

CAPITAL PARTNERS

Expanding Horizons in U.S. Nonbank Lending

By: Neil Hohmann, Ph.D., with Thomas Brennan, CFA; John Ackler, CFA; Timothy Rourke, CFA, CAIA; Chris Ling; Vaidas Nutautas; and Anthony Sylvester, CFA

The U.S. has the most dynamic financial system and capital markets in the developed world. Borrowers and lenders can access and extend credit through plentiful bank and capital market channels. The Global Financial Crisis (GFC) and its legislative repercussions curtailed banks' risk-taking activities. Nonbank lenders (NBL) stepped into the vacuum, growing and evolving to maintain the credit creation vital to consumer and economic health.

NBL institutions broaden the availability of credit while diversifying risk across the financial system. Derided at times as the "shadow banking system," today these lenders are an integral source of credit rivaling the traditional banking system. Lenders have excelled in creating novel products and efficiencies for borrowers – through capital markets, securitization, and investment and fund structures – that also meet private investors' appetite for higher income with capital preservation.

Regulators and investors alike acknowledge the sizable role that NBL plays in providing credit to segments of the U.S. economy not well served by traditional commercial banks. In his July testimony to the Senate, the Federal Reserve (the Fed) Chairman Jerome Powell noted as one of the U.S. economy's two fundamental strengths "...a highly developed ecosystem of financing sources. Banks are really not set up for that."¹

Yet as its economic importance grows, much of the NBL sector remains poorly understood and sparsely invested, offering investors attractive compensation amidst some unfamiliar risks. Our objectives for this paper are:

- Explain the rise of the \$17 trillion NBL sector over the past two decades
- Demystify NBL and its lending segments
- Acquaint investors with the more attractive direct investment opportunities
- Outline a prudent framework for investing in opportunities emerging from the growth of NBL
- Help match these investments to different classes of investor

¹ The Semiannual Monetary Policy Report to the Congress, July 9, 2024.

The anatomy of the nonbank ecosystem

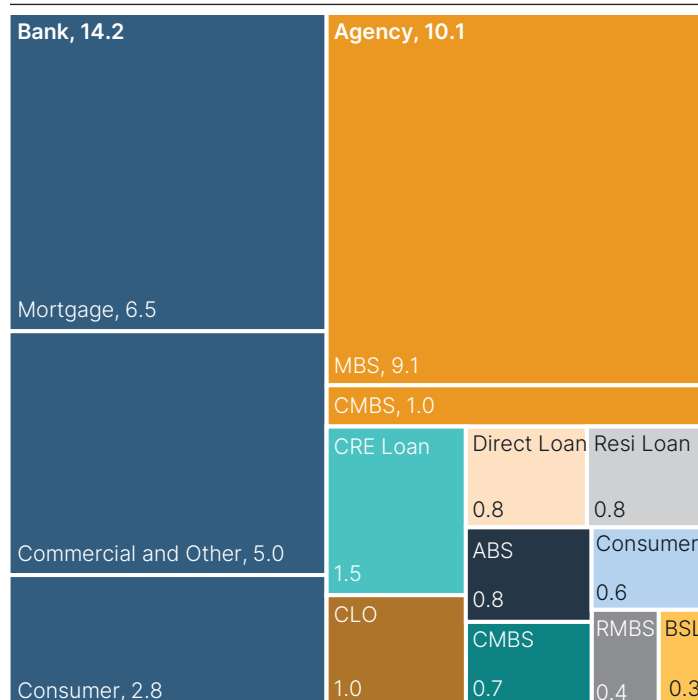
There are about \$31 trillion in loans outstanding in the U.S., based on the U.S. Financial Accounts kept by the Fed.² For perspective, there are \$28 trillion of U.S. Treasuries and \$11 trillion of U.S. corporate bonds outstanding.

U.S. loans – defined by their holder at risk – can be split into U.S. depositories (banks) and NBL. NBL, in turn, is split between government-sponsored enterprises (GSEs, or agencies) and securitization trusts, financial companies, and funds that hold the rest (nonagency, collectively). Exhibit 1 reveals that the \$17 trillion in outstanding NBL today (agency and nonagency) eclipses the \$14 trillion in loans held by U.S. banks.

Another way to segment U.S. lending is by loan type. Residential and commercial mortgages (i.e., loans secured by real estate) are the largest, amounting to \$20 trillion. Commercial lending (i.e., recourse loans to U.S. companies) is \$7.5 trillion. Consumer and other lending sums to \$3.5 trillion.

Bank and agency lending are public, prominent in

Exhibit 1: U.S. loans by holder (\$ trillion) – total \$31 trillion



Source: Federal Reserve, SIFMA, J.P. Morgan

Data as of December 31, 2023

* Excludes government, interbank, and broker/dealer lending.

Breaking down the different types of nonagency lenders and investment vehicles

- **Commercial mortgages** (commercial mortgage-backed securities, or CMBS) are the largest nonagency loan type (\$2.2 trillion). They're held in roughly even measure by insurers; CMBS vehicles; and real estate investment trusts (REITs), finance companies, and others. Nonagency residential mortgage-backed securities (RMBS) (\$1.2 trillion) are held rather evenly among nonagency RMBS trusts; REITs and finance companies; and other holders.
- **Nonbank commercial loans** (\$2 trillion) fall into two types:
 - **Bank-syndicated loans (BSL)**, or leveraged loans, are agented by large commercial banks to high-yield borrowers that typically have \$100 million or greater EBITDA. BSL are rated and generally liquid. BSL are held evenly by banks (~\$1 trillion) and nonbanks (~1.2 trillion), with the latter predominantly in collateralized loan obligations (CLOs) but also in mutual funds and other investment vehicles.
 - **Direct loans**, by contrast, are not publicly rated and mostly by contrast, are not publicly rated and mostly illiquid. They are originated mostly to firms below \$100 million EBITDA. Direct loan holdings have accumulated quickly in business development companies (BDCs), which now hold as much as private funds and other financial companies, with the remainder held in CLO and asset-backed securities (ABS) securitization trusts.
- **Consumer and other loans** are the most fragmented of NBL types. More than 30 different varieties of specialized lending are held across thousands of ABS vehicles. Loans are held on balance sheets of a dizzying array of financial companies (with the captive lenders of the large auto manufacturers prominent among them).

