

**BlackRock**

**Investment perspectives**

Mega forces – Future of finance  
October 2023

# A fast-changing U.S. financial landscape

Greater competition for deposits and proposed banking regulation are set to benefit savers, further diversify company funding sources and create investment opportunities.

BlackRock  
**Investment**  
Institute

# Summary

- This is the first paper on the future of finance, one of the five mega forces we see shaping returns now and in the future. **A fast-evolving financial architecture is changing how households, companies and investors use cash, borrow, transact and seek returns.**
- Here we dig into one aspect of the future of finance: the tectonic shifts underway in the U.S. financial sector changing the markets for deposits and credit. **We see these shifts benefiting savers, diversifying finance for borrowers, creating a more stable system and opening up potential investment opportunities.**
- **The end of zero rates is good news for savers.** While interest rates on bank deposits have lagged the Federal Reserve's policy rate, money market funds have provided savers with the opportunity to earn a rate much closer to policy rates. In September 2023, the average interest rate paid on deposits by U.S. banks was 3% versus the 5% yield available on cash invested in U.S. money market funds. Savers have moved money in response.
- **Money market funds proved attractive to depositors after regulatory reforms made them more resilient – further good news for savers.** Government money market funds are now the dominant type – and they park their cash overnight at the Fed or invest it in very short-term government debt. This makes the overall financial system safer, in our view, but also means that cash placed in money market funds is not channeled back to the banking system to help fund bank lending.
- **In a more competitive market, we expect to see banks paying higher rates to their depositors.** Some of that will be passed on through higher rates on loans they extend. Potential regulatory changes – partly in response to the 2023 banking turmoil – could reinforce this. We see the banking system consolidating and innovating.
- **As banks adjust to this new reality, non-bank sources of credit could become relatively more attractive to companies and more important as a source of financing for economic growth and job creation.** This brings potential opportunities for investors, in our view.
- **Private credit – financed directly by long-term investors who bear any losses on the loans – could be particularly appealing for small- to mid-size firms given the cost of and barriers of entry to accessing public markets.** We see investment opportunities over strategic horizons of five years or longer. Private credit returns reflect that loans cannot be easily traded. They are illiquid and suited for long-term investors who can meet liquidity needs with other assets in their portfolio. And credit selection, as well as lender experience and expertise, will be increasingly important in the higher cost of capital environment we expect to persist.
- **These developments are examples of the broader aspects of an unfolding mega force.** Activities that previously were bundled together in the same institution, such as deposit-taking and lending in banks, can be unbundled. We see that unbundling continuing to play out as banks and other financial institutions innovate, regulation evolves and technology develops around payments, digital currencies, the tokenization of assets and artificial intelligence.

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# Savers vote with their feet

Over the past 18 months, U.S. banks have seen deposits contract at an unprecedented pace. See the chart on the left below. Some of this is due to actions by the Fed. But some is not. It signals a shift that benefits savers.

First, the Fed. Early in the pandemic, the Fed was buying bonds through its quantitative easing program. Doing so injected deposits into the accounts of the sellers of those assets. See the surge in bank deposits in 2020-2021. Since early 2022, it has been taking deposits out of the U.S. economy via quantitative tightening, or the shrinking of its balance sheet by no longer replacing its holdings of government bonds and other assets when they mature.

Stripping out that impact allows us to see the full extent of other forces on deposits in the U.S. banking system. Since the start of the pandemic, the Fed has injected \$4 trillion into the economy. See the dark orange line on the chart on the right below. Yet the banking system only has an additional \$2 trillion of deposits over and above the loans it has made. See the yellow line on the chart on the right below.

