Europe. That may lead to the overbuilding of some energy assets, but eventually it should lower energy prices overall, promoting economic growth. Governments

### Energy Transition Private Capital Fund Raises (\$M)



Data compiled March 30, 2023.

Source: S&P Global Commodity Insights.

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are offering substantial subsidies that allow private equity firms and the owners of these assets to de-risk infrastructure investment. A degree of investment capital misallocation may be the price we pay to modernize the energy grid.

Being able to avoid constant revaluation may cushion private equity portfolios as they take on more technology and market risk, but it also raises questions about how far private valuations are from market value, and it increases the risk of dislocations that could feed into broader markets.

### Geopolitical Competition and Green Energy

Europe, the US, China and India have clearly signaled that they are going to compete in the cleantech economy.

The 2022 Inflation Reduction Act signed into law by US President Joe Biden was criticized by EU politicians for favoring cleantech from American firms. European and Chinese governments have histories of supporting their own cleantech industries through policy, demand creation and public/private partnerships. Because a lot of these technologies are being developed and funded by companies that have remained in private market ownership structures, particularly in the US and Europe, this growing geopolitical competition has prompted investors who want exposure to these growth areas to turn to private market funds.

Two divergent trends are shaping the energy transition. Through the Conference of the Parties process and Paris Agreement on climate change-alignment, almost the entire world is now, at least rhetorically, committed to the energy transition. This process demands reindustrialization through investment in new infrastructure that is clean, digitally enabled and fits into a more efficient and climate-hardened economy. All major economic blocks signed up for this change, even if the specific mechanisms are politically controversial.

The flip side is that not every country can capture the value created by this transition. There will be winners and losers in technology and manufacturing. Governments are attempting to boost their individual economic growth pathways by directly investing in cleantech infrastructure.

Since the passage of the Inflation Reduction Act, investment that might have gone to other sectors has been redirected. Money earmarked for investment in hydrogen production in Europe may now be shifted to hydrogen production in the US, and European companies with plans to open facilities in both markets are now accelerating their US development timelines. This is advantageous for US companies and US markets, allowing them to capture a big piece of the global market for hydrogen, but other regions risk being dependent on the US for energy in the future, just as they are currently dependent on Middle Eastern oil-producing countries. The energy transition, even if it results in meaningful climate action, will not change human nature — countries and economies will still compete for markets and influence.

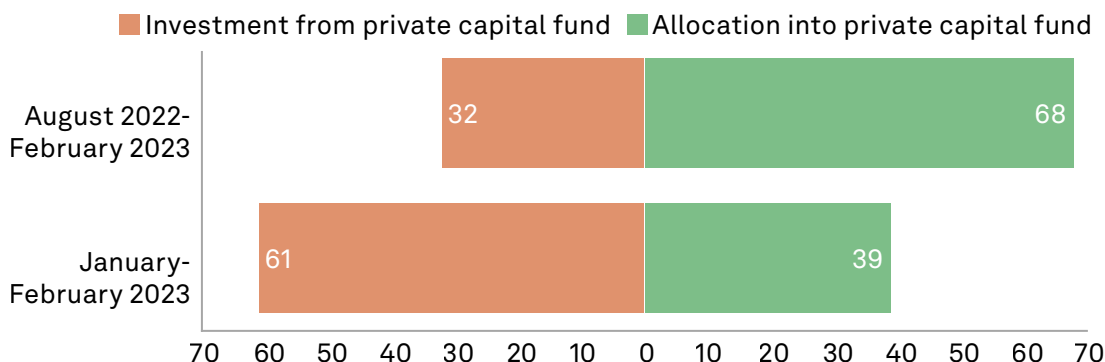
Governments have largely held back from directly building clean energy infrastructure. The US is incentivizing the creation of clean energy assets through the tax code and tax credits, meaning a market action must be taken before a qualifying tax credit can be issued.

Around the world, governments are attempting to de-risk the production of clean fuels. The US federal government has proved agnostic about who will benefit from these incentives. Tax credits will aid large oil companies that want to transition into hydrogen and carbon capture. Private equity firms have been moving aggressively into cleantech because the de-risking of production allows them to potentially generate higher returns with less downside. A lot of cleantech incentives are flowing into private equity-backed companies for the simple reason that private equity firms have dry powder ready to commit to new projects or already own the clean energy firms that could benefit from policy changes. As governments try to incentivize clean energy investments, private equity looks to increase its exposure to them.