A top-down view like this of nonagency loan types and holders provides clarity to what can otherwise seem like a daunting collection of acronyms and strange vehicles that deter participation.

² As of 12/31/2023. Excludes U.S. government loans, interbank lending, broker-dealer financing, and offshore loans.

markets, and familiar. By contrast, the \$7 trillion piece of nonagency lending – represented by the boxes in the lower right of Exhibit 1 – are the opposite. Non-agency lending encompasses a complex mix of lenders, is largely private, and is mostly absent from the major bond and equity indices. This massive, unfamiliar, and convoluted nonagency loan market is home to some of the best value in investing, in our opinion.

The entire NBL sector makes more sense when it's seen as a natural sorting of \$17 trillion in nonbank loans into the various types of holders and vehicles that can provide their borrowers with a swift, efficient, and low-cost solution.

Why is the NBL landscape so varied?

The primary catalyst for the varied NBL landscape is the federal government, through legislation and regulation. Implied government support for the GSEs and consequent low financing costs explain the dominance of the agency mortgage-backed securitization trusts (agency mortgage-backed securities [MBS]) in single-family and multifamily residential mortgages. REITs and BDC legislation also encouraged the growth

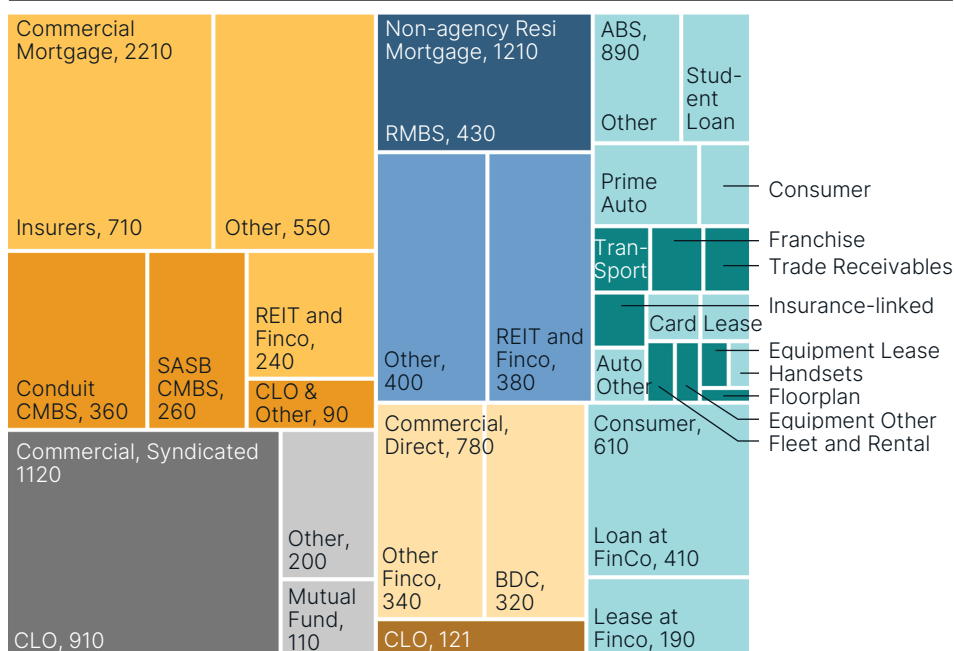
of tax-efficient public vehicles for mortgage and commercial loans, respectively – you now find the bulk of nonagency multifamily mortgages in levered REIT vehicles and more than half of direct loans in BDCs.

Dodd-Frank legislation, interagency guidance on leveraged lending, required capital boosts, and liquidity requirements have all shifted banks away from lending to leveraged and smaller companies and below-super-prime borrowers. Hence the prominence and growth of independent finance companies, and their related BDC, CLO, and ABS financing sources, over the last 15 years.

Another change agent is the dynamism and vast capital of the private equity (PE) and private credit ecosystem, which finances not just the borrowers marginalized by the banks but also competes directly for the larger loans and prime borrowers that banks target. The pace of business and structural development in privates is far more rapid than at the utility-like banks, suggesting privates' outsized growth and competitive pressure may continue, particularly as investors discover value in direct private opportunities.

A final force is the continued evolution of securitization as both financing source and investment, along with its supporting legal framework. Like any technology, the structural safeguards and flexibility afforded by securitizations have evolved and improved through successive market tests like the GFC and the COVID-19 pandemic. The bankruptcy-remoteness of securitization trusts continues to be definitively affirmed by U.S. courts. Application of ABS, CMBS, CLOs, and other securitizations should continue to outpace broader lending market growth.