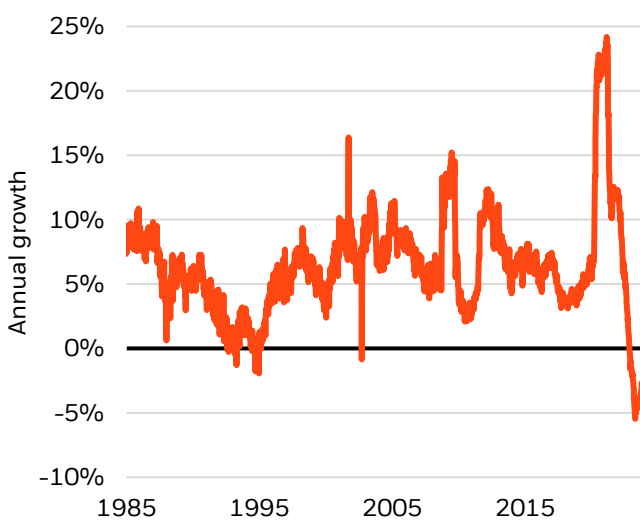
Savers have shifted their cash into U.S. money market funds. See the green line. Their share in the sum of cash deposits and money market investments has consequently risen to 25% from 20% in the last 18 months, according to data from the Fed and ISI. Why? Banks are facing greater competition. For much of the last decade, near-zero interest rates in major economies meant bank deposits had few rivals for cash and savings seeking a home. But with the Fed having embarked on a rapid rate-hiking cycle, the search for higher short-term interest rates is back. And banks have not increased the rate they pay on deposits in line with Fed rate hikes, while money market funds directly pass through short-term rates. Savers can benefit from that. In September 2023, the average interest rate paid by U.S. banks on deposits was 3% versus the 5% yield available by investing in U.S. money market funds, according to Crane data.

The outflow of bank deposits sped up in March 2023 when three U.S. regional banks failed. In the six months that followed, depositors not only moved their money out of regional banks into larger banks, but also ploughed a further \$700 billion into money market funds – a place seen as relatively less risky to put cash thanks to recent reforms, as we explore on the next page.

Swift regulatory action has helped shore up regional banks. And, thanks to the Fed, overall bank deposits are still up \$2 trillion relative to loans extended. As quantitative tightening proceeds, U.S. banks will need to adjust to a more competitive market for deposits. That's good news for savers but means banks can no longer fund lending cheaply by paying depositors rates well below the Fed's policy rate. We think this could further encourage companies to diversify their sources of finance.

## Shrinking bank deposits...

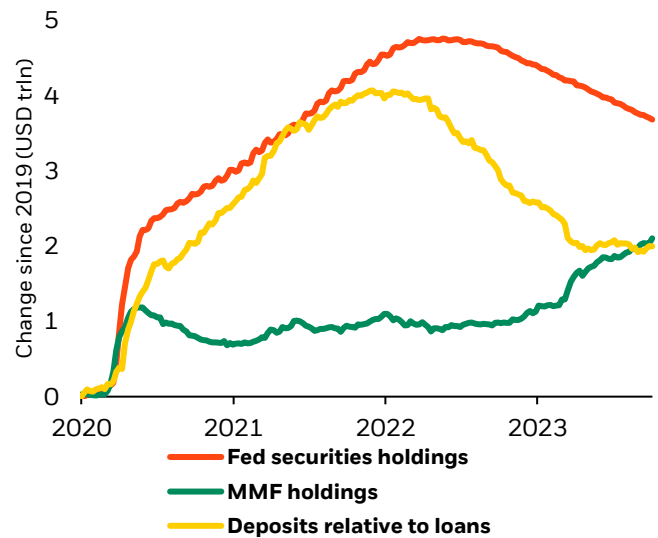
Annual growth in U.S. bank deposits, 1985-2023



Source: BlackRock Investment Institute, U.S. Federal Reserve Board, with data from Haver Analytics, October 2023. Note: The chart shows the year-on-year growth in total deposits in U.S. domestically chartered banks. The data is captured weekly and is non-seasonally adjusted. Bank deposit data is subject to revision.

## ...rising money market funds

Deposits and money market fund assets, 2020-2023



Source: BlackRock Investment Institute, ISI, Federal Reserve, with data from Haver Analytics, October 2023. Note: The chart shows the change since 2019 in U.S. Federal Reserve securities holdings (dark orange), "excess deposits" (the difference between deposits and loans outstanding in the overall banking system, in yellow), and money market fund assets (green).

# Safety first

What recent market and regulatory changes improved the resilience of money market funds? One key change is the structure of U.S. money market funds. This sector was previously dominated by prime funds. See the yellow area on the chart on the left below. Prime funds invested primarily in commercial paper (funding loans to companies, including banks) or in bank deposits (recycling funds back to banks and helping banks finance their own lending). See the left bar in the chart on the right below.

Wide-ranging reforms in 2016 imposed redemption fees and restrictions on prime funds, spurring a big shift to government money markets funds that now hold 80% of total money market fund assets. See the orange area on the chart on the left below. These are limited to investing in U.S. Treasury bills or repurchase agreements fully backed by U.S. government bonds. They don't lend to banks via deposits or commercial paper. And the loans they make to banks don't help fund bank lending as they are so short term. So, money placed in money market funds is not typically recycled to banks or private credit creation. See the chart on the right below.

