Thematic Analysis: Emerging Risks in Private Finance

Final Report

The Board of the

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Executive Summary

Global private finance is experiencing rapid growth, with annualized growth at nearly 18% since 2017 and private market assets under management (AUM) reaching $12.8 trillion USD in June 2022.[1] US companies have raised more money in private markets than in public markets in each year since 2009.[2] Certain types of funds, including private credit and private equity funds, have grown to an increasingly significant share of overall financial markets and, in doing so, are taking on ever more important roles in financing the real economy.

Private finance activities can be beneficial to the economy. Private credit industry practitioners state that they are financing key growth areas, particularly where banks are unwilling or unable to provide credit.[3] The geographic expansion of private equity and venture capital also provides key sources of developmental finance, for example through funding the expansion of established companies and start-ups in the Association of Southeast Asian Nations (ASEAN) countries.[4] More generally, academic literature describes the positive spillover effects of private equity and venture capital investments on firm-level productivity, employment and economic growth.[5]

Yet with this increasing role come potential risks. IOSCO has undertaken this work to better understand the potential vulnerabilities that might arise from private financing activities, including the ways in which risks in this sphere could touch on public capital markets and IOSCO's objectives,[6] including potential harm to investors, risks to market integrity, or potentially giving rise to financial instability and systemic risk. The outcomes of this report are based on an extensive review of literature, market research, and benefits from roundtable discussions held with private finance market participants, academics, and credit rating agencies.[7]

While the inherent opacity in private finance provides investors with some insulation from the transparency costs faced in public markets, it could also jeopardize availability of information that regulators and investors require to effectively assess risks. This includes risks that could arise due to the way in which private finance firms conduct their activities (e.g., valuations, conflicts of interest), from their interconnections with the wider financial system, and from how macro-financial developments could impact the sector, the portfolio companies that receive finance, and the real economy.

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1 Bain (2023) Global Private Equity Report 2023

2 See Morgan Stanley, Public to Private Equity in the United States: A Long-Term Look (Aug. 4, 2020)

3 Block et al (2023) A Survey of Private Debt Funds

4 ASEAN (2022) ASEAN Investment Report 2022

5 Samila and Sorenson, 2011; Davis et al., 2011; Bernstein et al., 2017

6 IOSCO Objectives and Principles

7 The external engagement is referred to as "market" or "roundtable" participants, or "external stakeholders" throughout the report.

The investment landscape has changed dramatically with the return of inflation and the rapid shift to interest rate normalisation. This creates prospective challenges to funding models within private finance sectors that have relied on continuing access to cheap and secure sources of debt funding. Potential questions therefore arise in terms of these sectors' ability to navigate this transition to the "new normal".

If interest rates stay at (or near) current levels (or increase further) for longer than expected, it is likely that there will be a reduction in the availability of funding to support private finance activities. Portfolio companies are likely to face higher rates on existing borrowing, which is typically floating rate, as well as on new and refinanced borrowing. Market participants noted that these risks were especially stark over the medium to long-term. Although private finance firms have accumulated a significant amount of "dry powder" (i.e., capital committed by investors, but not yet invested), the extent to which this could mitigate this risk is unclear. Flexibility of financing in private credit arrangements may also help portfolio companies navigate short-term market strains, but defaults are nonetheless expected to increase over the medium to long-term. Overall, there could be significant impacts on concentrated sectors that have become reliant on a constant flow of affordable funding.

There are also conflicts of interest in private finance, for example, between a fund manager's investors in different investment products, such as when one of the manager's debt funds lends to portfolio companies in one of its equity funds. There are also conflicts of interest in some aspects of valuations, transaction negotiation practices and general partner (GP) led secondary markets.[8] However, it is difficult to assess the scale of these risks, the frequency in which these issues arise and the extent to which they are managed effectively.

Should the relative increase in the cost of debt lead to a renewed interest in equity financing, such valuation concerns could be unearthed under a scenario where portfolio companies and their sponsors would need to face the prospect of raising capital through the public equity markets (e.g., through IPOs or perhaps SPACs).

More broadly, the connections between private markets and other parts of the financial system may also provide avenues for the transmission of risk into public markets. There has been a significant increase in market-based credit intermediation, at the same time as a contraction in loans and bonds held by banks in advanced economies.[9] External stakeholders have emphasized the interchangeability of public and private markets. Some roundtable participants remarked that the size and growth of private markets meant that private finance was now a critical component to the functioning of the real economy, especially for specific sectors, such as technology and healthcare.

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8 A private equity secondary market (or "secondaries" as it is known) allows investors to sell their private equity fund positions. A transaction in this "over-the-counter" market encompasses the transfer of a limited partnership interest from the selling Limited Partner to the new owner, who assumes all rights and obligations of the Seller (see Chartered Alternative Investment Association - https://caia.org/sites/default/files/AIAR_Q3_2016_01_Secondaries.pdf)

9 OECD (2020) Structural developments in global finance intermediation – the rise of debt and non-bank credit intermediaries

The lack of available data covering all aspects of private finance activities makes mapping risk transmission challenging, however, the market participants in both public and private markets overlap, bridging banking and non-bank sectors. On one side, investment banks play an intricate role in nearly all phases of a leveraged buy-out and/or private credit transaction, primarily through the provision of leverage. On the investor side, large institutional investors such as pension funds and insurance companies are dominant players in both private finance investments and in public debt markets.

Private market participants also appear keen to push toward new sources of capital, such as through retail investors. Such a shift would inherently come at the cost of the investment products being subject to greater regulation and higher standards of governance and oversight than those required when involving institutional investors. Nonetheless, retail investors could be more exposed to risks given the lower transparency of the investments compared to those in public markets. Retail investors would also have relatively poorer access to information and resources. Many of the liquidity risks associated with private finance activities are traditionally mitigated by the closed-end nature of the investments, yet retail investors may ultimately demand greater access to liquidity.

Private finance has largely grown in a period of accommodative macro-financial conditions. This has now changed. The sector may be tested in the medium to long term and could respond in ways that uncover hidden risks. It is evident that private and public markets are intertwined to the degree that any one market event could have implications across both markets and, potentially, the broader financial system.

Introduction

The term "private finance" is broad, and definitions can vary across jurisdictions. However, it generally encompasses activities relating to capital raising and lending provided by non-bank investors to companies through bilateral transactions.

Private finance is mainly arranged through private investment funds, including private equity and private credit funds, although direct investment is possible by large institutions. These funds, in turn, raise capital from investors such as pension funds, insurers and endowments, as well as high net worth individuals and family offices. Investors are usually required to commit significant capital (the standard minimum investment in private equity, for example, sits at about $25 million USD) for a significant time period (5-10 years). In certain jurisdictions, certain private finance funds may also raise capital from "retail investors" (i.e., individual and non-professional investors, who typically invest in funds with no or low-income threshold) and correspondingly require a much lower minimum investment. Furthermore, some private finance funds may be perpetual in life (i.e., "permanent capital") and do not have a specified investment time period.

This report focusses on private equity and private credit. Private equity includes strategies such as venture capital or leveraged buyouts. Private equity investments are achieved by acquiring an ownership stake in a company through purchasing equity securities that are subsequently not listed or actively traded on a market or exchange. Private credit is used to describe the provision of credit to (typically small- and mid-sized) businesses by non-bank lenders on a bilaterally negotiated basis.[10] In other words, the credit is originated without bank intermediation, and can take various forms, including loans, bonds, notes or private securitizations.[11] Examples of strategies include direct lending, distressed debt, mezzanine financing, venture debt and structured financing. The term “private credit” is often used interchangeably with terms such as “private debt”, “direct lending”, “alternative lending” or “non-bank lending”.

Table 1 describes some key characteristics that distinguish private equity and private credit from other forms of finance. Private equity and credit can be closely interconnected, and their activities can overlap and/or relate with activities of public securities markets or banks. For instance, banks may engage in lending activities with private equity and credit funds, and private credit funds may invest directly in leveraged loans without bank intermediation, providing an alternative to the broadly syndicated lending market.

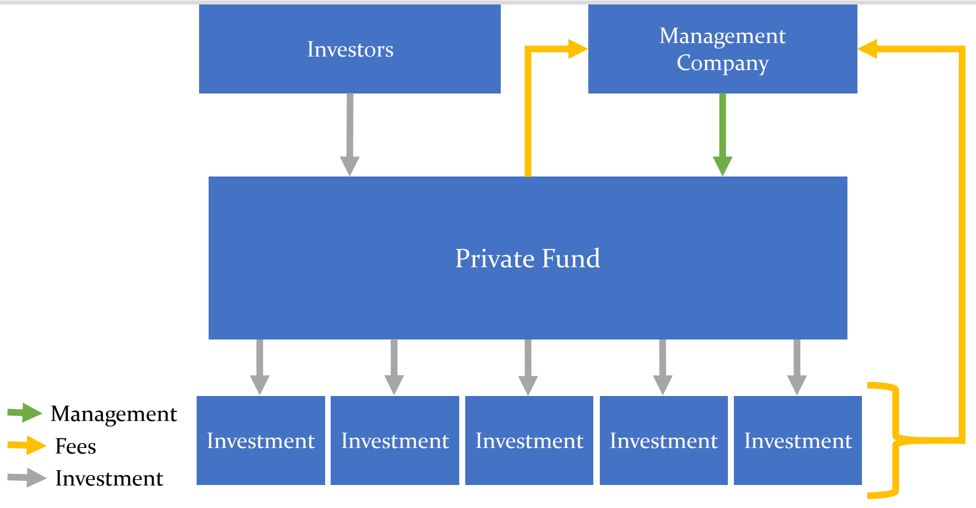
General characteristics of private finance funds

Private equity and credit investments are generally illiquid and held to maturity in a closed-end fund structure (Figure 2). These funds are typically structured in the form of a limited partnership or equivalent vehicle. Generally, a private equity fund’s contractual initial term is 10 years (which may be extended), with the first 4-6 years corresponding to the fund’s investment period. A private credit fund’s contractual term is typically 5-8 years with approximately the first 3-4 years constituting the fund’s investment period (Table 1). During the investment period, the fund manager sources investments for the fund and draws down capital committed by investors (“dry powder”) to fund such investments. Following the investment period, the manager can generally no longer draw down unused committed capital other than for certain approved items, such as fees, expenses, and follow-on investments. During this period, the manager focuses on “harvesting” or realizing exit events for the fund’s investments and distributing proceeds to investors.

[10] See, for example, the definition provided by AIMA

[11] See, for example, AIMA

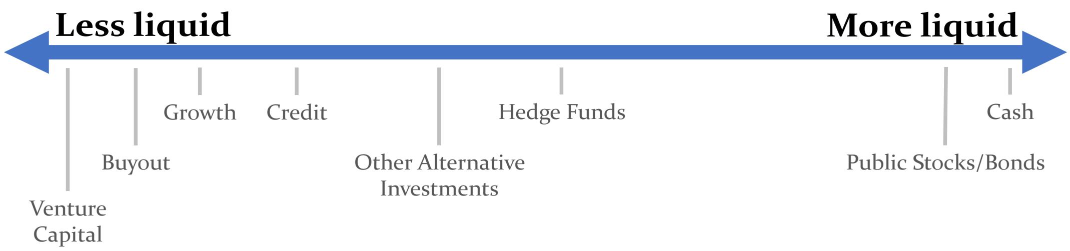
Figure 1: Typical fund structure



Source: IOSCO (2023)

Liquidity transformation is limited in private markets (Figure 2). Capital and profits are not generally distributed to investors until investments are realized (e.g., underlying investments are sold or liquidated, for example through going public or exit on secondary markets). The fund manager, and not the fund investors, controls the timing of investment drawdowns and distributions, although certain investors may negotiate "side letter" provisions affecting some of their rights in this regard (see "Conflicts of Interest", below).[12]

Figure 2: Liquidity scale



Source: IOSCO (2023)

Importantly, private finance funds generally do not offer redemption rights to investors (other than in the case of certain limited types of funds). Prior to fund liquidation, there is generally no way for an investor to dispose of their fund interests other than through a secondary market transaction.

Activity is focused in North America, Europe, and growing in Asia

The scale and scope of private financing activities varies considerably by jurisdiction. The US market accounts for over 54% of the private market AUM.[13] However, there are also

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12 For instance, an investor may negotiate an opt-out or "excuse" right from obligations to fund particular investments. This could be for regulatory or investment policy reasons.

13 McKinsey (2023) Private Markets Annual Review, Exhibit 2

sizeable investment footprints across the European and Asian markets (20% and 22% respectively) (Figure 3).

In 2022, only 48 of the largest 300 private equity firms and none of the largest 20 (by fundraising volume) were based in the Asia Pacific region.[14] While relatively small, the Asian private credit market has grown by almost 30 times over the past two decades, from USD $3.2 billion in 2000, to over USD $90 billion in June 2022.[15]

In particular, the Chinese private investment funds sector has grown significantly in recent years and has become an important part of the Chinese financial system, particularly as providers of direct financing for technological innovation, supporting corporate equity financing, and by introducing more institutional investors into the market.