Exhibit 2: U.S. private lending by holder (\$ billion) – total \$7 trillion



Source: Federal Reserve, SIFMA, J.P. Morgan
Data as of December 31, 2023

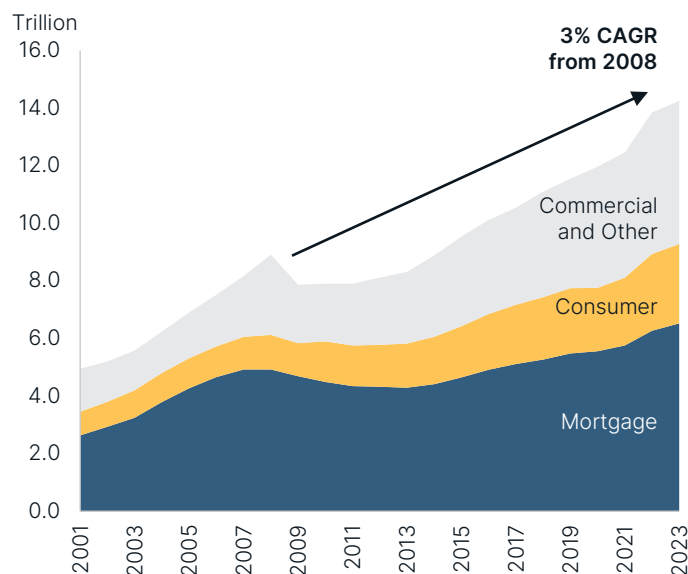
* Excludes government, U.S. depository, GSE, and broker/dealer lending.

The evolution of the nonbank ecosystem

It's useful to chart not just the current landscape of NBL but also its

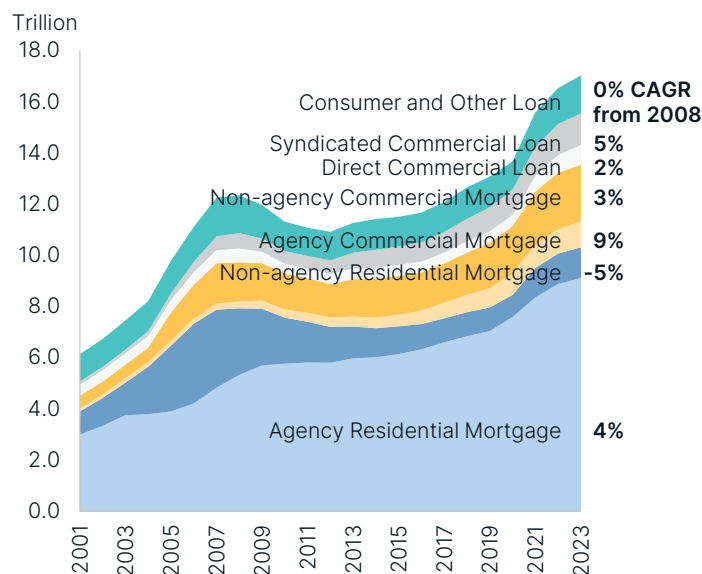
Exhibit 3: Growth of U.S. bank and agency lending, 2001-2024

(a) Bank Lending (U.S. Depositories)



Source: Federal Reserve

(b) Nonbank Lending



Source: Federal Reserve, SIFMA, J.P. Morgan, BBH Research

evolution over the last 20 years. Oddly, annual growth in the “dynamic” nonbank sector (2% annual) has trailed bank lending (3%) since the GFC. Hence, each sector is about the same size as it was at the end of 2008, adjusting for inflation.

The stall in bank lending growth is understandable. Since the early 1990s, consolidation has magnified average bank size. A greater share of a typical bank’s business is focused today on large commercial customers and higher quality consumer borrowers than in the past. Post-GFC regulation forced banks to de-lever, exit their higher leverage loans, and hold more liquid securities at the expense of loans. Large systemically important banks are capped in size, while the deposit stability advantage of regional and smaller banks has recently come into question.

The slower growth of NBL since the GFC is more surprising. It’s a compositional effect from the burst of the early 2000s bubble in nonagency mortgage lending, which had reached \$3 trillion in size by 2008. As housing prices declined, mortgage performance deteriorated, new origination shut down, and the sector cratered to its \$1 trillion size today.

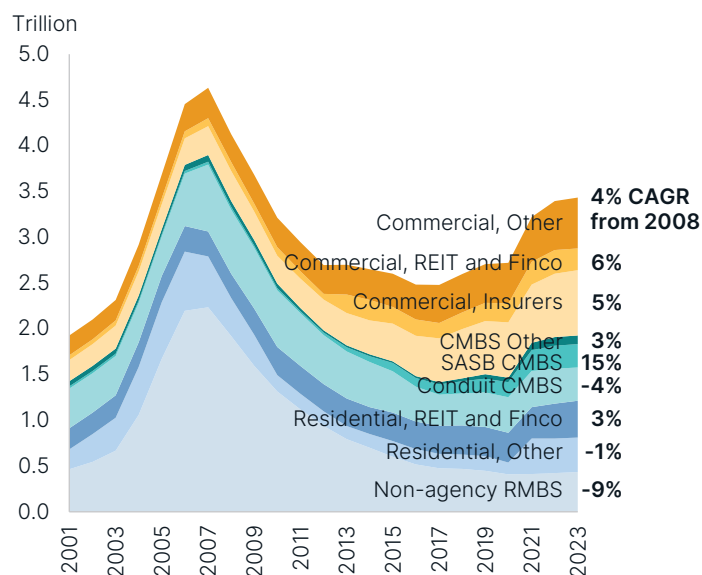
Remove residential mortgages and one finds that the

other segments of NBL have grown like or faster than bank loans. NBL growth has hastened particularly in the last five years: agency pools by 6% annually, nonagency commercial mortgages by 6%, syndicated commercial lending by 7%, direct commercial lending by 11%, and by 10% or more in many specialized lending segments commonly financed with ABS (e.g., consumer installment, auto and equipment lease, franchise, data centers and fiber, venture and recurring revenue debt, rental and fleet, and other specialized segments).