A second development has reinforced this. Money market funds can place their cash overnight at the Fed if they need to, in the Reverse Repurchase Facility (RRP). Although in place since 2013, this facility has gained importance as government money market funds have come to dominate because they are much more limited in where they can put their cash. While cash was flowing into money market funds, demand for Treasury bills from other institutions has outstripped the available supply. Without an alternative place for their cash, money market funds would have been forced to pay up for Treasury bills, pushing short-term yields well below the Fed's desired policy rate. This would have rendered the Fed's rate hikes less effective, as the Fed highlighted [back in 2015](#). By giving money market funds a last-resort place to park their overnight cash, the Fed avoided this outcome.

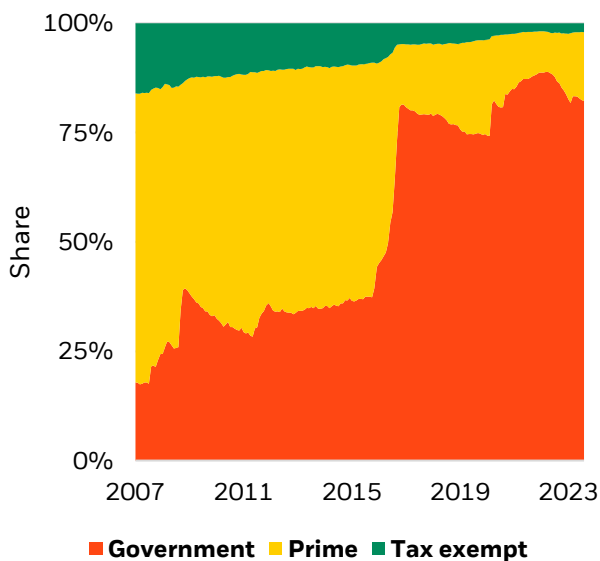
RRP use has already started to fall as the Treasury has ramped up bill issuance following the recent U.S. debt ceiling agreement, and it could fall further if banks start offering higher rates for repurchase agreements. But the share of money market fund assets placed in the facility is expected to stay materially higher than in the past due to the expansion of government money market funds and the much narrower set of investments they are permitted to make.

These reforms benefit the wider financial system: the money in government money market funds is left overnight with the Fed – and returned the next morning – or is in very short-term secured loans to banks or government debt. That means these funds can meet very large redemption requests. [SEC reforms](#) reinforced this earlier this year: money market funds must now hold a greater share of assets as cash, overnight assets or weekly maturing assets. These reforms mean money market funds today are very different to the funds where risks surfaced in the 2008 global financial crisis.

Yet the consequence of all this is that, if savers now turn to money market funds, less money is now recycled back to the banks or finds its way back into lending to companies. How will banks, and other credit providers, adapt to this changing system? We explore this on the next page.

## Big shift

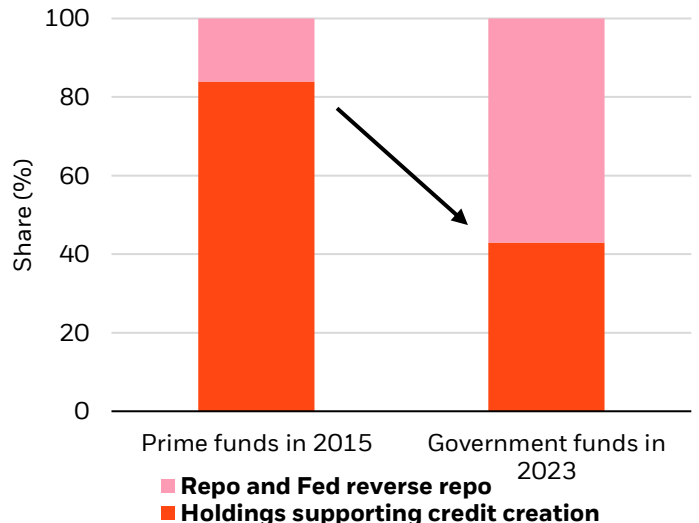
Share of money market fund assets by type, 2007-2023



Source: BlackRock Investment Institute, ICI, with data from Haver Analytics, October 2023. Note: The chart shows the breakdown of money market fund assets by type of fund.