By the end of April 2023, there were 22,300 private investment fund managers, with assets under management (AUM) of nearly RMB 21 trillion yuan (approximately $2.9 trillion USD). Among them, the AUM of private securities investment funds, which mainly invest in secondary markets, stood at nearly RMB 6 trillion yuan (approximately $800 billion USD), the AUM of private equity investment funds reached RMB 11 trillion yuan (approximately $1.5 trillion USD), and the AUM of venture capital funds rose to RMB 3 trillion yuan (approximately $400 billion USD). [16]

By the end of 2022, there were nearly 400 private investment fund managers in China whose AUM were above RMB 10 billion yuan (approximately $1.4 billion USD). There were 38 foreign private securities fund managers, with a total AUM of RMB 67.3 billion yuan (approximately $9 billion USD). Their parent companies covered major global capital markets such as North America, Asia, Europe and Africa.[17]

Private finance activities are not generally well established in emerging economies. For example, in Africa, private finance investments are still a tiny fraction of those elsewhere in the world.[18]

On the other hand, activity in South America experienced substantial growth following the Global Financial Crisis (GFC), and between 2008 and 2013, major international private equity firms including TPG, KKR and Ajax Partners opened offices in Latin America.[19] However, a steep recession during the COVID-19 pandemic and an environment of political uncertainty saw investors increasingly divest from the region[20] such that by 2021, each of these offices had closed. In addition, central bank interest rate hikes in Brazil were earlier and more rapid than in other regions, possibly owing to the country's history of

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14 Private Equity International (2022) PEI 300 | The Largest Private Equity Firms in the World

15 MAS (2023) Private Credit - The Next Key Driver of Growth in Private Markets

16 Asset Management Association of China (AMAC),Monthly Report on Private Investment Fund Managers Registration and Private Investment Fund Filing (April 2023)

17 Asset Management Association of China (AMAC),Overview of Private Investment Fund Registration and Filing in 2022

18 S&P (2023) African private equity activity surges to 5-year high in 2022

19 IMF (2023) IMF Data Mapper; The Lauder Institute (2022) Private-Equity-in-Latin-America-GBIR2022.pdf (upenn.edu)

20 Covid's Shockwaves Took Poverty in Latin America to a New Nadir - Bloomberg

hyperinflation. Private equity activity in the region picked up somewhat in 2020, but there remains an environment of considerable uncertainty.[21]

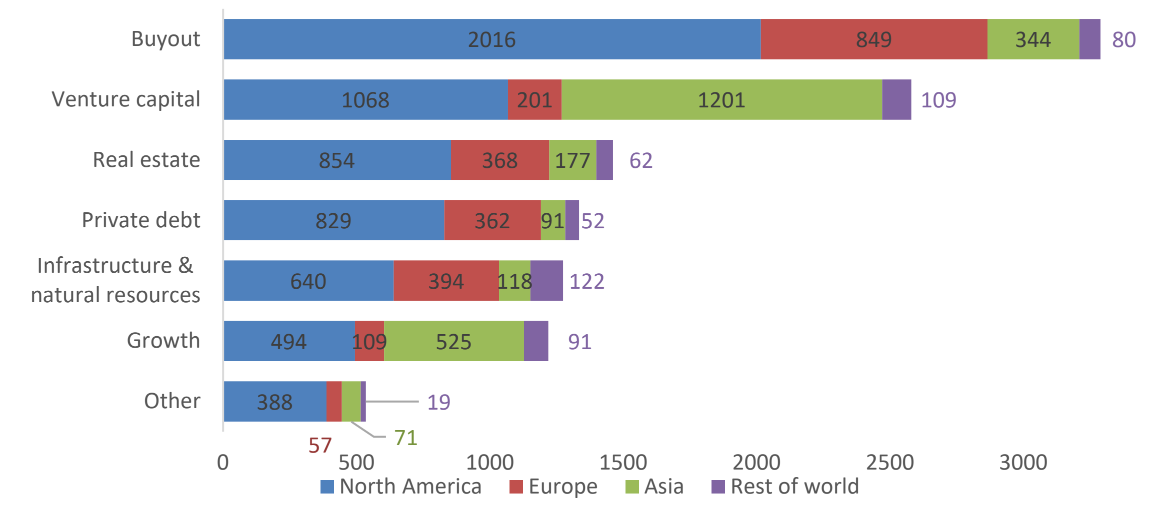
Box 1: Private Investment Fund Industry in China

In response to market growth, relevant rules have been issued in China such as Securities Investment Fund Law[22] and Interim Measures for the Supervision and Administration of Privately Offered Investment Funds. A bundle of self-discipline rules carried out by Asset Management Association of China (AMCC) have also been implemented in areas such as fund raising, internal control and information disclosure.

In January 2021, Provisions on Strengthening the Supervision of Private Investment Funds were released, further clarifying the bottom-line requirements of registration and investment operation. More recently, on July 7th, 2023, China published the Regulations on Supervision and Administration of Private Investment Funds, which will come into effect on September 1, 2023. This is the country's first administrative regulation in the sector.[23]

The new regulation aims to strengthen risk control from its source, clarify bottom line requirements of regulation, and promote the standardized operation of private investment funds.

Figure 3. Private market assets under management, H1 2022. (USD billion)



Source: McKinsey (2023) Private Markets Annual Review, Exhibit 2

[21] Intralinks (2022) Private Investment in Latin America

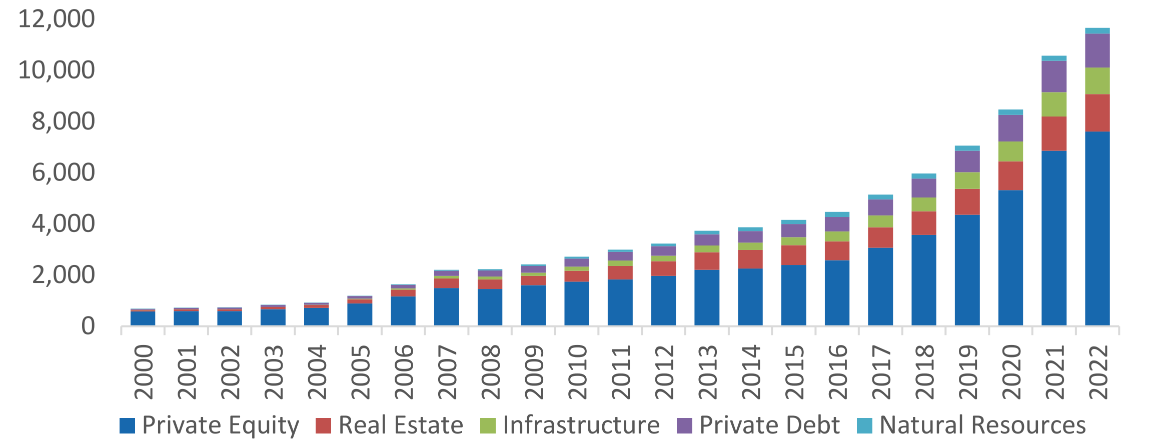
[22] See Securities Investment Fund Law of the People's Republic of China

[23] See China unveils regulation on private investment funds

Private finance in a changing macro-financial environment

Globally, private financing activities exhibited unprecedented growth in the period following the GFC. Global AUM for private funds nearly doubled in the four years to 2022 and trebled over the decade leading to 2022 to reach $12.8 trillion USD in H2 2022.[24] Although total fundraising fell more than 10% in 2022, down to $1.4 trillion USD, it was still the second highest year on record, and nearly three times higher than fundraising volumes seen a decade earlier.[25]

Figure 4. Assets Under Management Breakdown (USD billion)



Source: Preqin (2023)

[24] Bain (2023) Global Private Equity Report 2023

[25] Preqin Ltd (2023) Charts and league tables, accessed May 2023

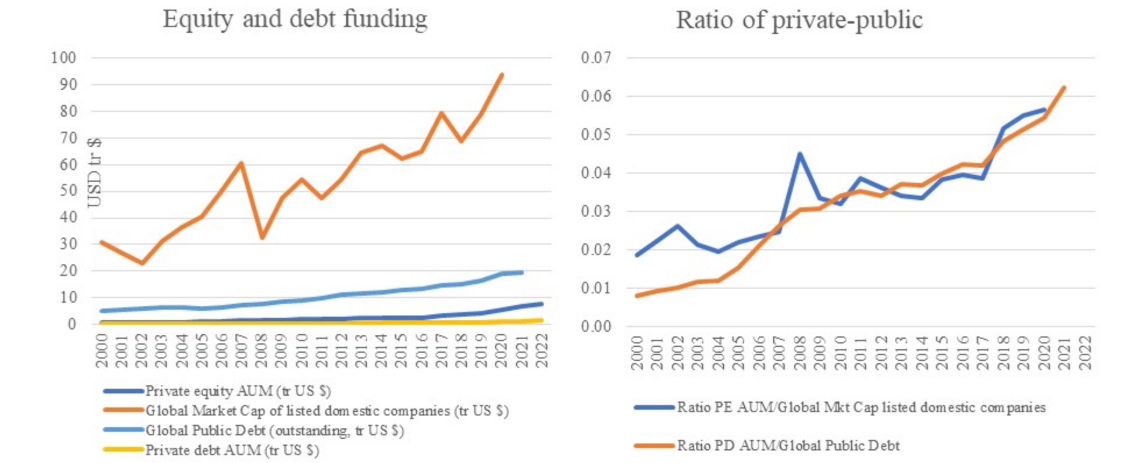
Table 1: Private equity and private credit versus other forms of finance

	Private equity and private credit	Public equity, public debt, and securitizations	Private finance when intermediated by banks
Type of instruments	Unlisted equities; loans; bonds; notes; may also include private securitizations.	Listed equities; corporate and government bonds; public securitization issues	Includes, for example, broadly syndicated loans (BSLs, also known as leveraged loans) and private securitization issues, including CLOs
Public prospectus	No, with exceptions – e.g., funds investing in private credit could have a public prospectus	Yes	No, with exceptions - e.g., funds investing in private credit could have a public prospectus
Typical investors	**Mainly arranged by private investment funds**, which typically source capital from non-bank investors. However, capital can also be provided directly. Mainly wholesale investors, although retail investors can invest in some markets.	Banks and non-bank investors - Wholesale and retail.	Banks and non-bank investors – Generally wholesale
Distribution/ intermediation	**Narrowly distributed** (bilateral, direct) – not intermediated by banks. Private funds typically arrange the finance, although direct investment by large institutions is possible.	**Broadly distributed -** Typically bank-intermediated.	**Moderately distributed -** Typically bank-intermediated.
Typical borrower	Private credit – SMEs or mid-market companies, although they have started to target larger, more established companies as well. Private equity – SMEs, mid-market companies and large businesses	Large businesses	BSL - Non-investment grade businesses on the higher end of mid-market and larger corporates. Varies for private securitization
Cost of capital and yield	**Typically, higher** - e.g., private credit typically offers a premium over syndicated loan yields and public debt	Typically lower	**Varies** - BSL yields are typically higher than for public debt, but lower than for private debt.

Time horizons	**Longer –** investors usually commit capital for a number of years. (5-10, typically, for private equity, and 5-8 years or perpetual for private credit)	Shorter	Varies
Active secondary market?	**No** –investments are typically non-tradeable Secondary market opportunities are generally limited. Lower liquidity.	**Yes -** Instruments are tradeable, and liquidity is generally higher.	**Varies** - Secondary markets are active for some segments, e.g. BSL and CLOs. Less liquid than public finance markets.
Valuations and price discovery	Infrequently updated - lagged repricing	**Frequent** - e.g., mark-to-market	**Varies** - e.g., relatively frequent for BSLs
Use of ratings	Not rated	Rated/usually rated	**Varies –** BSLs and CLOs are usually rated
Transparency (reporting and disclosure)	Low to none	High	Varies
Typical borrowing terms	More flexible, customized terms	Standardized	Standardized
Execution time for deals	Shorter	Longer	Variable

This unprecedented growth has led to private finance activities contributing a greater share of firm financing (Figure 5) and financial markets more broadly. The combined global AUM of private equity and private credit funds has grown by a factor of 15 since 2000, significantly outpacing the growth in the market capitalization of global public stock markets, which have roughly trebled over the same period.[26] However, in terms of volumes, private markets are significantly smaller than the public equity and debt markets (Figure 5). Academic and market literature cites two main factors underpinning the growth of private finance. Firstly, the period from the GFC up until 2022 was characterized by accommodative monetary policy, including prolonged low interest rates and quantitative easing. This fostered a search for yield environment, in which investors were willing to invest for longer terms and assume greater credit and illiquidity risk in exchange for higher potential returns.[27]

Figure 5. Comparing Growth in Global Markets 2000-2022



Sources: Preqin, World Bank, BIS. Notes: Data on private assets under management came from Preqin. Data on market capitalization of listed companies is only provided to 2020. Public debt series were constructed from BIS data on amounts outstanding of public debt to non-financial corporates issued in all markets in countries where data was available.

Private credit benefitted from this search for yield as investors were attracted by higher returns compared to other fixed income assets (see Box 2, "the emergence of private credit").[28] Rate floors also provided floating-rate investors with protection against falling rates. Monetary easing also led to credit growth, which supported private finance activities more broadly, given the positive relationship between the availability of credit, and buyout and merger and acquisition activity.[29]

26 Based on comparing private assets under management (AUM in private equity and private credit) and public market capitalisation (data from World Bank, WFE).

27 See, for example, BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021, Moody's (Private credit opportunity for lenders comes with opaque, systemic risks. May 2022) and CEPR.

28 BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021

29 CEPR

Secondly, the regulation of private finance funds is generally considered relatively light, for example, relative to banks.[30,31] Recalibration of business models and regulatory changes,[32] particularly since the GFC, have led banks to withdraw from certain types of lending. This has created an opportunity for private funds to step into many of these markets, particularly in lending to middle-market businesses.

The tax advantages that private finance firms can offer through their structure are also likely to have contributed to growth. For example, fund managers receive much of their income in the form of carried interest, which is taxed at capital gains rates in certain jurisdictions, rather than income tax rates which tend to be higher.

It is also notable that private finance markets navigated the COVID-19 crisis without experiencing significant losses. However, it is difficult to know the full extent of the COVID-19 market impact due to limited transparency in the private finance market as well as the extraordinary government support measures that were enacted to support market segments vulnerable to the pandemic. These measures also helped enable private finance activities to bounce back in the period that followed.[33]

Current macroeconomic context and its potential impact

Global macroeconomic conditions have changed significantly in recent years as a result of the COVID-19 pandemic and geopolitical tensions, most notably Russia's invasion of Ukraine. Interest rates and inflation have risen, while prospects for economic growth have declined. These conditions, which continue to persist, have placed private (and public) markets under increasing pressure.[34] More restrictive monetary policy is also beginning to impact the credit availability that underpinned the recent surge in private finance activities. Reports point to additional challenges posed by geopolitical and market uncertainties, dislocation in capital markets, debt market closures, and reduced investor sentiment.[35]

30 BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021

31 There are some exceptions to this, such as, for example, US registered funds are subject to comprehensive regulatory requirements under the Investment Company Act of 1940 and other rules and regulations.

32 The literature refers, for example, US leveraged lending guidelines and Basel III. See, for example, PGIM, Fitch and Moody's (Private credit opportunity for lenders comes with opaque, systemic risks. 4 May 2022)

33 See, for example, the IMF Global Financial Stability Report, which note that leveraged buyout activity boomed following policies aimed at reopening capital markets and supporting the flow of credit to households and firms.