NBLs have stepped in where banks have retreated, particularly in middle-market commercial lending, personal lending to below-super-prime borrowers, and specialized lending. New required disclosures have shrunk the number of U.S. exchange-listed companies. In reaction, new lending models are being pioneered by private lenders to be more flexible in underwriting. PE and credit providers are filling the gap left by the banks and exchanges.

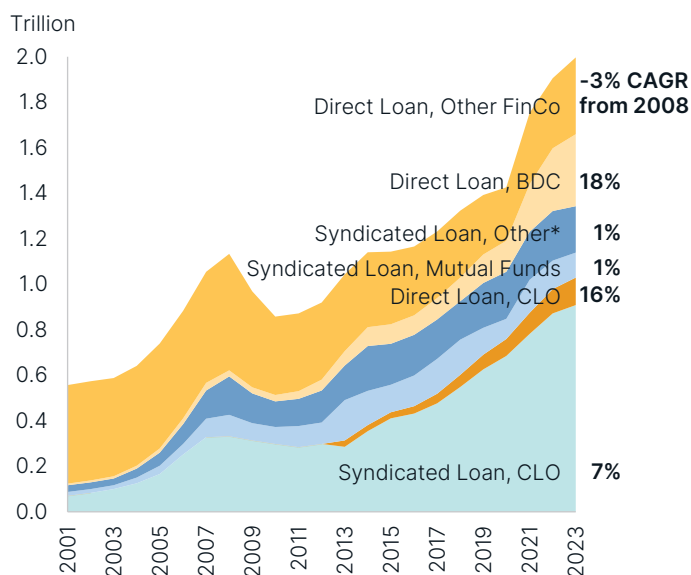
Charting the evolution of NBL over the last two decades offers additional insight. Exhibit 3(a) underscores the flat growth of bank lending, with a meagre nominal CAGR of just 3% since the GFC. In contrast, as seen in Exhibit 3(b), much of the NBL sector has grown at swifter annualized rates. These very broad NBL cate-

Exhibit 4: Growth and subsequent decline of nonagency mortgage lending, 2001-2024



Source: Federal Reserve, SIFMA, J.P. Morgan, BBH Research

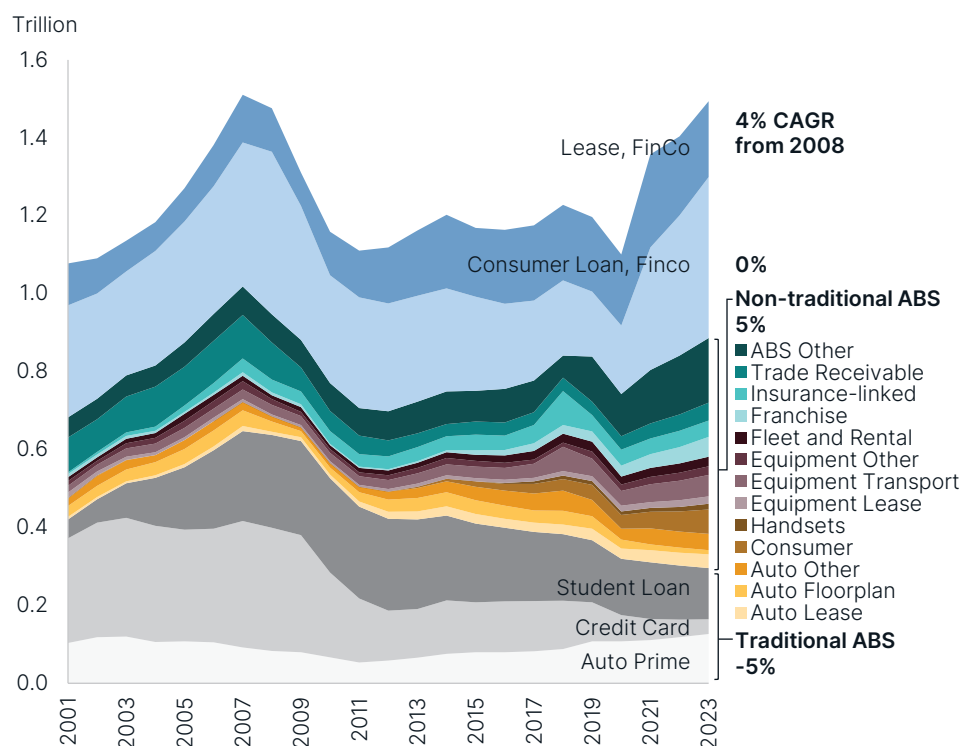
Exhibit 5: Growth of nonbank commercial lending, 2001-2024



Source: Federal Reserve, SIFMA, J.P. Morgan, BBH Research

* Holdings of nonprofits, brokers and dealers, insurers, and others, excludes offshore institutions.

Exhibit 6: Growth of nonbank consumer and other lending, 2001-2024



Source: Federal Reserve, SIFMA, J.P. Morgan, BBH Research

gories conceal even more dynamic growth in certain segments of the NBL market, which we explore below.

Nonagency residential mortgage lending is a shadow of its former size (see blue in Exhibit 4), but some new supply has been available in less-traditional investments, such as agency risk transfer, single family rental debt, and nonqualifying mortgages. Swifter growth is evident in nontraditional commercial mortgage investments, such as single-asset, single-borrower (SASB) CMBS and commercial mortgage REITs issuing commercial real estate (CRE) CLOs.