## Less support for credit creation

Holdings of prime and government money market funds



Source: BlackRock Investment Institute, ICI, OFR, with data from Haver Analytics, October 2023. Note: The bars show the composition of holdings of prime money market funds in 2015 and government money market funds as of July 2023. Holdings supporting credit creation – and recycled back into the banking system – include Treasuries, agencies, certificates of deposit, commercial paper and other. Repo includes private repurchases and use of the Fed's facility.

# Adjusting to the new reality

More options for savers means banks need to compete for their deposits. They won't be able to rely on paying rates well below the Fed's policy rate. If they do, they'll see deposits flow elsewhere. And that would mean they'd need to rely on other, more expensive forms of funding for their lending.

Most banks still have a lot of deposits relative to the loans they've made. But with the Fed's quantitative tightening running at \$80 billion per month and with bank deposit rates still well below the Fed's policy rate, we estimate those excess deposits may run down within two years. Plus, looking at the U.S. banking sector as a whole hides key differences across banks. Not all have such a comfortable buffer of deposits in excess of loans. Banks with less than \$250 billion in assets have, on average, a much lower deposit-to-loan ratio than larger banks. See the top two bars on the chart on the left below. Many already need to adjust to the new reality of competition for deposits. And these same banks have been making an outsized contribution to bank loan growth in recent years, as the lower bars show.

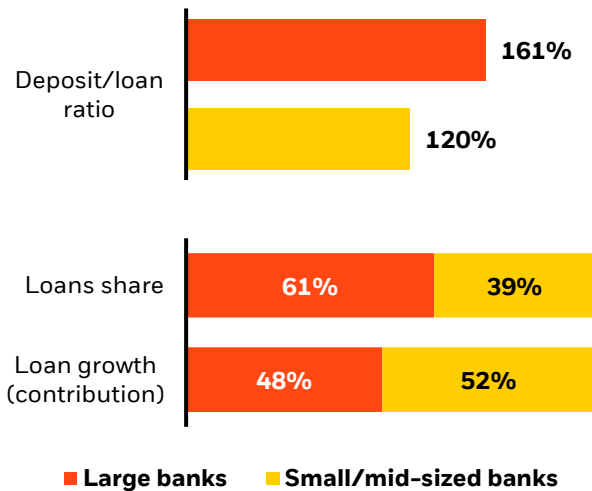
U.S. banks are likely to compete aggressively for deposits by raising the interest rate they offer customers. Smaller banks have started to do so this year, according to September 2023 data from SNL Financial. This will erode some of the advantage they had in extending loans from being able to fund them with cheap deposits.

That likely means higher interest rates on bank loans. Banks could choose not to pass on the extra cost of their deposits to borrowers. That would hurt their profit margins and reduce the profitability of loan-making, potentially discouraging them from lending as much. That's been true for net interest margins of small banks, which have fallen by more than those of large banks this year, according to September 2023 data from the Federal Deposit Insurance Corp.

So, the new reality is one of a combination of higher rates for depositors, lower bank profits and higher bank lending interest rates. We see the banking system consolidating and building innovative partnerships to reduce the need to support loans on their own balance sheets. Overall, we see a reduction in lending activity on bank balance sheets ahead. Indeed, we're already seeing lending standards tighten, which has historically led to a contraction in lending, as the chart on the right below shows. Much of that reflects the effects of the Fed's rate hikes, but there is now a longer-term, structural element too. And over time, regulators could reinforce that structural trend. See the next page.

## Deposit outflow hits small banks harder

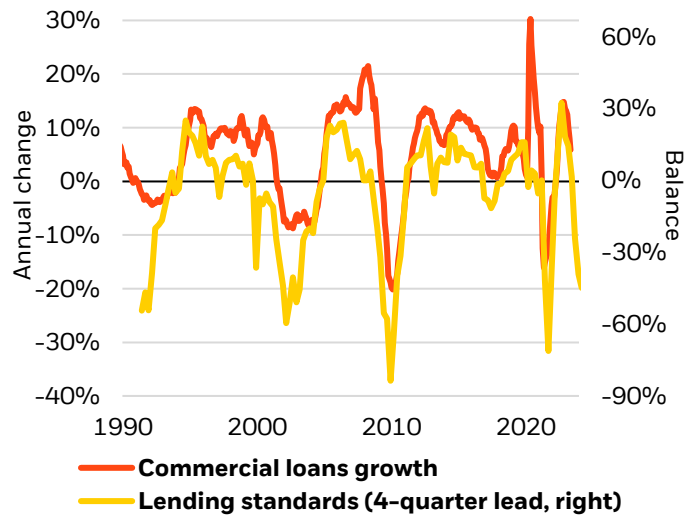
U.S. bank deposits to loans, loan share by bank size, 2023



Source: BlackRock Investment Institute, Federal Reserve, with data from Haver Analytics, October 2023. Note: Large banks refer to the banks with more than \$250 billion assets. The top panel shows deposits relative to loans. The bottom panel shows the breakdown of the outstanding stock of loans between the large and small banks and the contributions to the year-over-year growth rate.