Governments are attempting to boost their individual economic growth pathways by directly investing in cleantech infrastructure.

### Investments From vs. Allocations Into Energy Transition Private Capital Funds (%)

August 2022–February 2023



Data compiled March 30, 2023.

Source: S&P Global Commodity Insights.

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## The Future of Energy Markets

There is little doubt that a much higher proportion of the energy economy will stay in private hands than in the past. Incumbent incentives to exit into public ownership are no longer so universal. There will still be IPOs of private firms, and there will certainly be a lot of M&A activity as those newly public firms use their equity to buy established ones. But private capital as a guiding force in the energy transition is here to stay.

This phase of acceleration in the energy transition may be the first major industrial and technology investment cycle that occurs primarily in opaque private markets dominated by private equity funds and specialty asset managers, rather than through capital raises in public equity markets.

The Inflation Reduction Act will boost these markets. Developed and middle-income economies are focusing investment away from consumption at the services level and back toward industrial infrastructure investment. Except for China and South Korea, most economies have done little for their industrial base over the last 30 to 40 years. Energy infrastructure investment has long lead times, but the acceleration of activity over the past six months has been remarkable. There were zero hydrogen deals six months ago, and now there are dozens. There was also only a handful of utility-scale battery plays, and now there are well over a hundred. This pace will only pick up.

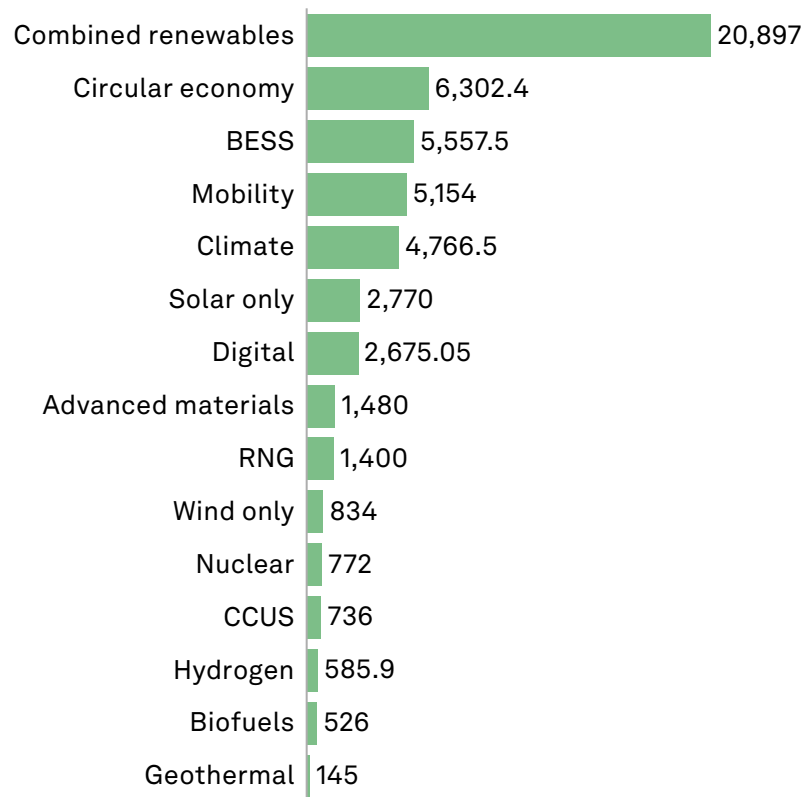
In the immediate term, the biggest private equity firms will get bigger. The capital expenditure requirements for cleantech energy investment are massive. Smaller funds will be limited to investing in midsize firms that may be unable to take advantage of scale or government incentives at the same level. A huge amount of capital is required to develop, own and operate energy and industrial assets of all kinds, and only the biggest private equity firms can commit for the longer term.

There remains a misunderstanding that private equity firms are investing in cleantech energy infrastructure due to an ambition to achieve net-zero carbon emissions. The concept of a single, global movement into a climate-friendly and cleantech-enabled capitalism was always a political conceit rather than a grown-up investment thesis, but it took hold as a global investment theme during the last two years.

Now, the investment story for energy is increasingly one of superior technology. In many cases, modern

## Private Capital Energy Transition Investment by Technology (\$M)

August 2022–February 2023



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cleantech is significantly more efficient than old energy sources. While estimates differ according to battery type and usage, battery-powered electric vehicles can be 300% more efficient than internal combustion engines due to improved performance and a lack of heat loss. When you turn on a wind turbine, energy appears with zero ongoing fuel cost. A giant solar farm is pretty much self-sufficient once it is operational, while it takes dozens of highly trained and highly paid individuals to operate a coal-fired power plant.