In commercial lending (see Exhibit 5), the swift 11% growth of direct commercial lending over the last five years has been financed primarily through BDCs – which have grown at a remarkable 25% rate – as well as through middle-market

CLOs (MM CLOs), with 18% growth. Funds and finance companies have basically been static over that period. Syndicated loan market growth has also been swift and absorbed almost entirely in CLOs, as mutual fund holdings have declined.

Moderate overall growth in U.S. consumer and other lending (see Exhibit 6) masks the rapid rise of more specialized lending segments against the decline of traditional lending channels. Bank accounting rule changes have effectively eliminated the large credit card ABS market. Direct federal lending to students has similarly diminished student loan ABS. Growth has been dynamic in the rest: ABS segments catering to nontraditional asset types including triple net lease, transportation, data centers and fiber, auto and equipment lease, smartphone handset financing, venture and recurring revenue debt, fund financing, and many others.

The balance sheet growth of these same specialized lenders outpaced the moderate overall growth and supported further ABS financings.

A prudent approach to loan-based investment

Investing against loan portfolios would seem entirely different than corporate and municipal investment. Based on 150 years of credit investing at BBH, we find that certain investing principles hold true for all types of debt:

- A priority of preserving investors' capital
- The necessity of thorough fundamental position-level research
- Assurance of durability to worst-case conceivable macroeconomic and industry stress
- Ceaseless risk-adjusted value focus in longer-horizon context
- Fulllest access to and transparency with issuers' senior management

Alongside proper analysis, abundant sourcing (i.e., having deep issuer relationships and the widest channels of origination) is likewise critical to investment success.

Capital preservation focus

For loan-related investing, preserving capital means avoiding the risk of credit loss by:

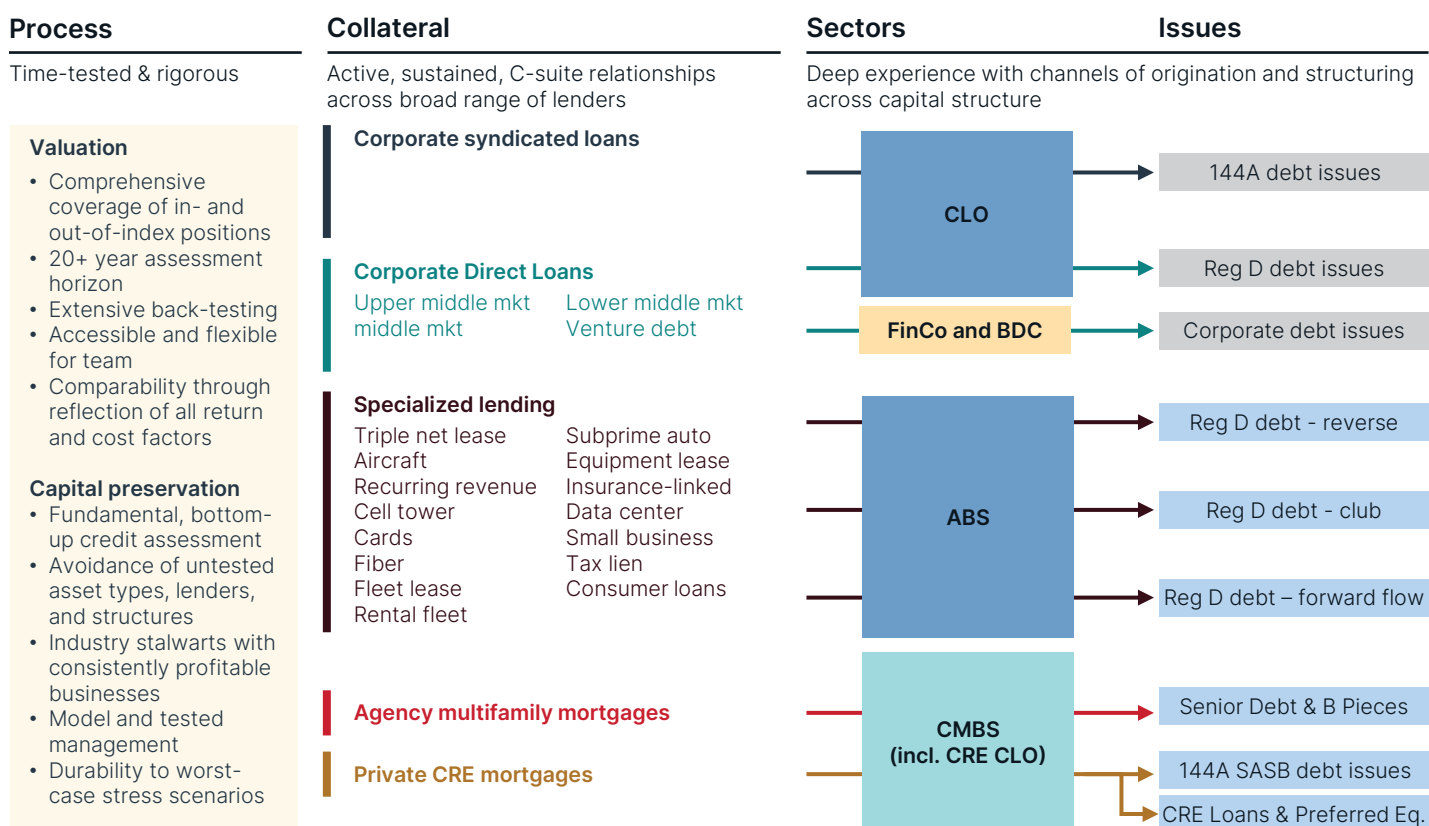
- Sticking to decades-established lending products with stable observed industry loss experience through crisis periods (e.g., the 1980s recession, the 2000s dot-com bubble, the GFC, the commodity collapse of 2014, and the COVID-19 pandemic)
- Investing only in loan and lease pools of profitable well-established lenders with time-tested management teams, stable underwriting criteria over time, and observable performance data extending back through periods of extreme stress
- Requiring "skin in the game," i.e., investing only against pools where the lender has a substantial, pivotal first-loss position, and aligning incentives appropriately
- Investing with lenders where a strong channel of communication and trust exists with the management C-suite
- Thoroughly reviewing transaction documents and structural safeguards
- Seeking to assure that investors' capital is preserved in the most severe conceivable macro and industry stress³