## Lending set to fall as standards tighten

Year-on-year commercial loan growth, 1990-2023



Source: BlackRock Investment Institute, Fed, with data from Haver, October 2023. Notes: The chart shows growth in commercial and industrial loans (orange, left-hand side), and results from FRB Senior Loan Officers Survey – net percentage balance tightening in standards for commercial and industrial loans to large and middle-market firms (yellow).

# Bank regulation in motion

Bank regulators are aiming to ensure that banks – which convert short-term deposits into long-term loans – can absorb losses without harming their ability to repay depositors and can access cash quickly enough to meet large and sustained deposit withdrawals. Existing regulations are set to be strengthened based on previous global agreements. In the U.S., regulators are also responding to troubles earlier this year at some mid-sized banks.

U.S. regulators have proposed requiring banks to have more shareholder capital to cover losses. The proposals, if implemented, would significantly expand the number of banks under this capital and liquidity regulation, and the banks that failed in March would have fallen into this size category. See the chart on the left below.

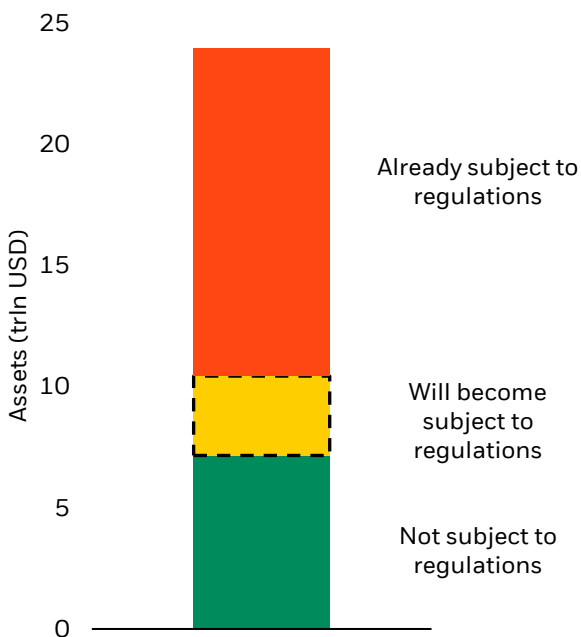
This could speed up consolidation within the U.S. banking sector as larger banks take over smaller, less profitable ones or banks merge together – a trend already observable, according to European Central Bank [analysis](#). Markets may already be trying to reflect these changes. Regional banks have been revalued, with share prices down more than 30% in the last 12 months, according to data from LSEG Datastream. Credit agencies have downgraded several institutions in the sector, citing concerns related to funding risks and weaker profitability.

The proposed regulations are still at an early stage – and elements could change through the legislative process. But the broad thrust for the banking system appears that more bank lending will need to be funded with more expensive, loss-bearing shareholder capital and with long-term debt, rather than cheaper, short-term deposits.

Together with greater deposit competition, we think these regulations could reinforce the long-standing trend of companies diversifying their funding sources. Companies have over time relied more on public markets, as the chart on the right below shows. That shift could now broaden to private credit as we explain next.

## A wider regulatory net

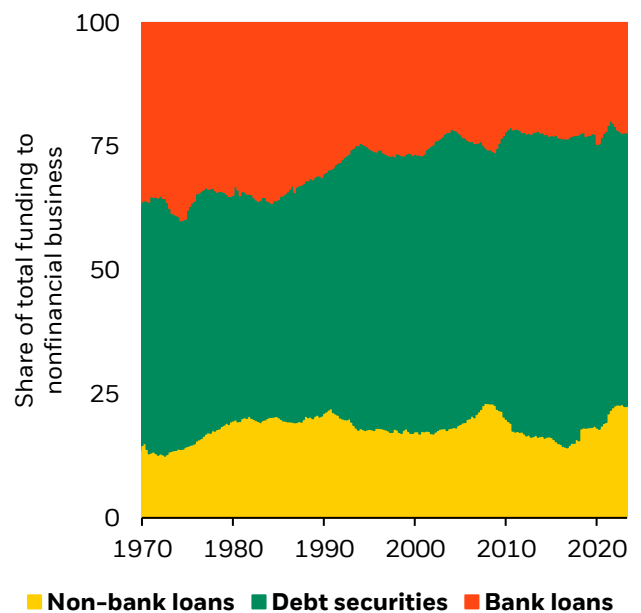
Assets subject to more stringent regulatory requirements