34 For example, more than half of respondents to a survey of fund managers by AIMA, identified inflation and macroeconomic risk as the biggest challenge for their portfolios and future lending activity. A survey of 100 private equity firms by Dechert produced similar findings. AIMA (2022) Dechert (2022)

35 See, for example, Deloitte, EIF, and PwC

Box 2: The Emergence of Private Credit

Over the past decade, middle-market companies, which are typically too small to access public markets for financing, have increasingly turned to private credit funds for funding. The global private credit market grew from less than USD $60 billion in 2002 to over USD $1.3 trillion in H1 2022 (figure 4) – the approximate size of the bank leveraged loan market in the US. This growth is expected to continue, with Preqin forecasting global private credit AUM to reach USD $2.3 trillion by 2027.[36] In recent years, private credit funds have also started to target larger, more established companies (see Table 2, below).[37] This change in dynamics has been driven by several factors, including:

- Increased competition in the middle-market space: As more private credit funds have entered the market, competition for deals has increased, leading some funds to look for opportunities in larger deal sizes. Growth in the amount of capital available to private credit funds has also enabled them to pursue larger deals.
- Tailored financing solutions: Private credit funds generally have the flexibility to tailor financing arrangements to the needs of larger companies. For example, some private credit funds offer unitranche financing, which combines both senior and subordinated debt into a single instrument, allowing companies to access a larger amount of capital without having to deal with multiple lenders. In addition, private lenders may offer greater certainty of execution and speed of closing compared to public markets.
- A close relationship between direct lenders and borrowers: These funds typically hold the loans till maturity thus, if borrowers get into financial distress, they may find it relatively easier to work with direct lenders who may often have expertise in restructuring matters, e.g., to refinance their debt or reorganize the company.[38] A recent academic study finds that, in the U.K., private equity sponsored companies outperformed non-private equity sponsored companies during the COVID-19 pandemic, as their sponsors provided various managerial and operational expertise as well as access to capital.[39]

Overall, market participants generally predict that the trend towards larger deals in the private credit market is likely to continue.

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36 Preqin (2023) Global Report 2023 – Private Debt

37 AIMA ((2022) Financing the Economy

38 S&P (2021) Private Debt: A Lesser-Known Corner Of Finance Finds The Spotlight

39 Lavery and Wilson (2022) The Performance of Private Equity Portfolio Companies During the COVID-19 Pandemic

Table 2: Scale and complexity of Private Debt

	Syndicated Debt	**Private Debt**
Number of Lenders	Dozens	1-6
Deal Size USD	200 million – 5 billion	20 million - 2 billion. Middle market (> 50 million EBITDA) and lower market
Interest Charged		Higher than syndicated
Covenants	Mostly (>91%) Cov-lite	Most deals have a covenant but no more than one
Borrowers Rating	BB to B+	Mostly unrated
Secondary Market Liquidity	Possible unless stressed market conditions	Less liquid. Lenders hold debt to maturity
Leveraged lending guidelines	Typically, up to 6x EBITDA	Subject to negotiation, may be higher than leveraged lending guidelines
Speed to execution	Two months or more	30-75 days

Source: S&P Financial Services.

Challenges for portfolio companies

Changes in the macroeconomic environment directly impact portfolio companies held by private funds. For instance, many companies face increased operating costs due to inflation. Furthermore, these portfolio companies tend to be more highly leveraged than issuers in other markets,[40] and may face increased debt servicing costs at the same time as worsening economic prospects may negatively impact their revenues. Conditions could also tighten for new financings and refinancing, both in terms of cost and availability.[41]

In a rising rate environment, investors may see private credit funds as an attractive option since private credit loans are typically provided at a floating rate[42] and with a higher coupon compared to broadly syndicated debt. However, in this same environment portfolio companies will pay more for their own floating-rate debt,[43] and firms' hedging of this borrowing may be limited.[44]

Private credit portfolios are also disproportionately comprised of smaller, less established companies, although in recent years funds have targeted larger companies as well (Box 2). Small firms may be less resilient to higher inflation and interest rates, and more impacted

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40 See, for example, Haque (S) Does Private Equity Over-Lever Portfolio Companies, or Block et al (2023) A Survey of Private Debt Funds

41 For example, Reuters report that the cost of a $1 billion loan from a private equity firm for a non-investment grade company now averages an interest rate of up to 12%, versus 7.5% in 2021.

42 Preqin (2023) Global Report 2023 – Private Debt

43 See, for example, AIMA and Fitch

44 See, for example, Fitch Ratings

by the decline in fiscal support as economies have emerged from the pandemic.[45] There are some signs of small firm bankruptcies starting to increase,[46] as well as of portfolio write downs, although roundtable participants noted that this would also be true for public markets.[47]

These factors could lead to higher risks of default, which may also be observed through the restructuring of deals rather than corporate insolvencies. Roundtable participants noted that this risk would increase significantly if the environment of higher interest rates persists beyond 2024. According to some industry observers, there is a growing imbalance between the protection provided to investors by floating rate loans and the impact of higher rates on borrowers' ability to repay them.[48] Still, private credit lenders may have expertise in restructuring loans in troubled times, thus helping their portfolio companies avoid defaults and bankruptcies.

A lack of transparency in this sector makes it difficult for investors and regulators to assess such risks. Private finance investments are generally valued by the managers themselves (and are typically validated by independent valuation agents and audited by external parties), at regular intervals (typically quarterly), based on internal models, and adjust more slowly than in public markets. Furthermore, flexibility in loan terms, and the ability to restructure deals, may delay the impact of rising borrowing costs and postpone or prevent insolvencies.

This could be positive, as it would allow more time for firms to respond to macroeconomic changes, yet it could also prolong issues and exacerbate their impact (see also, "Stale valuations").

Challenges for fund managers

Growth in private equity markets slowed in 2022, compared to the prior year, and is expected to slow further in 2023.[49] For example, private equity fundraising fell by 13% last year, and is predicted to fall by 2.7% this year.[50] Private credit fundraising also fell, by 8%. Furthermore, in the same period, new private equity and credit fund launches fell by 33% (21%). Private equity deal volumes were also lower with global buyout value and deal counts, for example, falling by 22% and 17% respectively. Private credit deal volumes fell substantially (39%) but aggregate deal value only decreased by 18%, due to an increase in the average deal size.[51]

Historically high returns

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45 IMF, Moody's (Growing leveraged finance liquidity risks are harbinger for private credit. 16 May 2022)

46 See, for example, IMF

47 See, for example, EIF/Invest Europe and Bain (2023) Global Private Equity Report 2023.

48 AIMA (2022) Financing the Economy

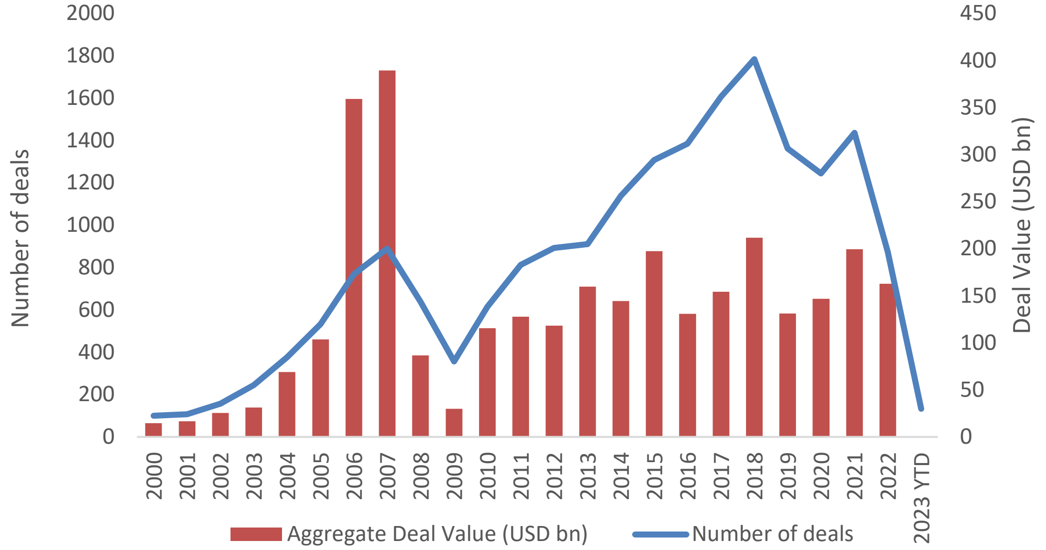
49 Preqin Ltd (2023) Global Report 2023 –Private Equity and Preqin Ltd (2023) Charts and league tables, accessed May 2023, see also Bain, Global Private Equity Report 2023

50 Preqin Ltd (2023) Global Report 2023 –Private Equity and Preqin Ltd (2023) Charts and league tables, accessed May 2023

51 Preqin Ltd (2023) Charts and league tables, accessed May 2023

Private markets have historically achieved greater returns, on average. According to recent Pitchbook data, aggregated public benchmark performance generated cumulative 18.8% return between Q1 2020 and September 2022, compared with an 84.0% Net Asset Value (NAV) increase in private equity over the same period. Likewise, one recent study by the asset manager Cliffwater found that over the 22-year period ending June 30, 2022, net-of-fee returns of state pensions' private equity allocations were 11.4% on an annualized basis, compared with the 5.8% annualized return for public stocks.[52] Investors may be expecting similar returns in the future, with managers finding it more difficult to match or exceed them in times of worsening economic conditions.

Figure 6. Private credit deals 2000-2022



Source: Preqin Ltd (2023) Charts and league tables (accessed May 2023)

Lower allocations to private finance, and more selectivity by investors

In the same way as lower interest rates drove a search-for-yield environment in the years leading up to 2022, higher interest rates would be expected to impact investor risk appetite and could reduce the relative attractiveness of private finance markets. Constraints on the availability of capital will likely be a key challenge, and some industry stakeholders have indicated that portfolio companies of both private equity and private credit funds may face refinancing risk, especially if the high-rate environment persists beyond 2024 (see "lending standards and loan terms", below).[53]

There is also some evidence of fund investors becoming more selective in their allocation to private finance strategies.[54] Indeed, Preqin data for the first three quarters of 2022 shows a substantial decline in the number of funds that closed (137 up to Q3 2022, versus 273 for

[52] See Cliffwater report, February 28, 2023

[53] See, for example Pitchbook (2023)

[54] See, for example, Bain (2023) Global Private Equity Report 2023

all 2021), with larger commitments going to fewer managers, and the top 10 funds accounting for a larger proportion of aggregate capital raised (50% versus 36% in 2021).[55]

Increased selectivity may also manifest itself in other ways. For example, bargaining power may shift from private finance firms to investors in terms of fees and the sharing of rents.[56] Investors may also seek more transparency of fees and performance, or more control over the direction of portfolio companies.[57] Finally, there may be industry consolidation, potentially affecting competition.

Changing strategies

The exit environment is increasingly challenging. The aggregate value of global exits decreased by 32% in 2022 compared with 2021 (figure 7), and the value of private equity-backed IPOs decreased by more than 68%, following steep declines in public markets.[58] This may lengthen investment holding periods, particularly if IPO market illiquidity persists.[59] New exit routes may be used, with predictions, for example, of increased deal flow in the secondaries market.[60, 61] Funds may also look to raise finance in other ways, such as through NAV financing[62] and offering their products to retail investors.[63] Finally, there may be more focus on adding value to portfolio companies through operational and strategic improvements, rather than generating returns through rising valuations or high leverage.[64]

Procyclicality

Views differ on whether private markets are procyclical or magnify the fluctuations in an economic cycle. Some market participants contend that private credit tends to remain "open" and supports resilience through providing diversification in sources of funding, while traditional sources of finance tend to retrench during times of stress. Some industry

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55 2023 Preqin Global Private Debt Report 2023

56 See, for example, CEPR and CEPR2

57 See, for example, Dechert's 2022 Global Private Equity Outlook, where 47% of respondents indicated that LPs are expressing a desire for greater control over the direction of portfolio companies.

58 S&P (2023) Private equity exits plummet in 2022 | S&P Global Market Intelligence (spglobal.com)

59 See, for example, Bain (2023) Global Private Equity Report 2023 and EIF's Venture Capital Survey 2022.

60 Secondary funds, commonly referred to as secondaries or continuation transactions, purchase existing interests or assets from primary private fund investors. For example, a primary private equity fund may purchase a stake in a private company, and then sell that interest to a secondary buyer.

61 For example, Preqin's November investor survey revealed that over half (52%) of respondents view use of private secondaries as presenting the best opportunities over the next 12 months.

62 See, for example, Deloitte and Bloomberg

63 For example, Dechert's 2023 Global Private Equity Outlook reports that 37% of surveyed senior PE executives believe that retail access to PE vehicles will expand.

64 See, for example, The Economist and Bain (2023) Global Private Equity Report 2023

commentators also point to the long horizons of private market investors, which can mean that borrowers are less impacted by short-term market volatility.[65]

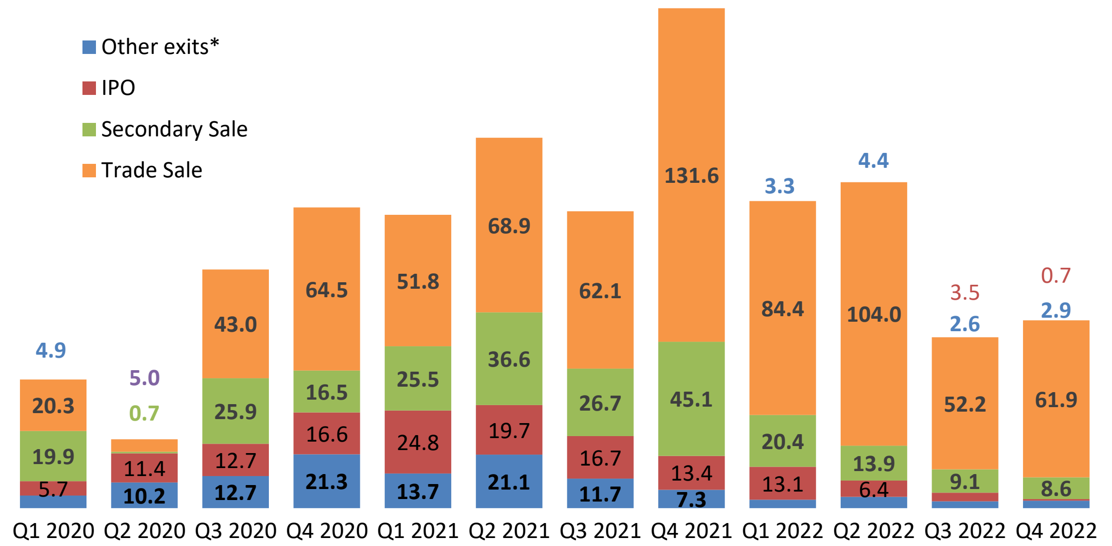
On the other hand, the Bank for International Settlements (BIS) concludes that private markets "appear every bit as procyclical as public markets", with BIS quantitative research finding that capital deployment in private equity and private credit is positively correlated with stock market returns.[66] This relationship is similar to the procyclicality of leveraged loans and equity capital raising and could be linked to the lower risk premia that accompanies periods of high stock returns. The leverage involved in private equity may also contribute to procyclicality, with fund managers able to support more debt when their net asset value rises.