These strict criteria may seem to rule out a swath of attractive lending opportunities. Likewise, a great deal of industry experience and time-consuming research is necessary to implement them; however, examples prove that deviating from any one of these may result in substantial loss.

A common alternative approach to these criteria is simple breakeven analysis. Position-level structural safeguards and credit enhancement would seem to protect an investment at, say, two times or three times modeled base case loss. Little analysis of asset type, lender, or pool need be performed. We strongly caution against this narrow approach. In our approach, elevated risk of capital loss isn't acceptable in credit investing.

³ A typical BBH stress is to 1930s Great Depression-level conditions, including prolonged 25% unemployment

Exhibit 7: Keys to successful investment in NBL



While principles for investing may be common across debt types, the process for assuring capital preservation in loan-based investments is different in some ways. Corporate analysts assess a company's ability to generate cash flow to repay its debt, while asset-based investors ensure that pools of loan assets (i.e., the collateral) generate sufficient cash flow to comfortably meet debt service or expected return targets. Cash flow durability is assessed using deal structure analytics tools and applying proprietary models to stress-test cash flows across economic stress scenarios. A key advantage to investing in these markets is that the assets are typically held in a bankruptcy-remote vehicle, which can shield from many external risks.

The importance of a strong lender sponsor is often under-appreciated in the credit underwriting process. Partnering with trusted and long-established sponsors of securitizations historically leads to better investment outcomes. When sponsors retain an economic stake, it aligns their interests with investors and provides a strong incentive to maintain collateral performance. Working with long-established sponsors provides an

added benefit of access to comprehensive data sets, important in due diligence. A thorough review of transaction documents is necessary to ensure that cash flows are distributed appropriately and fairly across the capital structure. Finally, it is important to have structural safeguards within the investment structure, so that as a collateral pool may begin to underperform relative to expectations, mechanisms can redirect cash flows as needed to ensure equitable distribution.

Valuation focus

Having narrowed investments to those highly likely to return capital, a rigorous, consistent valuation framework is important to order and size positions for portfolio construction. Based on long experience and extensive back-testing, we believe a suitable valuation approach should be:

- **Comprehensive:** It is important that a valuation framework encompasses and accurately treats the entire universe of lending-related opportunities. Given its vast size and complexity, this is a challenging proposition that requires familiarity with and

access to the dozens of segments in this market, as well as historical experience with pricing metrics and product evolution. An effective framework should include not just outstanding index- and exchange-listed positions, but also new issue, over the counter, private, and restructured trades. For scope, our quantitative team values over 9,000 potential positions daily.

- **Consistent:** Arguably the greatest challenge in valuing loan-backed investments is appropriate comparison across the medley of disparate investment types. Experience and ample data are needed to adapt each investment type to the important metrics (see below) that allow common comparison. Care must also be taken in defining the ultimate value measure on which to order and size (for example, we use cost-adjusted one-year expected return over Treasuries).
- **Inclusive:** Making investments on simple value metrics can be a particular problem in the lending space, exposing investors to misleading compensation or omitted costs. For example, a CLO spread margin can paint too rosy a picture of expected performance. Long experience suggests that a useful framework should at the least reflect carry, potential price and spread change, and roll-down on the return side; and expected credit loss, liquidity, optionality, volatility, and effective tax rate on the cost side.
- **Focused on the long view:** Our experience suggests that investing based on relative value across opportunities at a given point in time is misleading and dangerous. While no evaluation horizon is perfect, our back-testing and performance suggests it's effective to evaluate current compensation against long-term 25-year average levels and volatility for securities at the same industry/asset, same rating, and similar maturities. Although simple in concept, implementing this requires a skilled quantitative team analyzing constituent-level index data over several decades.
- **Rigorously applied:** An effective framework should be the key tool in a team's investment process, applied without exception, providing a common viewpoint among portfolio managers (PMs), analysts, and traders. Buy and sell decisions should follow

the valuation metric and positions should be sized in portfolios accordingly.

- **Handy:** For effective use, valuation results should be at hand through a simple yet versatile interface. To accommodate secondary and new issue loans, valuing novel positions and variants should be quick and easy. A dedicated quantitative team needs to continually adapt the framework for developments in markets, new investment types, and recent market data.

Without applying an appropriate valuation framework, investment in lending-related opportunities is likely to be uneven and volatile at best, and costly at worst.

Abundant sourcing

While capital preservation and valuation focus are necessary for investment success, access to markets and origination capability are key to exploiting value. Effective origination of loan-based investments requires strong direct relationships with the senior management of hundreds of lenders – much more so than in corporate credit.

In loan-backed sectors, issuers are frequently private companies in specialized markets that seek and value direct investor relationships rather than rely on the dealers' broad syndication process. The investor set is smaller and more concentrated. Lenders are accordingly incentivized to understand their investor's individual appetites and conditions, and dealers are often asked to show issuance just to a club of investors rather than market widely. Seeing the range of opportunities is impossible without existing familiarity and relationships with the sizable issuer universe, a major barrier to inexperienced investors.