This efficiency-boosting role for cleantech in the energy economy is still being tested. Fifteen years ago, these technologies were new, and each project was expensive to deploy. But we have reached the point of turning energy production into a manufacturing, rather than a resource extraction, process. This is a very different type of economic consideration — one that private equity firms with lengthy experience in technology and innovation are well placed to profit from. ■



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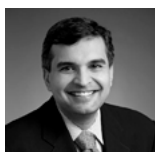
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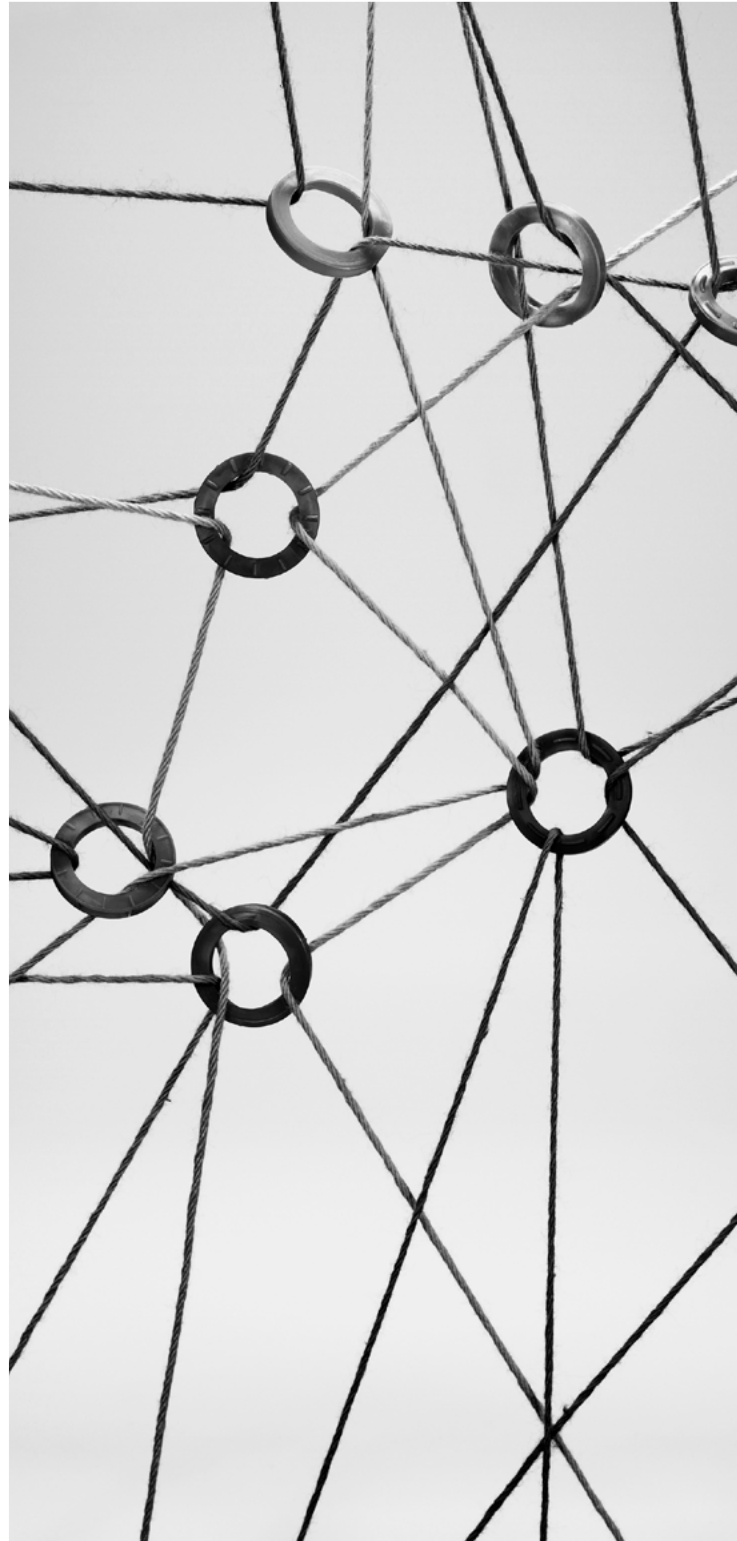
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