Sources: BlackRock Investment Institute, FDIC, October 2023. Notes: The chart shows total U.S. bank assets in Q1 2023 as reported by the FDIC. The total is broken down by the size of banks holding those assets. The orange bar denotes assets held by banks with at least \$250bn of assets each; the yellow by banks with between \$100bn-\$250bn each; and green by banks with less than \$100bn each. The dashed outline shows the additional assets subject to tighter bank regulations under Federal Reserve proposals as of July 2023.

## Less reliance on bank loans

U.S. non-financial business debt by source of finance



Sources: BlackRock Investment Institute, Federal Reserve, with data from Haver Analytics, October 2023. Note: The chart shows the share of funding for U.S. non-financial businesses broken down by source: outstanding bank loans (in orange); debt securities (green) and other non-bank loans (yellow). Bank loans exclude mortgages. The latest data point is for Q2 2023.

# Private credit aids diversification

Since the global financial crisis, the growing private credit market has enabled firms to diversify their funding sources beyond banks and public debt markets. We expect it to keep growing as borrower demand expands.

Private credit refers to lending (typically structured as a floating rate loan) that is directly negotiated between a borrower and a lender (typically a large asset manager). Private credit encompasses a wide range of strategies and is part of the burgeoning \$12 trillion alternatives market. See the chart on the left below. The predominant one is direct lending, which refers to directly negotiated loans to small and mid-sized firms. These firms are typically in a growth phase and looking for financing, but not yet ready, or willing, to tap the public markets. Banks are not involved: the loans are not held on their balance sheets and banks are not required to arrange them, unlike bonds or syndicated loans that banks distribute to a wide variety of investors via a syndication process.

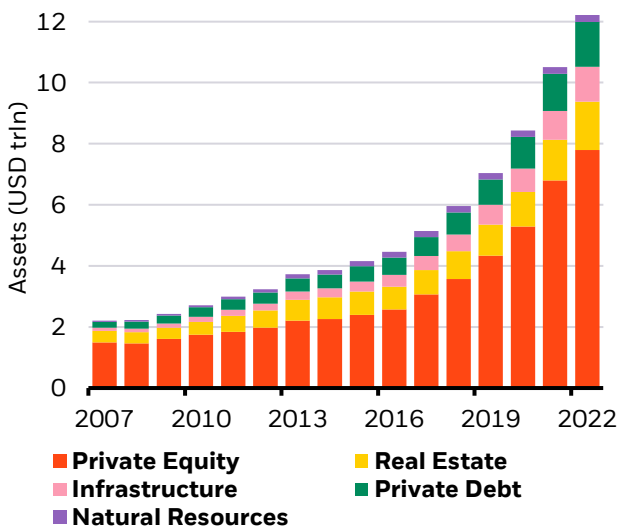
Globally, private credit – excluding real estate – has grown to roughly \$1.6 trillion of assets under management, according to March 2023 Preqin data, and is now on a par, in terms of size, with some of the widely tracked U.S. high yield bond and leveraged loan indices. See the chart on the right below. Multiple factors are behind that continued growth, including the desire of borrowers for pricing and deal execution certainty, customized funding in a long-term partnership and smaller deal sizes. Public markets are serving ever larger borrowers. The average deal size in the U.S. high yield market has been well above \$700 million and about \$480 million in the leveraged loan market since 2020, Dealogic and LCD Pitchbook data show. That’s prohibitively large for small to mid-size firms, in our view.

We see significant scope for growth in private credit that is beneficial to borrowers, economic growth and financial stability. Private credit deployed capital in North America is still only about \$698 billion, Preqin data as of March 2023 show – a quarter of the outstanding stock of commercial and industrial loans at U.S. banks, as seen on the chart on the right below. Private credit can help borrowers diversify their sources of finance to grow as bank lending becomes relatively less attractive. Private credit funds are generally not highly levered and have long-term commitments of capital from their investors that align with the maturities of the underlying loans. Any losses are borne solely by those investors.