Nor do the largest investors generally have an advantage. To the contrary, smaller deal sizes below \$500 million offer them limited opportunity. Issuers are more in control of syndication and tend to allocate favorably to consistent investors, not be directed by banks to the largest bond buyers, as in corporate markets. Frequent issuers may still have brought just a dozen or fewer transactions to market, reinforcing their loyalty to their earliest and most consistent investors. These investors typically have earliest notice of new transactions, greater opportunity to participate in private deals via

reverse inquiry, and more encouragement to structure private transactions and whole loan purchases.

Dealer channels: The vast bulk of loan-related investments, both more and less traditional, are issued and traded through commercial bank dealers. Given the specialized nature of investing in nonagency mortgage, commercial loan, and consumer opportunities, a reputation for investing and personal experience with the dealer, banking, and syndication desks is important. Frequent investors' opinions of the banks are important to issuers, reinforcing their influence.

In the more traditional agency MBS, cars and cards ABS, conduit CMBS, and BSL CLO markets, issuers' programs may be more established and investor numbers higher, lessening the importance of an investor's historical presence in the market. In the less-traditional public and private markets, existing relationships with dealers and issuers are essential to seeing opportunities and allocations. Bid-side liquidity is often decent, but given the importance of insurers and other buy-to-hold investors in many less-traditional loan-backed investments, secondary availability is low, which further raises the importance of issuer relationships in the primary issuance market.

Private channels: There are multiple approaches to accessing private opportunities:

- A reverse inquiry, or directly engaging with a lender or asset originator to shape the asset pool and structure the transaction
- Working with a financial intermediary, such as an investment bank or broker-dealer, which syndicates a private investment to either a single investor or a small club of investors
- Here, the assets backing the private investment can come directly from bank's balance sheet or from the lender with whom they have the relationship
- A forward-flow agreement, where an asset originator agrees to provide a predetermined number of future originations over a specified period to an investor

While there are several ways to source and structure private investments, having strong relationships with

key players in the market is essential. Such relationships generally develop over time by teaming up on multiple transactions.

A major advantage of private investments vs. a public offering for buyers and sellers is the ability to customize and streamline the process. Familiarity between parties involved can create trust and ease the process.

Private debt investors should be mindful of the structural safeguards, and conduct thorough reviews of underwriting standards on the asset pool, as some lenders may sacrifice underwriting quality to expedite deal closings. Caution is warranted in private transactions, where alternative managers are securing the loan assets of an owned or affiliated documentation and support.

Investment opportunities in nonbank lending

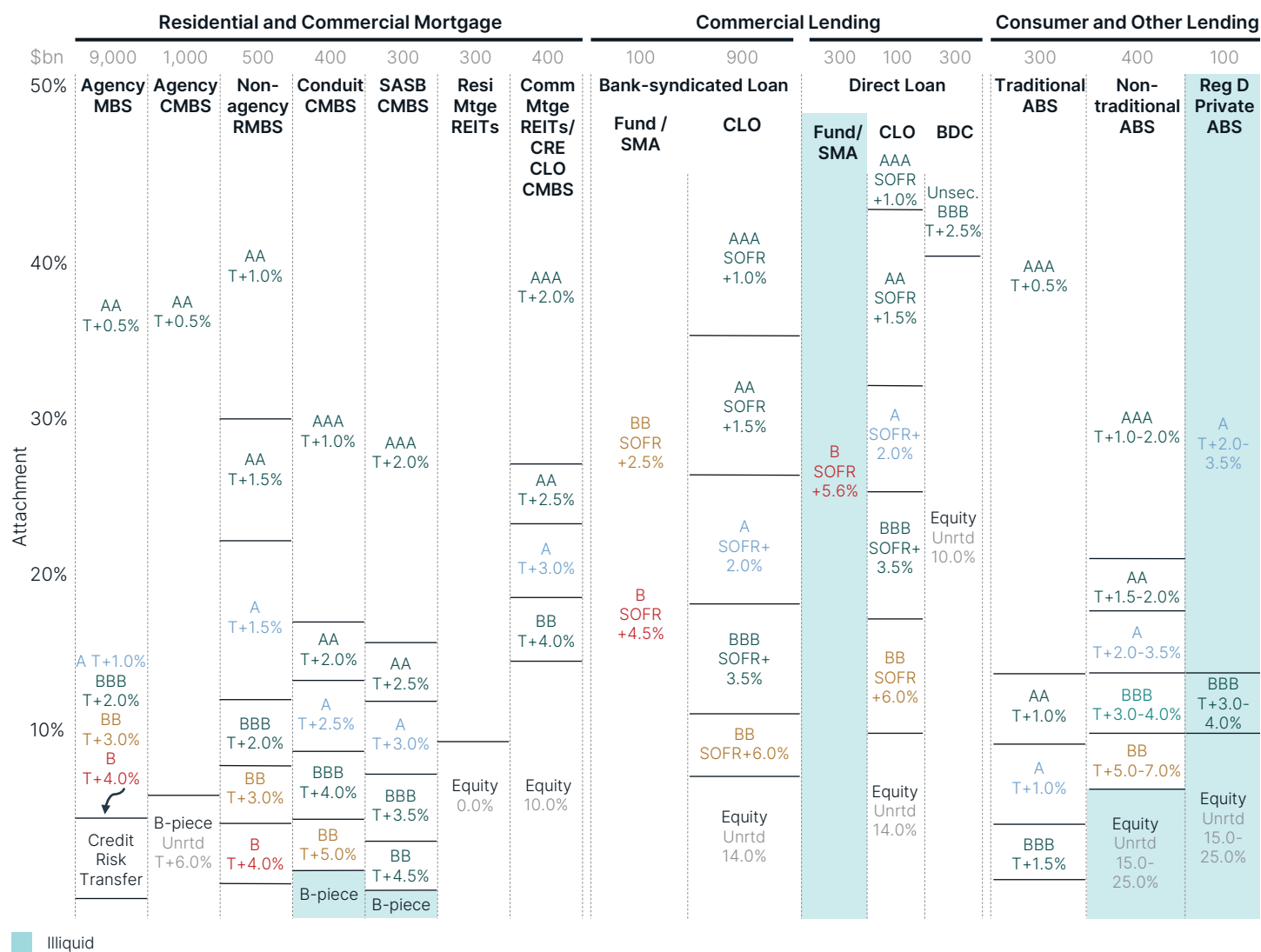
The NBL landscape is vast and varied. Exhibit 8 represents a tapestry of the richness and complexity of investment opportunities in the \$17 trillion NBL market. As we describe the opportunity set in this article it may be helpful to refer back to this landscape.