Private markets' performance during past downturns.

There is some research to suggest that private equity investors who did not retreat and continued allocating capital during times of stress fared well during market turbulence in the last two decades. Indeed, private equity generated some of its best performance results during the dot-com crash of 2001 and the 2008-2009 GFC.[67] These results coincide with others showing that during the dot-com crash and GFC, private equity recorded less severe hits on the investment multiple compared to public equity indices.[68]

Figure 7. Private equity-backed exits by type, 2020- 2022

Aggregate exit value *(USD Billion)*



Source: S&P (2023); Data compiled Jan. 4, 2023. *Includes bankruptcy or write-off, private placement or follow on, sale to management, and unspecified exits.

In addition, there is some evidence to show that private equity-backed companies operating during the GFC increased capital expenditure compared with peers without this backing.

65 For example, Moody's (Growing leveraged finance liquidity risks are harbinger for private credit. May 2022).

66 BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021

67 Pitch book (2023) Q2 2020 Private Market Playbook

68 Bernstein, Lerner and Mezzanotti, (2017) Private Equity and Financial Fragility during the Crisis

As a result, those companies were able to increase market share and experience higher asset growth during the crisis. A Stanford University and The Kellogg School of Management study indicated that the positive investment effects of private equity were particularly large in companies which would have been otherwise more likely to be financially constrained at the time of the crisis. The study, which included analysis of almost 500 private equity-backed companies in the UK during the GFC, found that these firms recovered faster from the crisis and captured more market share relative to comparable non-private equity-backed competitors.

These studies suggest that private equity backed companies are more resilient to market falls. Private equity fund managers are also not compelled to sell illiquid assets to satisfy redemption requests from exiting investors. Yet limited partners may have pressure to re-balance their portfolios by reducing exposures in alternative assets. Therefore, an abrupt correction in public markets may slow the inflow of funds to private markets, impairing the capital available for small and medium-sized companies.

Chapter 1: An Opaque Market

Private funds have considerably fewer reporting obligations to the public than, for example, publicly listed or registered funds.[69,70]However, many jurisdictions collect detailed recurrent data at the fund and portfolio levels, including on private finance activities, even if that data is only reported to regulators. Still, certain parts of the private finance markets, such as information on portfolio companies, may remain opaque. Furthermore, unlike investments in the portfolios of public counterparts, private finance investments are generally not rated by credit rating agencies, and valuations are generally periodic though infrequent (e.g., quarterly).

Transparency is not costless. The costs associated with public market reporting and disclosures, along with other compliance issues, are cited as one of the drivers of growth in private finance activities. In contrast, while compliance costs in private markets are considerably lower, investors are more reliant on specialist intermediaries such as private equity and private credit firms to conduct more bespoke and costly due diligence on their behalf.[71] On one hand, while this opacity provides investors with some insulation from the transparency costs faced in public markets, it also jeopardizes availability of information for investors and regulators to use in effectively assessing risks. This includes risks that could arise due to the way in which private finance firms conduct their activities (for example valuations, conflicts of interest), from their interconnections with the wider financial system, and from how macro-financial developments could impact the sector, portfolio companies, and the real economy (see Chapter 4 on risk transmission to public markets).

69 See for example, Table 1

70 It should be noted that the US SEC recently adopted new rules and rule amendments to enhance the regulation of private fund advisers (see https://www.sec.gov/news/press-release/2023-155)

71 Phalippou, L. (2020) An Inconvenient Fact: Private Equity Returns & The Billionaire Factory

Opaque Valuations

Fund valuations have the potential to be a key contributor to risks in private finance activities. In recent years, valuation gaps between public and private assets have arisen.[72] There may be several explanations for this gap:

- Private assets may have a higher value than public assets due to some characteristic that is correlated with the private finance business model.
- Private valuations are inevitably stale. For example, where listed equities can be valued by investors many times a minute, private funds may value their assets as infrequently as quarterly, or even annually, and do not have active secondary markets. This may lead to a gap where there is a large change in valuations in public markets in the period between valuations.
- While private fund managers often follow third-party guidelines around valuation principles, there is a greater level of uncertainty regarding valuations – see below.

Stale valuations

Valuation of private market assets, which tend to be periodically, though infrequently, repriced, moves at a different pace compared to the typical daily price movements in public investments. Though the pace may be indicative of the general "buy to hold" nature of private finance investments, the difference in valuation timing can result in a staleness in valuations. There is usually a 2 or 3 quarter lag between a decline in public market valuations and the impact becoming fully evident in private markets. For example, during the GFC in 2008, while the S&P 500 declined 30% between the first and third quarter, new private capital continued to be invested during this period. Similarly, as the listed stock market valuations began to recover in the third quarter of 2009, private capital invested remained depressed for two more quarters.[73]

Staleness of valuations has dual effects. Over the past decade, buyout funds have exited assets at valuations exceeding their last quarterly mark nearly 70% of the time.[74] The Bain report in which this figure was published cites this as evidence that private equity firms may undervalue their assets. However, this may also be a function of timing, since when markets are rising on average, valuations that are stale tend to be low.

By contrast, when public markets are down materially, as in 2022, this could raise questions about private capital overvaluations.[75] In extreme cases, this could lead investors to seek to exit the fund before it is revalued downwards (a "first mover advantage"), although in practice this risk is mitigated by the fact that private funds are, typically, closed-end and do not allow redemptions by investors during the fund's lifespan.

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72 Pitchbook (2023) Q1 2023 PitchBook Analyst Note: How Macro Risks Are Shaping the Outlook for US Private Markets | PitchBook

73 How the Current Public Equity Downturn Could Work Its Way Through Private Markets Lessons From the 2000 Dotcom Debacle and the 2008 Global Financial Crisis. Dushyan Shahrawat, Udayveer Singh Chawla, Vikas Shah

74 Bain (2023) Global Private Equity Report 2023

75 Institutional Investor and SP Global

Valuation methodology

In preparing financial statements, private fund managers are generally required to follow accounting principles found in the US Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRSs) (collectively, "applicable accounting standards") in valuing fund investments. Determining which to apply (i.e., US GAAP or IFRS) depends on a variety of factors, including the user of the financial statements.

For investments that lack an observable market, the applicable accounting standards do not require any single valuation technique to be applied. Instead, they discuss several broad valuation approaches and specify principles that must be followed when measuring fund investments at fair value in accordance with these standards.[76] However, the fair value of investments that lack an observable market generally have a greater level of uncertainty than those that have an observable market. For example, analysts have reported that, in the US, the sheer size of the valuation gap between public and private assets has primarily been caused "by extreme markups in private valuations that have little chance of ever being fully realized."[77]

Vulnerabilities from valuation practices

Valuations of private finance investments are subjective because of their illiquid nature and lack of secondary market, with many managers designating such investments as "buy and hold." Managers may be incentivized to maintain their (higher) valuations on private finance investments despite falling prices in public markets or use improper valuation methodologies to achieve such a goal.

Stale or inaccurate valuations could negatively impact market integrity and, in some cases, may cause or exacerbate investor losses. By definition, stale valuations may impede price discovery and can lead to inefficient capital allocation. This could have direct implications for institutional investors that are obliged to maintain certain allocations to private and public markets. In particular, inflated valuations would result in investors becoming overexposed to private finance activities.

Uncertainty around valuation accuracy could also become a trigger for a broader loss of confidence. Risks arising from valuation uncertainty can be exacerbated by a general lack of transparency since, in the absence of objective and readily available data, there is an increased likelihood that new information could come as a shock to some market participants. A negative valuation shock could lead to discounted sales on secondary markets or, where available, attempted withdrawals from the fund, particularly where investors believe that the real value of assets may be lower than the book value.

Valuation concerns and associated conflicts of interest (see Conflict of interest, below) could also be unearthed under a scenario where portfolio companies and their sponsors

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[76] For example, when applying a given valuation technique, the applicable accounting standards require entities to maximize the use of observable inputs and minimize the use of unobservable inputs. For US GAAP, see 820-10-35-24 (ASC Topic 820, Fair Value Measurement). For IFRS, see IFRS 13 para 67 (IFRS 13, Fair Value Measurement).

[77] Preqin (2023) Q1 2023 PitchBook Analyst Note: How Macro Risks Are Shaping the Outlook for US Private Markets

return more prominently to raising capital through the public equity markets (e.g., through IPOs or SPACs).

Conflicts of interest

Conflicts of interest often arise in relation to private finance activities, and investors and other interested parties may not be fully informed about the ways and extent to which these conflicts are managed. Conflicts may arise at several points throughout the lifecycle of a private equity or private credit fund, and at different levels of the fund structure. They can occur at the fund level (e.g., pressure to deploy capital), between different types of investors (e.g., private equity and private credit funds investing in the same portfolio company, or between buyers and sellers in continuation vehicles), and for individuals in the firm. The following summary describes selected conflicts of interest faced by private finance managers.

Fees and Fee Structure

Typically, fund managers charge an annual management fee of 1% to 2% of committed capital (though in some funds the fee is charged on invested capital), which is used to cover the fund's operating expenses.[78,79] This fee is charged regardless of performance and can represent a significant source of revenue for the firm. Managers may have less incentive to generate strong returns if they can earn a substantial fee simply by maintaining the fund. However, in such cases the manager may be less incentivized to rely solely on management fees for their economic compensation, as they would be foregoing a lucrative performance fee (described below).

Another potential conflict arises from the carried interest or performance fee that private finance managers receive when the fund generates certain returns. Typically, managers receive a percentage of the fund's profits above a certain threshold, such as an 8% hurdle rate. This fee is intended to align the manager’s interests with those of the investors, as the manager only receives a fee if the fund generates strong returns. However, investors could be concerned that the manager has an incentive to take excessive risks or pursue short-term gains in order to generate a performance fee, rather than focusing on long-term value creation[80](though such risks are somewhat mitigated by “clawback” provisions). Further to this, performance is often measured using internal rate of return (IRR), which some research shows may be subject to manipulation, such as through use of subscription credit facilities. In one survey, 30% of private equity executives said that the greatest advantage of subscription credit facilities or net asset value financing was that it boosted IRR by allowing funds to call capital at later dates.[81]

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78 Private credit management fees are traditionally 1%. Block et al (2023) A Survey of Private Debt Funds

79 The “2 & 20” structure or 2% management fee and 20% performance fee is common in private equity. See, for example, Fried (2017) Only One Type of Private-Equity Fund of Funds Earns Its Fees

80 The-Alignment-of-Interests-between-the-General-and-the-Limited-Partner-in-a-Private-Equity-Fund__Full-Article-1.pdf (harvard.edu)

81 Dechert (2023) 2023 Global Private Equity Outlook

The mix of management fees, performance fees, hurdle rates and clawback provisions are intended to balance the economic incentives a manager may have in managing their fund, although their effectiveness can be debated.

There can also be conflicts of interest related to transaction fees and expenses, as managers, particularly in private equity, may receive fees from portfolio companies for services such as financing or consulting. The manager could prioritize its own interests over those of the fund and its investors when negotiating these fees and/or providing such services.

Competing funds and investments

Many private credit funds are sponsored by private equity firms[82] and invest in private equity sponsored deals.[83] Conflicts are likely to arise when the private credit fund of a firm finances a portfolio company of the same firm's private equity fund, or where the portfolio company is otherwise related to the firm. This conflict may become more acute in times of stress, where the equity and debt holders have competing interests while seeking to protect their investments. Some industry stakeholders have indicated that conflict of the equity investors' interests with the debt investors' interests would be avoided, and generally covered by internal policies that stipulate that fund-sponsoring firms should not favor one set of investors over another. In some cases, regulations place restrictions on transactions (e.g., in the U.S., the Investment Company Act of 1940 places restrictions on affiliated transactions involving registered funds).

Some industry stakeholders highlighted that these practices may occur with some funds when investing in middle-market companies (partly driven by investors' demands) or in companies that are in distress. In the latter case, conflicts of interests are more relevant if both equity and debt holders contest the assets. Moreover, a firm that is both a private debt and private equity investor may, for example, use its voting rights (e.g., in a default situation) as a debt holder to support its equity position, to the detriment of other debt investors (though fiduciary obligations may mitigate this risk). Nonetheless, it is difficult to identify where these investments occur and how often related conflicts materialize.

Preferential treatment of some investors

Private funds, including private equity and private credit funds, may negotiate individual terms with select investors such as fees, preferential redemption rights, portfolio reporting, and excuse rights from funding certain types of investments, among others. These are often granted through side letters, which may not be visible to other investors.

Some jurisdictions are proposing to mandate disclosing such preferential treatments to prospective and existing investors. Private funds may prefer to avoid making such bilaterally negotiated terms known to other investors as they could in turn demand similar rights.

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82 In a recent survey by Block of 38 U.S. and 153 European private credit firms found that 25% of the U.S. and 40% of the European respondents are affiliated with a private equity firm. Block et al (2023) A Survey of Private Debt Funds

83 Block survey also found that 78% of U.S. and 42% of European private credit funds invest significantly greater fraction of capital in PE-sponsored deals. Block et al (2023) A Survey of Private Debt Funds

Continuation funds

Conflicts can also arise between the interests of existing and new investors in continuation funds, due to ambiguity about valuations. In a continuation fund, the private equity fund will raise new capital from investors to purchase the remaining portfolio companies from the original fund. The valuation of the portfolio companies is an important step in the process of creating a continuation fund, as it is used to determine the amount of capital that will be needed to purchase the remaining investments from the original fund.

This process can result in conflicts of interests, as the private equity firm and investors in the original fund may have differing opinions on the value of the remaining investments, and there may be disagreements about the price at which the investments should be sold to the continuation fund.