From an investment perspective, structurally higher demand for private credit is likely to result in an expanding “addressable market” of potential borrowers and higher lending rates thanks to enhanced pricing power. We think spreads between private and public credit markets are likely to widen further as a result. This underpins our strategic overweight to the asset class – but private markets are complex and not suitable for all investors. Private credit is not immune to the tough economic backdrop. That warrants increased selectivity, granularity – and importantly – focus on how much of the opportunity, and risks, associated with the investment are already in the price.

## Private credit: a growing alternative

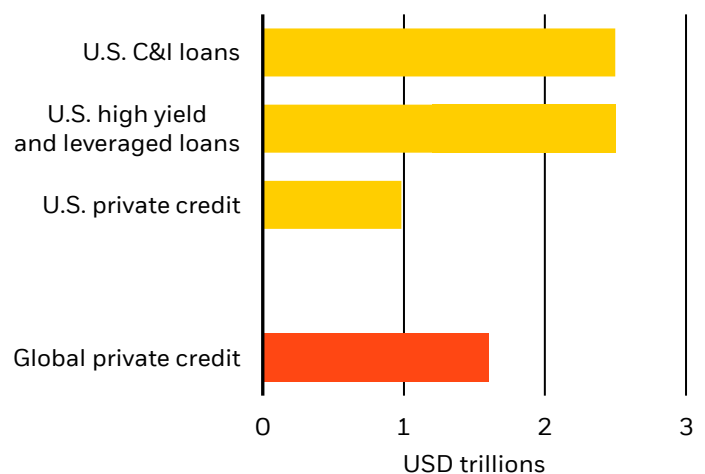
Global alternative assets under management, 2007-2022



Sources: BlackRock Investment Institute with data from Preqin, October 2023.  
Notes: The chart shows the share of global alternative assets under management in U.S. dollars by category. To avoid double counting of available capital and unrealized value, fund of funds and secondaries are excluded. Natural Resources includes Natural Resources and Timberland fund types only to avoid double counting. Data is as of December in each year shown.

## Room to grow

Comparison of global debt markets, 2023



**Forward looking estimates may not come to pass.** Source: BlackRock Investment Institute with data from Bloomberg, St. Louis Federal Reserve, ICE Bank of America, Pitchbook LCD, Morningstar/LSTA and Preqin, October 2023. Notes: Measures used to size the markets are: outstanding stock of commercial and industrial (C&I) loans from the St. Louis Fed; total market value for index proxies Bloomberg US High Yield Corporate Index, Morningstar LSTA USD Leveraged Loan index, and the value of assets under management of private credit funds. Values are as of March 2023.



# Pricing the risks and opportunities

Loss rates in private credit have been low, but we expect them to normalize as higher financing costs and stagnant activity take their toll on borrowers, as they have for borrowers in the public markets already – especially firms with floating rate debt. See the chart on the left. As new private credit lenders enter the market, we attach more importance to a selective approach, lending to sectors and borrowers that may be better positioned to successfully navigate a higher cost of capital environment and pay utmost attention to due diligence on borrower deal terms and lending standards.

Stepping back, we see that over long periods loss rates have remained consistent with – or lower than – losses in public markets such as U.S. high yield and U.S. leveraged loans, based on the Cliffwater Direct Lending Index (CDLI) as a proxy for North American direct lending. Private credit has grown over time, so it has experienced fewer shocks at its current size. Yet we see structural features of private credit supporting similar or lower loss rates, including granular credit selection and the long-term partnership private lenders can provide. The latter can encourage borrowers to proactively seek amendments and stave off defaults. Another key feature: seniority in the capital structure. The CDLI index reflects the shift, over time, to private credit becoming typically more senior and less subordinated, that is, moving up the pecking order for getting paid back.