There could also be a misalignment of interests between the private equity firm and the fund's investors in the creation of a continuation fund. There is no standard methodology for valuing private equity investments (see “Valuation”, above), which can lead to inconsistencies in the reported valuations of different firms. While price discovery is a concern in continuation funds, there are certain ways in which these conflicts may be mitigated, including through use of a third party such as a valuation agent or an unaffiliated investor, or via auction. As noted above (“changing strategies”), the current challenging exit environment may contribute to increasing use of continuation funds.

Investment opportunities

Dry powder refers to the amount that has been committed to the fund by the investors but has not yet been called. As the fund manager identifies investment opportunities, it issues a capital call to investors, after which investors have a short period (e.g., two weeks) to transfer funds to the manager.

Dry powder can provide liquidity to the market and be a stabilizing factor,[84] but it can also incentivize managers to deploy capital inefficiently if under pressure to invest. This pressure could increase private debt financing of riskier deals. Similarly, pressure to deploy capital could result in private equity funds overpaying for firms.[85]

The availability of dry powder could also have an impact on loan terms. On one hand, the potential speed and certainty of access to financing could lead borrowers to accept stricter covenants[86] but, on the other hand, pressure to deploy could lead to looser covenants in private credit deals (see below).[87]

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84 Bloomberg and Financial Times

85 Relatedly, banks financing private equity buyouts in the broadly syndicated loan market could struggle to offload the debt and bonds financing the buyouts due to changing market conditions; see, for instance, Financial Times

86 Guilford and Unmack (2022) Private credit’s main threat is itself, Reuters, July 8 2022

87 Brooke (2019) Lack of, or looser, covenants could prove costly for funds and their investors Reuters

Vulnerabilities from conflicts of interest

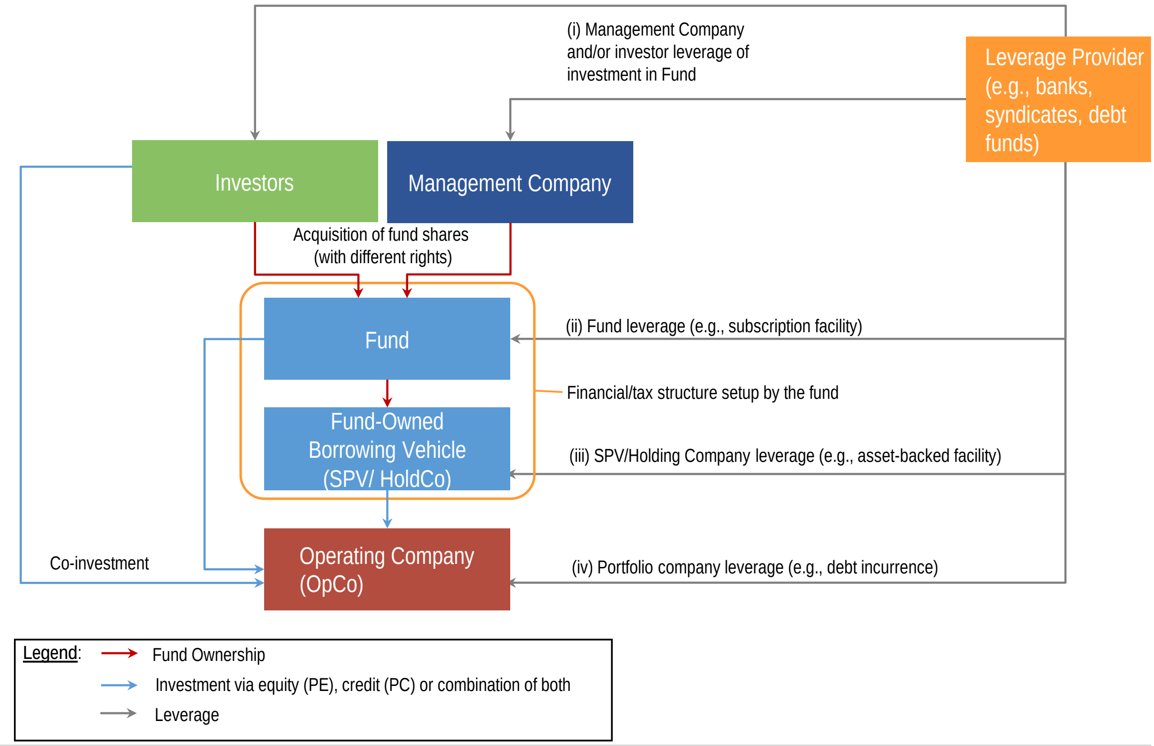
Conflicts of interest could incentivize market participants to make decisions that erode trust in the market or lead to an inefficient allocation of capital. Such conflicts can also exacerbate other potential risks in private markets.

For example, in many jurisdictions, regulators have limited visibility into portfolio company leverage. In the absence of conflicts of interest, this may not be of great concern, since private equity fund managers should, in theory, choose a level of leverage that balances the benefits of leverage against the cost of credit and the increased default risk, resulting in an optimal outcome for fund managers and investors. Any departures from this balance would be incidental. By contrast, where conflicts of interest incentivize fund managers to choose risky levels of leverage, the lack of transparency could become a significant concern for investors and for the market. Investors, for their part, could choose a portfolio that is riskier than intended. Industry stakeholders suggest that firms typically have mechanisms in place to manage conflicts, but this may not always be the case, or such mechanisms may not be sufficient and/or tested.

Chapter 2: The use of leverage in private finance

Leverage is an inherent part of private financing activity. Both private equity and private credit rely on the use of leverage, primarily at the level of the portfolio company, but also in particular at that of the fund (Figure 8). LBOs, in particular (and as the name suggests), induce significant debt exposures.[88]

Figure 8: Private equity and credit financing and leverage sources



Source: IOSCO

Portfolio company leverage

Target companies are generally prompted by private equity fund managers to go into more debt.[89] In particular, portfolio company leverage is typically significantly greater after a leveraged buyout and continues to be greater even five years after the event (figure 9, below).[90] There are a range of views as to why this is the case.

One explanation, according to sponsors and academics, is that the optimal level of debt increases after a buyout, since private equity management aligns the incentives of portfolio company managers and of their shareholders. This is said to lead to more efficient firm organisation, and limits costs and raises firm value (not only shareholder value).[91]

88 Arguably, venture capital is fundamentally less prone to leverage its returns, also due to the cost of related debt. This point remains to be assessed on a more factual basis.

89 Axelson, U., P. Strömberg, M. Weisbach (2009) Why Are Buyouts Levered? The Financial Structure of Private Equity Funds,

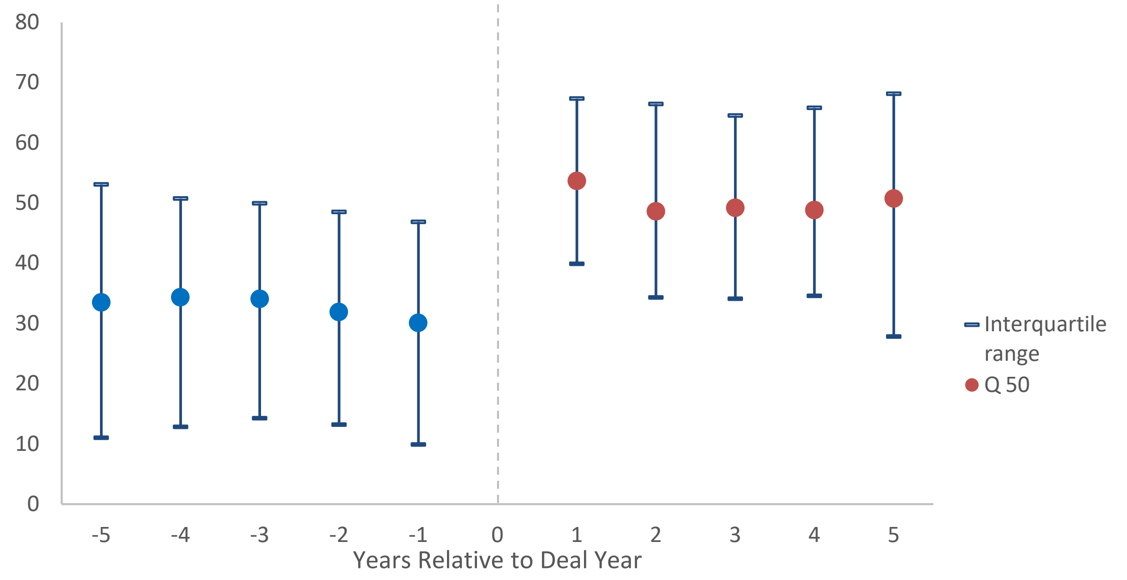
90 Haque, S (2022) Does Private Equity Over-Lever Portfolio Companies?

91 Guo S., E. Hotchkiss, W. Song, 2009

In addition, some stakeholders and academics have reported greater incentives for flexible solutions in the event that firms need to restructure.[92] More generally, it is assumed that the risk from higher leverage is matched by a rise in efficiency and returns – in other words the argument is based on a risk-return trade-off.[93]

However, some academics have argued that buyout leverage is not primarily determined by firm-specific factors, but rather the market-wide condition of the credit markets at the time of the buyout.[94] This implies that any risk-return trade-off is also not firm-specific and may therefore be higher than optimal for some firms. Other academics have noted that the risk-return trade-off may not fully incorporate the wider cost of firm failure, especially in cases of private equity ownership, since fund managers capture much of the gains associated with leverage, but do not bear the full costs of bankruptcy.[95]

Figure 9: Leverage Ratio in Companies before and after PE Investment



Notes: This chart plots Leverage Ratio (Net Debt/Asset) of a large sample of portfolio companies each year since PE-takeover. Source: Bureau Van Djik and Haque, S (2022) Does Private Equity Over-Lever Portfolio Companies?

It is difficult to establish the relationship between portfolio company leverage and fund performance using empirical analysis, and commonly used metrics have been criticised as overly simplistic.[96] Generalizations are particularly problematic since leverage has multiple uses. For example, leverage is often used for external growth (M&A) deals, where private equity ownership is commonly thought to add value in handling.[97] By contrast,

92 Jensen M., 1989 Eclipse of the Public Corporation

93 Jensen M., 1989 Eclipse of the Public Corporation

94 Axelson, Borrow Cheap, Buy High? The Determinants of Leverage and Pricing in Buyouts

95 See, for example, Magnussen S. The Public Cost of Private Equity (tamu.edu)

96 See, for example, KPMG; 2016 Evaluating private equity's performance (kpmg.com) on the limits of the value bridge framework's capacity to assess the contribution of leverage to firm value creation.

97 See, for example, Kaplan and Stromberg Leveraged Buyouts and Private Equity - American Economic Association (aeaweb.org)

portfolio company debt often finances dividend recapitalization, whereby portfolio companies take on additional debt in order to pay special dividends to private equity fund shareholders. In such cases the benefits of the leverage to the portfolio firm are less clear.[98]

Regulators have limited visibility of portfolio fund leverage

There is only limited administrative data on the extent of portfolio company leverage. Banks may have visibility over portfolio company leverage, but supervisory evidence on portfolio company leverage varies by jurisdiction. For example, in the US, SEC reporting (Form PF) requires large private equity fund advisors to report on a range of indicators on the indebtedness of their controlled portfolio companies' (CPCs).[99] In Europe, by contrast, the Alternative Investments Fund Managers Directive (AIFMD) framework specifically excludes reporting on leverage at the level of a portfolio company.[100]

Available evidence suggests that there has been a meaningful rise in leverage ratios, especially for leveraged buyouts (Figure 10, below). S&P Global Ratings reports that the median corporate debt ratio rose continuously between 2003 to 2021. Ratios increased in the US from 4 to 6 times, and in the EU the increase was from 4 to 7 times debt to equity.[101]

Leverage at the fund level

While some fund-level leverage is relatively common, leverage ratios are generally relatively low and exposures at the fund level are subject to US, the UK and the EU reporting rules.

However, fund-level leverage is generally not borne directly by the fund but by a holding company or special purpose vehicle (SPV) (figure 8, above), via which the fund invests into portfolio companies. Such vehicles are often set up to take advantage of offshore tax benefits.[102]

For private equity funds, in principle, the debt of such vehicles is secured by portfolio company asset collateral so that net fund debt does not exceed the value of their assets, since investors are not liable to fund debts in excess of their investment amount. In Europe, this characteristic enables the debt to be excluded from European reporting requirements under AIFMD rules.[103] Such debt is also exempt from reporting requirements in the U.S. As a result, it remains challenging for regulators and most market participants to assess the risks associated with fund-level leverage.

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98 The New York Times Private Equity Firms Are Piling On Debt to Pay Dividends; Dividend recaps, (…) long condemned for loading up companies with debt (…), has surged. 19 Feb. 2021.

99 Form PF requires disclosure of a fund's CPCs' weighted average debt-to-equity ratio, highest and lowest debt-to-equity ratio of any CPC and the type and amount of CPC borrowings (e.g., current or long-term), among other disclosure requirements.

100 AIFMD Recital 78

101 S&P Global Ratings

102 Vehicles incorporated in offshore jurisdictions (e.g., Cayman or Virgin Islands) are typically not subject to any direct income tax on their income, nor any withholding or similar income tax on distributions to their investors. However, this does not normally apply to taxes on their investment activities in other (e.g., onshore) jurisdictions.

103 AIFMD Delegated regulation 231/2013, Art. 6 3

Other sources of leverage have also been increasingly relied upon by private equity funds. This includes newer forms of borrowing, such as NAV financing and collateralised fund obligations (CFOs) (See Box 3). Innovation in areas such as these may lead to new risks arising in respect of borrowing/leverage, including where transparency is lacking. More typically, a rising reliance on subscription bridge financing and credit lines (SCLs)[104] has been noted (see conflicts of interest, above). SCLs consist of short-term debt (e.g., up to three years) and are generally used as a cash flow management tool, typically to smooth and make LP capital calls more predictable. The scope of the use of such credit sources has however been questioned, particularly due to the ability for fund managers to use them to enhance fund performance (i.e., IRR) metrics.[105]

SCLs may affect fund performance. Private equity firms commonly use the internal rate of return (IRR) as a measure of performance which can be increased by bringing forward the timing of distributions or delaying capital calls, thus shortening the investor's holding period for the applicable investment.[106] This can affect manager decision-making and can be a source of conflict of interests, since fees are often paid based on performance and strong "on paper" performance may support fundraising. On balance, however, BlackRock has found the impact on IRR to be modest, and SCLs are more useful in simplifying fund operations than boosting performance.[107]

Fund level leverage is also relatively common in credit funds.[108] A 2021 survey of investors for 119 European and 38 US firms, with AUM dedicated to private debt of at least €180 billion and $136 billion respectively, found that 95% of US funds and 33% of European funds used some leverage.[109]

Vulnerabilities from leverage

Leverage is an inherent characteristic of private markets, and although unlikely to be concentrated in any one entity, multiple layers of leverage could pose risks. For instance, portfolio companies of private equity funds are highly levered, on average. Similarly, credit funds may lend to borrowers that incur higher levels of leverage than a bank would generally finance. In the current inflationary environment, highly levered portfolio companies would expect to see increased costs and may also see decreased output in the event of a broader downturn.

In addition, several leverage sources may impact cumulatively along financing chains. For example, deleveraging of a portfolio company could impact on the ability of its holding fund to refinance its own debt (if it was leveraged), and, further, on GPs and fund managers

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104 See e.g. BlackRock, Understanding the impact of subscription lines on private equity funds.

105 Braun R., J. Cornel, P. Schillinger (2019) stress their distorting effects, namely their "*potential to increase time-sensitive return measures substantially*" and thereby to alter also fund rankings.

106 See, for example, Internal rate of return: A cautionary tale | McKinsey and How do private equity funds measure performance? - Financial Advisers - Schroders

107 See e.g. BlackRock, Understanding the impact of subscription lines on private equity funds.

108 AIMA (2022) Financing the Economy

109 Block et al (2023) A Survey of Private Debt Funds

that would have gone into debt to finance their own investments in the fund. Accordingly, leverage sources should be considered from a network/system-wide perspective.

Box 3: Collateralized Fund Obligations[110]

Collateralised Fund Obligations (CFOs) are a re-emerging securitization strategy that allows private equity funds to free up cash flows and access a wider investor base by creating an alternative channel for secondary sales. They can be composed of a variety of private assets and allow a fund to re-allocate or re-balance its holdings. CFOs offer more favorable pricing and the ability to tranche a senior, mezzanine, and equity piece, which allows the sponsor to bring in a wider swath of interested investors with different investment goals.

CFOs provide a way for institutional investors to gain exposure to private financial assets in a structured and capital-efficient rated format. For insurers and pension funds, CFOs can lower the carrying costs or tax implications by converting equity positions to debt holdings. In a PE fund securitization:

- The transaction sponsor transfers LP interests in private equity funds into a special purpose vehicle (SPV)
- The SPV then issues tranches of debt and equity that are sold to various investors, typically including a portion retained by the sponsor.
- Proceeds of the sale are used to pay the sponsor for the initial transfer of LP interests.
- Cash distributions from the underlying funds over time are used to pay for capital calls from the funds, the expenses of the SPV, interest and principal of the notes, with the remainder going to the equity.

CFOs may build upon existing leverage at the fund and portfolio company levels, where funds may be borrowing against investor's commitments, and lenders' claims on fund assets could interrupt cash flows to bondholders. Due to their opaque structure and low transparency on their asset base, CFOs may amplify risks of private finance to a wider asset base.

CFOs are likely to be an area of continued innovation and variety—with structures as variegated as the assets underlying the transactions—and demand driven by sophisticated, regulated investors. These features, while generally designed to manage risk, may come at the cost of transparency.

110 Dechert (2022) *Collateralized Fund Obligations (CFOs): The Technicolor Dreamcoat of Fund Finance*; Wiggins (2022) "Collateralised fund obligations: how private equity securitised itself", *Financial Times* (25 November 2022); and, Fitch Ratings (2019) *PE CFOs: Securitizing Private Equity Fund Interests*,.

Chapter 3: Threats to Market Integrity

Potential issues in the private credit market

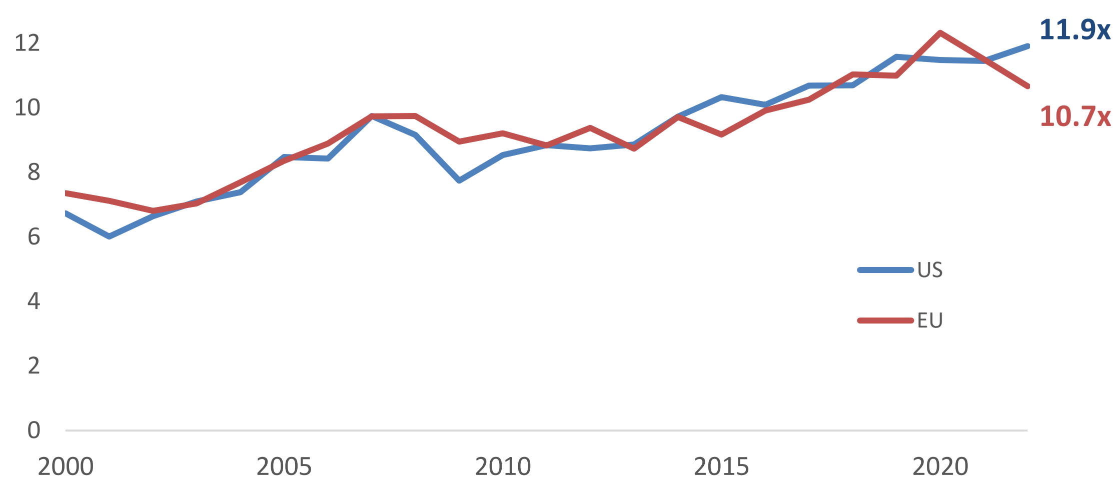
For firms that face liquidity needs and are otherwise unable to access the public capital markets, private credit has a reputation as "bear market capital" available during periods of market stress, albeit at a price.

More generally, industry practitioners state that private credit provides financing in key growth areas, particularly where or to whom banks are unwilling or unable to provide credit.[111] Increasingly, larger private credit fund sizes and new loan structures are enabling lending that was not feasible in the past (see Box 2).[112] In these ways, private credit is growing and in many ways filling a gap left as banks tighten credit.

Lending standards and loan terms

Roundtable participants argued that deal multiples – which increased significantly during the period of expansionary monetary policy and are beginning to decrease – reflected value for money, and therefore could be an appropriate proxy for lending standards in debt-financed deal (figure 10).

Figure 10: Average EBITDA purchase price multiple for leveraged buyout transactions



Source: Bain (2023) Global Private Equity Report 2023

The vast majority of leveraged loans issued in recent years are classified as covenant-lite, meaning that they contain fewer restrictions on the borrower and fewer protections for the lender. The share of covenant-lite loans in the institutional loan market reached 91% in October 2021. For loans backing leveraged buyouts, this figure was even greater (figure 11).

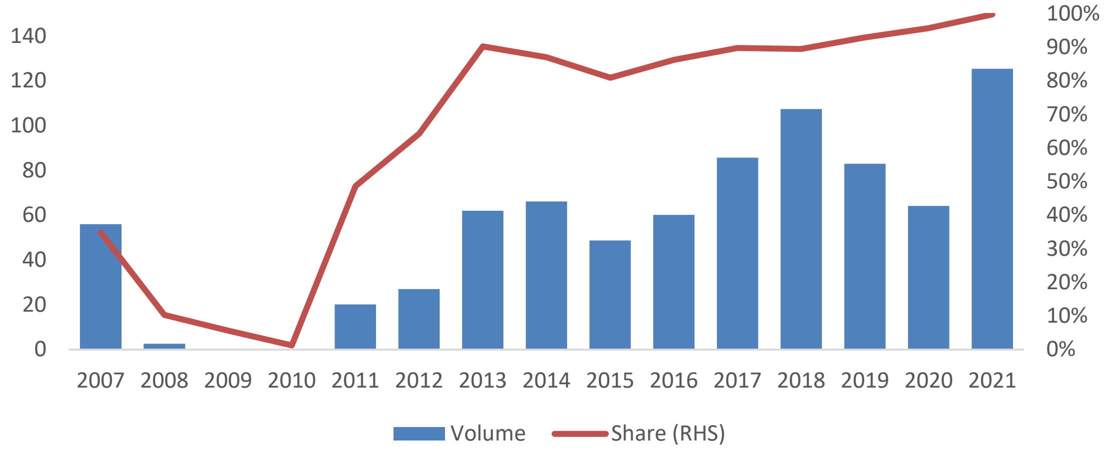
In private credit, unlike in the broadly syndicated loan market, covenants are still written into most loan agreements, although the number of covenants declined in the low-rate years leading up to the beginning of 2022, to include an average just over one in many deals since

111 Block et al (2023) A Survey of Private Debt Funds

112 Private Debt: A Lesser-Known Corner Of Finance Finds The Spotlight: SP Global

2015.[113] Private credit funds primarily utilize cash flow-based covenants as they are largely cash flow-based lenders.[114]

Figure 11. Covenant-lite new-issue volume and share: LBOs



Data to October 4, 2021

Source: LCD, an offering of S&P Global Market Intelligence[115]

Possible vulnerabilities in debt servicing

Rising inflation and the rising interest rate environment since early 2022 could impact private credit loans as they are typically based on variable rates such that borrower servicing costs rise as interest rate rise. A private credit default index compiled by Proskauer shows an upward trend throughout 2022.[116] As interest rates adjust upward, floating rate loans provide protection for the lenders but potentially make it difficult for borrowers to meet their obligations. According to Proskauer, the private credit default rate ended 2022 at 2.06% - the second straight month of increases. Companies with EBITDA less than $25 million had a 2.7% default rate, up from 1.5% in Q3 2022. While these are notable increases, default rates remained well below the peak of 8.1% in that index, reached in Q2 2020. Further, one of the perceived benefits of private credit is the ability and willingness of lenders to work with stressed borrowers in debt restructuring, such that defaults would be avoided.

Portfolio rebalancing

Institutional investors have continued to increase their allocations to private assets. In the past five years to 2022, the global average private equity allocation across different types of investors increased from 8.4% in 2017 to 11.2% in 2022 (see Figure 12). This trend has been most evident among insurance companies, which have doubled their average investments in private equity. The search for yield by these investors during the low-rate

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113 Block et al (2023) A Survey of Private Debt Funds

114 Block et al (2023) A Survey of Private Debt Funds

115 S&P Global (2021) Covenant-lite deals exceed 90% of leveraged loan issuance, setting new high

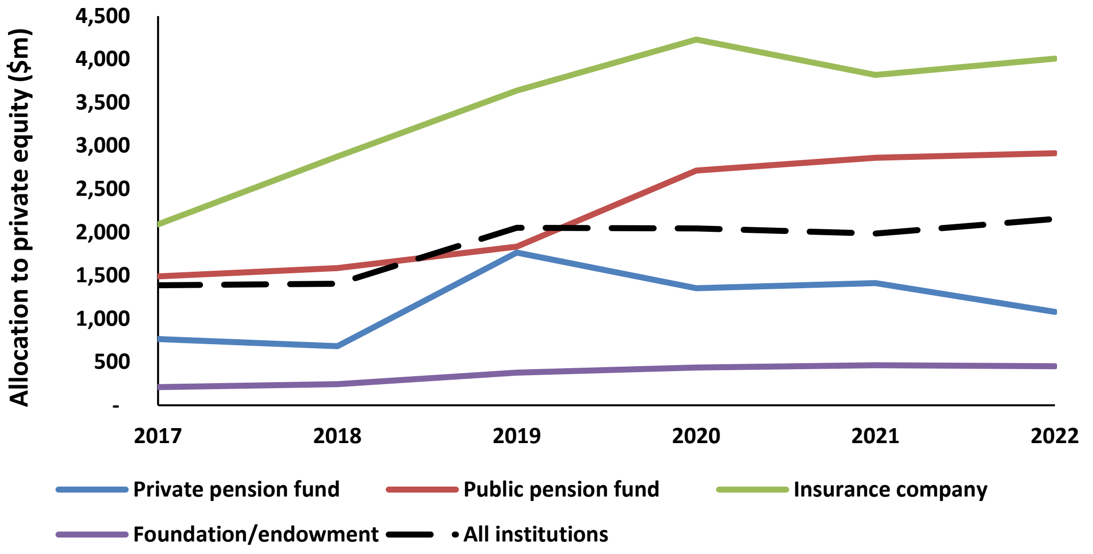
116 Proskauer (2023) Proskauer's Q4 2022 Private Credit Default Index Reveals Default Rate of 2.06%, Increasing 0.5% over Previous Period - Insights - Proskauer Rose LLP

period was a central factor in the growth of private finance and remains a key source of capital.

The most active investors in global private credit are pension funds.[117] On average, private and public pension plans' allocation to private credit is about 5.5% and 4.9%, respectively.

As these large capital providers re-evaluate their strategies in the changing economic environment, the potential unwinding of positions or reduced re-investment in private assets may present key risks over the coming years. The risk-return profile of leveraged assets that became appealing for these investors under the low-rate environment has changed, with portfolio companies subject to increased cost pressures due to inflation and rising interest rates.

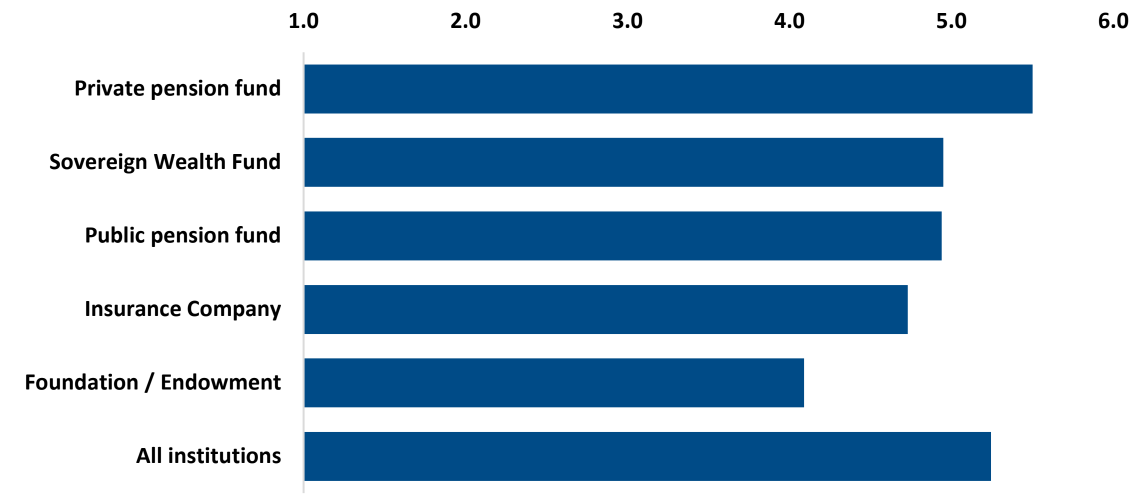
Figure 12: Average private equity exposure by institution type (in USD million), 2017 – 2022



Source: Private Equity International Investor Report FY-2022

[117] Preqin (2023) Global Report – Private Debt

Figure 13: Average private credit exposure by institution type (%)



Source: Private Debt Investor (2022) 2022 Investor Report

When rebalancing is required, time and cost are key variables. Fund limited partners may choose to:

- Remain over-allocated, adjust targets or wait for market corrections.
- Offload their private assets from semi-liquid funds or potentially engage in sales in secondary markets.
- Halt new purchases and/or re-investments.