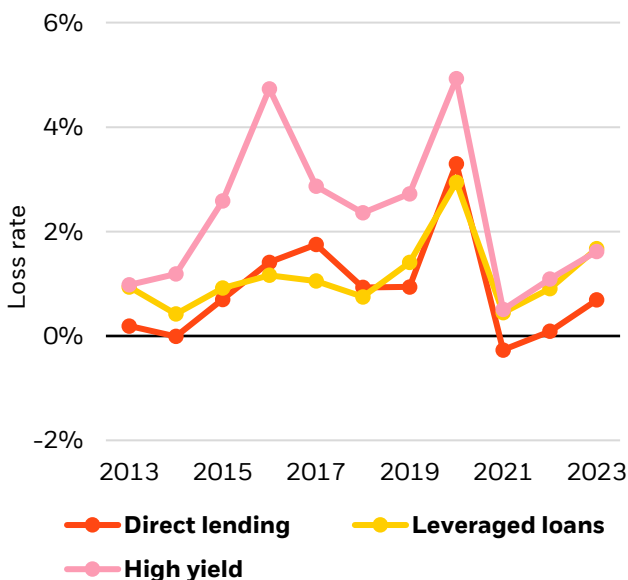
Even with similar or lower loss rates, private credit has offered a sizable yield premium relative to public markets. The average yield was about 400 basis points, or more, on average above comparable public market peers when comparing major U.S. high yield and leveraged loan indexes over the last couple decades. See the chart on the right. We expect that yield gap to be reinforced by greater borrower demand.

We see some element of this excess yield over public markets reflecting a “middle market” premium, which is the extra compensation lenders require for extending financing to small- or mid-sized companies that may not be able to easily access public markets. The excess yield over public markets also reflects compensation for bearing illiquidity risk. Unlike public market exposures, private credit is not easily tradeable and early sales can incur capital losses in such markets. This is one of the reasons it may not be suitable for all investors. It is a long-term investment for those able to meet their liquidity needs from other parts of their portfolio. Yet for investors with appropriate liquidity management, we think private credit offers potential opportunities to harvest the premium.

Ongoing demand from borrowers, consequent better pricing power, and seniority in the capital structure – alongside lower or comparable loss rates with public peers – make private credit more appealing to us over strategic, or long-term, investment horizons.

## Comparable losses

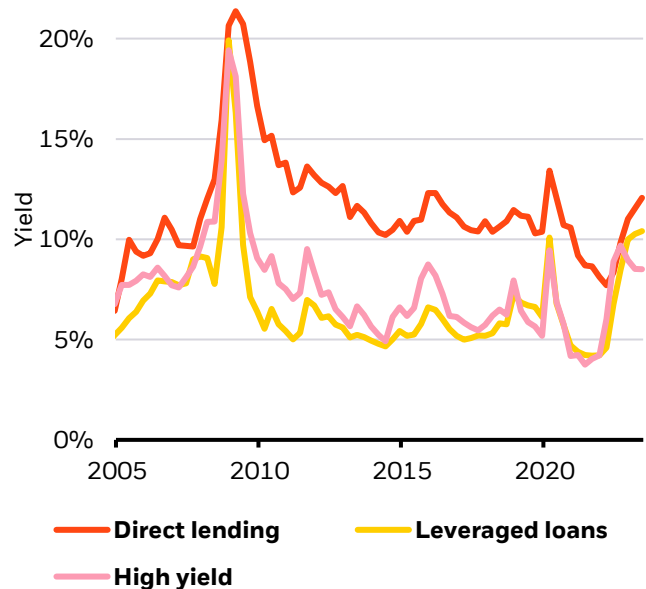
Historical loss rates, 2013-2023



Past performance is not a reliable indicator of current or future results. Index returns do not account for fees. It is not possible to invest directly in an index. Source: BlackRock Investment Institute with data from Cliffwater and Moody's, October 2023. Notes: The chart shows realized losses in the Cliffwater Direct Lending Index (CDLI) (orange line). A negative loss rate for the CDLI indicates a realized gain, which can be driven by an investment exit or gain on a warrant, a type of derivative that gives the holder the right to buy underlying stock. The other lines show U.S. dollar loss rates for high yield credit (pink) assuming a 40% recovery rate and for leveraged loans (yellow) assuming 60% to arrive at a loss given default, using Moody's default data as of June 30, 2023, the latest CDLI loss data.

## Wider range of yields

Quarter-end index yields, 2005-2023



Past performance is not a reliable indicator of current or future results. Index returns do not account for fees. It is not possible to invest directly in an index. Source: BlackRock Investment Institute, Cliffwater, Bloomberg, Pitchbook LCD, Morningstar/LSTA, October 2023. Notes: The chart shows quarter-end yields, data to June 30, 2023. Direct lending is based on the CDLI 3-year takeout yield. High yield is based on the Bloomberg USD HY Corporate Bond Index yield to worst. Leveraged loans based on Morningstar/LSTA Leveraged Loan Index yield to maturity.



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