Sentiment among institutional investors towards private assets is moderating, though this may be transitory as markets adjust. The fixed income assets these funds traditionally held against their liabilities are presently providing higher yields than previously and, in some cases, inflation-protection, and may be seen as safer and more liquid options to private assets. A December 2022 survey found that 24% of these investors believed their funds to be over-allocated to private equity, a significant increase from 2017 when only 4% felt that way. Despite this, investing intentions remain strong with 79% of respondents planning to sustain or increase investment over the next year.[118]

Institutional investors may need to rebalance asset allocations for a variety of reasons, including:

- *Denominator effect*: When values of other portfolio elements decline, private equity or credit may exceed the investor's target allocation due to the denominator effect. Depending on the prevailing investment guidelines, the portfolio manager may be forced to sell some private finance positions (to the extent possible, as they are typically illiquid) to rebalance the portfolio. However, valuations of private assets in the portfolio may lag public market valuations considerably; situations may occur where rebalancing is triggered without full knowledge of changes in the underlying private asset pricing and adjustments could be premature.

118 PEI LP Perspectives 2023 Study

- *Liquidity demands:* Institutional investors have fiduciary responsibilities to ensure their investment strategies align with their liabilities. In the event of significant market downturns, insurers or pension plans may face liquidity constraints to meet their regular liabilities and this may prompt unplanned withdrawals. Private assets, which are frequently illiquid, may be unattractive to investors when their liquidity requirements rise (see, for example the gating of withdrawals by some real estate funds in 2022 amid higher redemption requests).[119]

- *Regulatory changes:* Insurers and pension funds are highly regulated entities, subject to regular reporting to various supervisory bodies. Changes to their investment policies, regulations or accounting standards may require changes in their exposure to private assets.

Secondary Markets

As noted in earlier sections, liquidity transformation is limited in private markets and investments are generally held to maturity in closed-end funds, with exit strategies typically involving, for example, public listings or trade sales. Yet the current exit environment is challenging, and some market participants have identified secondary markets as an increasingly attractive option for fund exits (see "Changing exit strategies", above). Meanwhile, secondaries are stratifying beyond straight sales. For example, the following types of secondary transactions have recently become more prevalent:

- *Tender offer plus staple*: GP-led secondary deals negotiated at a pre-set price and incentivized through additional capital committed from the buyer (e.g., "stapled" to the tender offer). Volume in such deals increased in 2022 alongside the onset of tighter financing conditions. Denominator effect and investor over-allocation to private equity has been a key driver, while this option has been more beneficial to high demand funds.[120]

- *Multi-buyer ("mosaic") sales*: Selective bidding behaviour has also made "mosaic sales" more attractive, where portfolios are sold in parts to targeted buyers. Mosaic sales can lead to better pricing for the seller than a straight sale, where buyers are looking to take parts of the portfolio to gain specific or strategic exposures. The average number of buyers in such transactions rose in 2022 to 3.5, up from 2.4 in 2021.[121]

- *Continuation funds*: New private equity funds raise new capital from investors to purchase the remaining portfolio companies from the original fund. These funds are also a potential source of conflict of interest (See "continuation funds" above).

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119 Burgess (2023) Investors face up to private funds' illiquidity as rates rise, Advisor's Edge, 26 January

120 "Tender Offers: An industry staple", *PEI* https://www.privateequityinternational.com/tender-offers-an-industry-staple

121 Jeffries, *Global Secondary Market Review* (January 2023); https://www.jefferies.com/CMSFiles/Jefferies.com/files/IBBlast/Jefferies-Global_Secondary_Market_Review-January_2023.pdf

However, capital costs and availability have been identified as key risks in the current macroeconomic environment.[122] There is also a risk amplification concern with reduced liquidity where certain participants may have come to expect that they may sell their private holdings at a later date, whether through a fund exit or secondary sale of units.

Furthermore, where they do occur, transactions on secondary markets tend to be at a discount. Academic research on the liquidity cost of private equity investments found that the average and median transaction prices in the secondary market were 86.2% and 85.6% of NAV, respectively, for the sample of 2,226 secondary market transactions carried out in the period 2006-2014.[123] This characteristic – generally considered to be an illiquidity premium – could have the effect of amplifying any downwards pressure on prices. The research also highlights the high transaction costs incurred in secondary markets, most likely because of a limited number of participants and the asymmetric information about both funds and their portfolio firms. The authors found that transactions costs are higher during poor economic times, when the fund is smaller, when the stake of the fund being transacted is smaller, and when funds have lower public market equivalent prices as of the transaction date.

Retail investors

Most investors in private finance activities are institutions as opposed to individual or retail investors. Compared with individual or retail investors, institutional investors can have a greater capacity to invest for longer time horizons, reducing the likelihood of liquidity mismatches. They also tend to be better informed and may have greater bargaining power with fund managers, which reduces problems associated with informational asymmetry. Yet increasingly, private fund managers are looking to expand their offerings to retail investors.

For fund managers, retail investors represent a large, untapped pool of capital. While individual investors hold about half of the estimated $275-295 trillion USD in global assets under management, that same group only holds about 16% of alternative investment funds.[124] Fund managers are looking to retail and individual investors to support continued growth, particularly as the flow of institutional capital slows. A December 2022 survey of 100 fund managers by Dechert,[125] found that about 40% of respondents had seen an increased level of interest in setting up funds raising capital from retail investors over the preceding 12-24 months. In a 2021 survey by EY, 74% of fund managers responded that retail investors should, with some conditions, have more access to private markets.[126]

Muted demand from individual and retail investors for private finance products has been attributed to variety of reasons, including:

122 Pitchbook (2023) Q1 2023 Quantitative Perspectives: US Market Insights

123 Nadauld, Sensoy and Weisbach (2016) The Liquidity Cost of Private Equity Investments: Evidence from Secondary Market Transactions

124 Bain (2023) Global Private Equity Report 2023

125 Dechert (2022) 2023 Global Private Equity Outlook (dechert.com)

126 Y (2022) The future of Private Equity: embracing the "retail revolution"?

- *Regulatory restrictions*: Many jurisdictions restrict the ability of private equity and private credit funds to offer their products to retail investors.
- *High minimum investments*: The standard minimum investment in private funds traditionally sits at a threshold most individual investors cannot meet.
- *Liquidity:* Most investments are illiquid and held to maturity in closed-end funds, making them less attractive to individual investors who cannot afford to lock up their cash for multiple years at a time.
- *Distribution channels:* Private finance products have not been set up for mass distribution, with most funds dealing directly with only a handful of institutional investors.[127] Retail investors would also need advice on suitability.

Increasing interest in retail investor participation

In recent years, retail investor participation in private finance has increased in many jurisdictions. In the US, for example, retail investors increasingly participate via registered funds such as business development companies (BDCs) which typically focus on private credit.

Similarly, regulators have expanded access to retail investors via a series of new investment vehicles including European Long-term Investment Funds (ELTIFs) and Long-Term Asset Funds (LTAFs) in the UK. These funds have lower minimum investment requirements and are designed to allow controlled access for some retail investors, thus lowering the regulatory and minimum investment barriers. Many investors may also be able to gain exposure to private finance activities through a pension fund or through, for example, listed investment companies.

Wealth barriers to accredited investor status (which, while not strictly retail, solicits less stringent requirements than for typical institutional investors) have also lessened as a mechanical function of inflation. In some cases, these effects are significant. For example, in Australia, investors with a gross annual income of $250,000 AUD or net assets of at least $2.5 million AUD (including the primary residence) qualify as accredited investors. When this policy was introduced in 2002, approximately 1.9% of the population met the criteria for wholesale investor status. In 2021, that figure had increased to about 11.3% of the population.[128]

Some funds are also experimenting with innovative ways to reduce distribution costs, such as through the use of tokenization which has been flagged as a way to reduce both private market transaction costs and the size of minimum investments.[129] Such innovations may someday have a direct impact on retail investors' participation in private markets.

On one hand, retail investor participation offers consumers the chance to invest in funds that have achieved almost double the annualized returns of their public equivalent for the past two decades. Yet there are significant risks. For example, informational asymmetry is of greater concern where investors are retail, rather than institutional. For example,

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[127] See, for example Bain (2023) Global Private Equity Report 2023, McKinsey (2023)

[128] Phillips (2021) Sophisticated Investor Projections

[129] Bain (2023) Global Private Equity Report 2023

academic research has found that, while "poorly performing" asset managers appear to overstate NAVs around the time they are raising a follow-on fund, this effect is reduced where investors have the ability to detect bias.[130] This implies that retail investors could be more exposed to risks associated with a lack of transparency (see "Transparency", above), given relatively poorer access to information and resources. Furthermore, many of the liquidity risks associated with private finance activities are traditionally mitigated by the closed-end nature of the investments, yet retail investors may demand greater access to liquidity.

Some industry analysts have also argued that fund managers may be looking to retail investors to fill the funding gaps left by retreating institutional investors.[131] Where institutional investors are retreating due to risk aversion, by implication retail investors that step in could be exposed to higher than appropriate levels of risk.

130 Block et al (2023) A Survey of Private Debt Funds

131 Pitchbook (2023) Q1 2023 PitchBook Analyst Note: How Macro Risks Are Shaping the Outlook for US Private Markets | PitchBook

Chapter 4: Potential Risk Transmission to Public Markets

The interconnections between public and private markets are strong and complex, and any significant stress event in either market could have spillover effects on the other. Common information flows affect both public and private markets because expectations in each market are influenced by macroeconomic and/or industry-specific news. For example, expectations of a downturn could lead both banks and private credit funds to be more cautious with their lending. Information that affects expectations in one market can also impact trading and volatility in other markets because investors commonly diversify their holdings across both public and private markets. As such, a change of demand in one market could flow through to other markets, including through hedging behavior or sell-offs.[132]

The lines between public and private markets are blurring

There has been a significant increase in market-based credit intermediation, at the same time as a contraction in loans and bonds held by banks in advanced economies.[133] External stakeholders have emphasized the interchangeability of public and private markets. Some participants remarked that the size and growth of private markets meant it was now a critical component to the functioning of the real economy, especially for specific sectors, such as technology and healthcare. These comments echo views expressed by certain industry analysts and academics.[134]

External stakeholders also emphasized the potential productivity gains of private finance activity. For example, some noted that private credit in particular was not just substituting for bank financing, but also reflected an industry innovation, whereby credit is provided in ways that were previously not available.

While there was no consensus on the level of risk in private finance activities, there was a general agreement among all external stakeholders that the public and private markets are now sufficiently intertwined that it is difficult to distinguish risks unique to one market and not the other: any one market event could have implications across both markets and, potentially, the broader financial system.

Modelling these risks is challenging because of the lack of transparency in many jurisdictions, limited data, and the intricacy of financial systems that involve many different types of institutions, with complex inter-relationships. Given the increasing importance of private finance activities, the lack of transparency is a particular concern, interfering with the ability of various stakeholders to fully contextualize applicable risks. However, there are two points of interconnection that stand out. Firstly, the investors in both public and private markets typically overlap, apart from retail investors which do not, with some limited exceptions, directly access private markets. Secondly, banks and investment banks, play a crucial role in both public and private markets.

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132 Fleming et al

133 OECD (2020) Structural developments in global finance intermediation – the rise of debt and non-bank credit intermediaries

134 See, for example, BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021

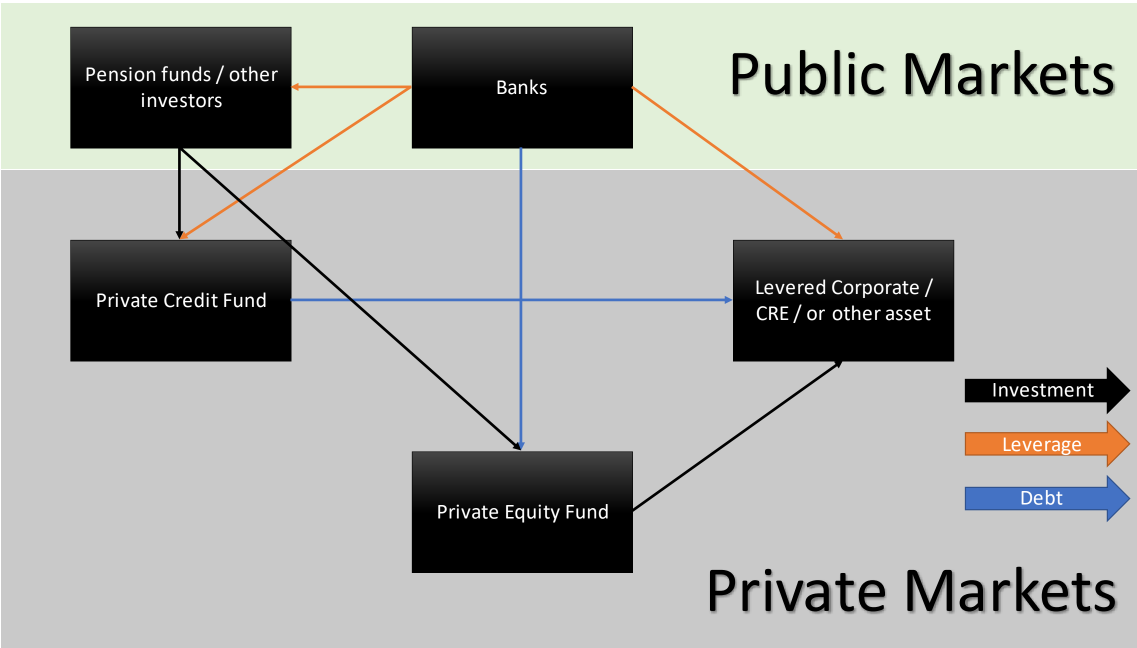
Risk Transmission Channels

A lack of available data covering all aspects of private finance activities makes mapping risk transmission challenging. However, one option is to focus on those market participants that provide the bridge between the public and private markets.

For instance, investment banks provide leverage to private credit funds. As illustrated in Figure 13, below, investment banks are critical nodes in the financial system, and their provision of leverage and exposures to a wide range of financial counterparties have proven to be a key risk transmission channel in the past. There is a risk that, if not properly managed, leverage in private finance could amplify losses and trigger wider market stress.

On the investor side, large institutional investors such as pension funds and insurance companies are dominant players in both private finance investments and in public debt markets, such as corporate bond markets. Clients of banks are also significant investors in private finance.[135] Greater-than-expected losses could also have significant implications for these investors, amplified by asset liability matching.[136]

Figure 13: The role of banks in Private Finance



Source: IOSCO (2023)

In contrast, some industry stakeholders have indicated that they are unconcerned by the use of leverage in private markets. Some remarked that the use of credit lines or revolvers for speculative investment would naturally reduce given the higher interest rate environment, and that the use of leverage was not significant or material to a credit fund's ability to lend. Similarly, participants did not think that investors used leverage when committing capital to private investments.

135 See Preqin Special Report: Banks as Investors in Private Equity

136 Aramonte (2020) Private credit: recent developments and long-term trends, BIS

However, given the opacity of some leverage information, it is unlikely that any one market participant has a complete view on the amount and scale of leverage deployed. There is also likely to be jurisdictional variation.

Increasing Credit Risk in a High Interest Environment

This interconnectedness between different types of market participants through the use of credit facilities can amplify potential spillover risks from private to public markets, as a default by one market participant could trigger a cascade of defaults throughout the system.

Portfolio company defaults

Private credit portfolio companies are directly affected by monetary tightening since the majority of private credit is issued with floating rate agreements, and firms tend to be more highly leveraged than equivalent public companies.[137] This increases the relative likelihood that firms default on payments to the private credit fund. For example, recent analysis from Moody's analytics, which set up a portfolio of public and private debt and tested it against a range of economic scenarios, concluded that the private credit segment of the portfolio contributed materially to portfolio risk, despite accounting for a relatively small portion of exposures.[138] A large increase in portfolio company defaults could lead a private credit fund to default on its debt. It may then look to promptly sell assets at a discount, which could result in losses for investors, including institutional investors, such as pension funds or insurance companies, who have invested in the fund.

If the losses are significant enough, these investors may need to sell other assets to meet redemption requests, potentially leading to forced selling in public markets. In addition, if the debt is secured by private credit investments as collateral, the leverage provider to the private credit fund may seize that collateral upon default (though the debt may be worked out before that). Similarly, in the current inflationary environment, highly levered private equity portfolio companies would expect to see increased costs and may also see decreased output in the event of a broader downturn. Debt service coverage ratios for new loans will reduce as a mechanical function of increased interest rates, increasing the likelihood of payment default.

Reduction in investor payments

There are several ways in which investors could see an unexpected shortfall in payments, for example, if the portfolio company defaults. Also, and as noted above ("Current macroeconomic context and its potential impacts"), the challenging exit environment for private equity firms could lead to extended fund holding periods, resulting in unexpected delays before the distributions of a fund are realized and shared with investors.

Investors in private funds may rely on these payments. For example, in North America, many pension funds are investors in private credit funds, with more than $100 billion USD invested in private credit.[139] Globally, about 5.5% of private and 4.9% of public pension

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137 See, for example, S&P Global (2023) Look Forward Journal. This was also noted by external engagement participants

138 Moody's Analytics (2023) Private Debt: How much is too much in a credit portfolio

139 Pension Investments in Private Credit Hit Eight-Year High, Heather Gillers, WSJ, January 29, 2023

fund assets are allocated towards private credit. About 13% of public pension funds in the US are allocated towards private equity.[140] If portfolio companies in the fund default, the pension funds may be forced to offload more liquid assets to meet their obligations to members. Unexpected delays in fund closures could see pension funds forced to sell (more liquid) assets from the public book to meet their obligations. Alternatively, such pension funds may seek to sell their private fund interests in the secondary market, which, if actually done, may be accompanied with a significant haircut to their value.

Other institutional investors that hold both private and public assets could face similar pressures in the event that distributions or repayments dry up. For example, some investors may have to adjust how they fund capital calls. Historically, investors with a mature private-asset program have been able to fund capital calls of young vintages entirely with distributions from older vintages. However, if distributions slow down more than committed capital contributions, that option will no longer be possible. This may force investors to raise liquidity by selling assets from the public book at unfavorable valuations, amplifying the effects of a downturn.

Investors could seek early exits

In addition to those identified, a range of other situations could lead investors to seek early exits from private markets. Such situations may include losses in public markets. In particular, due to the lag in private equity valuations, losses in public markets may have the effect of leaving investors overexposed to private markets (See Chapter 3, “Portfolio rebalancing”).

Alternatively, shocks to confidence may arise from sharp revaluations or limits on redemptions for semi-liquid funds. A valuation shock, or the prospect of one, could lead private investors to exercise a potential first mover advantage. Alternatively, a large gap between public and private valuations may lead investors who are looking to raise capital to “sell high”, in preference to crystallizing losses in public markets. (See Chapter 1, "Valuations”).

Early exits from private markets are generally only possible though secondary markets, which could incur larger than usual discounts in times of stress (see Chapter 3, “Secondary markets”, above).

Capital Costs and Availability

The current economic slowdown has led to a slowdown in fund raising (see “challenges for fund managers”, above). Banks have pulled back from funding leveraged transactions, and some analysts have reported a clear pivot towards lower risk across asset classes.[141] This could have two main effects as well as potential longer-term impacts on financing behavior if the higher interest rate environment persists.

Firstly, a drying-up of new inflows to private capital markets may alter the funding dynamics of start-up companies and corporate deals. This is especially the case for sectors

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140 See, Pension fund allocation to private equity under target in 2023, S&P Global Market Intelligence

141 See, for example, Dechert (2022) 2023 Global Private Equity Outlook (dechert.com)

and companies which are highly dependent on private capital, such as the technology and health sectors, or with lesser access to banking lending or public capital markets.

Secondly, the pullback in bank lending may affect private finance portfolio companies' abilities to refinance. If a large number of funds operating in the same area were unable to provide refinancing, assets may have to be sold at discounts or projects would stall, with direct implications for the real economy. External stakeholders argued that this would not be a concern for high quality assets, since private fund managers would step in to provide credit to firms in their portfolios, if needed,[142] however they noted that it could be a risk for lower quality firms.

In the longer term, should the cost of private credit increase and the availability of private credit decrease, firms that were previously overly reliant on its availability may need to consider other options for raising capital. One scenario could mean that these firms would turn to public markets, if available to them, particularly if the balance between the cost of debt vs. equity shifts toward equity under a normalizing interest rate environment.[143] The prospect of having to raise capital through public markets, such as through an IPO, or possibly through a Special Purpose Acquisition Company (SPAC) process, could bring conduct concerns into the public sphere.[144] For instance, inconsistencies with valuation practices may crystallize when portfolio companies need to adhere to public listing requirements.

More generally, the increased dependency of small and middle-sized companies on private finance[145] means that a decrease in the availability of private capital may have a significant impact on such companies' growth, although the magnitude of this is uncertain.

In contrast, the March 2023 collapse of several regional banks in the United States may have presented an opportunity for private credit funds and private credit investors. Depending on how this banking stress plays out, regional banks may pull back from providing finance to the mid-market segments that they have traditionally specialized in. For instance, the California Public Employees' Retirement System (CalPERs), the largest public pension fund in the United States, has signaled a willingness to step in to provide financing to fill the gaps left behind by the banks.[146]

Some external stakeholders have shared similar views. Increasing interest rates are expected to make floating rate loan portfolios more profitable and, given a broad portfolio, the increase in profit could offset the financial risks from portfolio company defaults. However, refinancing risks were highlighted as pivotal, especially over the long-term horizon.

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142 Although, most external stakeholders noted that they did not lend to themselves, since this would result in a conflict of investors' interests (see "Debt vs. equity investors of the same firm", above).

143 See, for example, IOSCO (2020) Conflicts of interest and associated conduct risks during the equity capital raising process. This could also have implications for private debt vs. public debt costs.

144 See,for example, IOSCO (2023) Special Purpose Acquisition Companies

145 BIS (2021) The rise of private markets, BIS Quarterly Review, December 2021

146 Drean (2023) Silicon Valley Bank Collapse And Credit Suisse Rescue Are A Boon For Private Equity, Forbes.com, 5 April 2023

Conclusions

Private finance markets have grown rapidly since the GFC due to accommodative monetary policy, bank retrenchment, and cost advantages versus other sources of finance. Global macro-financial conditions have significantly changed in the near-term. Higher interest rates in particular could expose vulnerabilities in private markets. However, private finance is inherently opaque and consequently there is a lack of clear understanding of the level of risk in private finance activities. Nonetheless, it is evident that private and public markets are intertwined to the degree that any one market event could have implications across both markets and, potentially, the broader financial system.

Private markets lack transparency when compared with publicly listed markets. This gives rise to greater asymmetries of information. Listing and disclosure requirements are designed to give investors and the market sufficiently reliable public information to effectively assess corporate profitability and assess risks. While transparency in public markets comes at a cost to issuers and their shareholders, it helps to support efficient price formation and reduces search costs for investors. In contrast, while regulatory compliance costs in private markets are lower, investors are more reliant on specialist intermediaries such as private equity and private credit firms to conduct more bespoke and costly due diligence on their behalf. Though not straightforward, it is clear that any attempts to increase transparency (either for regulators or market participants) in a market built with opacity as a key functional feature would need to carefully balance the increased costs to market participants, with the benefits to the financial system more broadly.

While this opacity provides investors with some insulation from transparency costs, and volatility faced in public markets, it could also jeopardize availability of information that investors and regulators require to effectively assess risks. This includes risks that could arise due to the way in which private finance firms conduct their activities (e.g., valuations, conflicts of interest), from their interconnections with the wider financial system, and from how macro-financial developments could impact the sector, the portfolio companies that receive finance, and the real economy.

The investment landscape is changing dramatically with the return of inflation and the rapid shift to interest rate normalisation. This creates a number of prospective challenges to funding models within certain sectors, in terms of continuing access to cheap, secure sources of debt funding. Potential questions therefore arise in terms of these sectors' ability to navigate this transition to the "new normal".

If interest rates stay at current levels for longer than expected, it is highly likely that there will be a reduction in the availability of funding to support private finance activities. While private finance firms have accumulated a significant amount of dry powder, the extent to which this could mitigate this risk is unclear. In addition, portfolio companies are likely to face higher rates on existing borrowing, which is typically floating rate, as well as on new and refinanced borrowing. Market participants noted that these risks were particularly stark over the medium to long-term. Portfolio companies will also be subject to increased cost pressures due to elevated inflation. While flexibility on the financing arrangements may help portfolio companies navigate short-term market strains, defaults are expected to increase over the medium to long-term. Overall, there could be significant impacts on concentrated sectors (e.g., technology and healthcare) that have become reliant on a constant flow of affordable financing.

The lack of reliable insight into the risks of these private finance investments means that it is difficult to determine with any certainty whether the impact of higher defaults would be worse than what may occur in public markets. However, the impact could nonetheless be significant, and in public markets, financial risks particularly around refinancing, are better known and actively monitored by regulators and investors.

There are conflicts of interest, for example, between a fund manager's investors in different investment products, such as where one of its debt funds lends to portfolio companies in one of its equity funds. There are also conflicts of interest in some aspects of valuations, transaction negotiation practices and GP-led secondary markets. However, it is difficult to assess the scale of these risks, the frequency in which these issues arise and the extent to which they are managed effectively. Should the relative increase in the cost of debt lead to a renewed interest in equity financing, such valuation concerns could be unearthed under a scenario where portfolio companies and their sponsors would need to face the prospect of raising capital through the public equity markets (e.g., through IPOs or SPACs).

The relative lack of transparency in private finance markets is especially relevant when considering any increased participation by retail investors. Private market participants appear keen to push toward new sources of capital, but this move would naturally come at the cost of the investment products being subject to more regulation and higher standards of governance and oversight than those required when selling to institutional investors. Similarly, characteristics of the products and the market may need to change to enable this (e.g., to offer liquidity, more information, and to ensure investors receive suitable advice).

While private finance activities present potential risks, including to IOSCO objectives, there are areas where they could provide benefits to the financial system and the real economy. Increasingly, private companies and their private equity sponsors use private markets to meet their funding needs, either in preference to banks or because banks are unwilling or unable to provide credit. Some market participants argue that this has considerable benefits, for example, private credit providers may be able to provide more bespoke, flexible covenants, higher risk tolerance, and a longer investment horizon than banks are willing to support.[147] Private credit providers could also be more flexible than banks in helping borrowers avoid default and restructuring debt in times of stress. However, private finance has largely grown in a period of accommodative macro-financial conditions, which has now changed. The sector may be tested in the medium to long term (e.g., as portfolio companies seek to refinance), and could respond in ways that uncover hidden risks.

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[147] Block et al (2023) A Survey of Private Debt Funds

Abbreviations

AIFMD	Alternative Investment Fund Managers Directive
AIMA	Alternative Investment Management Association
BDC	Business development company
BSL	Broadly syndicated loans
CDO	Collateralised debt obligation
CFO	Collateralised fund obligation
CLO	Collateralised loan obligations
CPC	Controlled portfolio company
EBITDA	Earnings before interest, taxes, depreciation and amortization
ELTIF	European Long-Term Investment Fund
GFC	Global financial crisis
GFCF	Gross fixed capital formation
GP	General Partner
ICO	Initial Coin Offering
IFRS	International Financial Reporting Standards
IOSCO	International Organization of Securities Commissions
IPO	Initial Public Offering
IRR	Internal Rate of Return
LBO	Leveraged buyout
LP	Limited partnership
LTAFs	Long Term Asset Fund
M&A	Mergers & Acquisitions
NAV	Net asset value
SMA	Separately managed account
SMEs	Small and medium-sized enterprises
SPV	Special purpose vehicle