First, at the top, loan types are divided into three sections: residential and commercial mortgage, commercial lending, and consumer and other lending. Within each loan type, we further divide the pool into different segments and more common financing vehicles labeled in black text. For instance, in commercial lending, we have unlevered BSL funds/separately managed accounts (SMAs), BSL CLOs, unlevered direct loan fund/SMAs, direct loan (middle-market) CLOs, and BDC direct loans. The size of each segment is given in blue text – it's not to scale, but provides a reminder of relative outstanding size.

The vertical axis is to scale and represents where each investment type "attaches" in seniority within a pool of loans of that type – for instance, BSL CLO equity typically represents the most junior 14% of a BSL loan pool, while the senior AAA-rated represents the 65% senior piece of the pool and benefits from credit support of the roughly 35% of pool investments that are junior to it.

Ratings for each investment type are indicated in

Exhibit 8: Direct investment opportunities in NBL



Source: BBH (observed market levels), as of March 31, 2025

colors common to that rating across loan segments. In the same color, a typical approximate average compensation level in normal markets is given for each investment type, either as total return, like 14%, or as a spread to a benchmark rate, like T+3% (i.e., Treasuries + 300 basis points [bps]).⁴ Note that expected investor compensation here is provided net of expected credit, option, and management fee costs.

Finally, generally illiquid investment types are indicated by a light blue dotting. Next, we review the features and compensation of the plethora of investment types.

Residential mortgages

Residential mortgages (loans secured by single-family houses or multifamily homes) are the largest type of lending in the U.S., representing more than \$4 trillion of bank lending and the majority (\$11 trillion) of NBL. Nonbank residential mortgages fall into two segments: agency and nonagency. The issuance of agency MBS, guaranteed by one of three government entities (Ginnie Mae, Freddie Mac, and Fannie Mae), dates back to the 1970s and dominates the residential lending landscape.

⁴ One basis point is equal to 0.01%.

Agency

Agency mortgages: Securitized loan “pools” carry minimal credit risk due to backing of the U.S. government. Investors in these high-investment grade bonds earn option-adjusted yields that are typically 0.5% or less over Treasury yields for bearing interest rate and prepayment risk.

Freddie B-Pieces: Over the past 15 years, the agencies have encouraged private investors to take nonguaranteed junior risk participations in the performance of agency multifamily mortgage pools. For example, since 2009 expert investors have taken the unrated junior first-loss “B-piece” of Freddie multifamily loan securitizations, a high-quality loan type, at spreads typically 5% or more over Treasuries, in exchange for bearing historically ultra-low principal impairment risk in these pools.

Agency credit risk transfer (CRT): More recently, Fannie and Freddie have offered private investors “credit risk transfer” participations at low attachment points (1% to 3%) within agency MBS pools. Credit ratings can range between B and A. Notes offer investors spreads of 1% to 4% over Treasuries for assuming credit, prepayment, and considerable price volatility risk in these thin junior tranches.

Nonagency

Nonagency mortgage loans typically do not conform with underwriting standards of the three government agencies due to higher loan size, limited income documentation, unique loan structures, or nonperforming status. Nonagency mortgages are held by three roughly similar-sized groups: nonagency RMBS pools, REITs and finance companies, and other holders (primarily governments).

Nonagency RMBS: Like agency MBS, RMBS also carry prepayment and interest rate risk, but further expose investors to credit risk in the absence of the agency guarantee. Transactions are structured into tranches, with ratings ranging from AAA to as low as B. Given severe performance through the GFC, the once-massive \$2.5 trillion nonagency market has shrunk to just half a trillion dollars, consisting primarily of nonqualifying and reperforming loan pools.

The lower-rated tranches of these capital structures are typically highly leveraged, with credit enhancement levels as low as 0.5%. Spreads to investors for investment grade tranches range from 1% to 2% over Treasuries in this relatively crowded, contracting segment of the nonbank loan market.

REITs and finance companies: Agency mortgage REITs are highly levered, volatile investment vehicles with poor historical returns for equity investors over the last decade and a half. Nonagency mortgage REITs focused on multifamily lending have exhibited more stable performance. These REITs are typically financed via investment grade-rated CMBS (or CRE CLO) structures with spreads ranging between 2% and 4% over Treasuries. Equity for these REITs can be available in private or public form with expected returns between 8% to 10%, albeit with elevated levels of volatility.

Commercial mortgages

Investment opportunities within commercial mortgages can be split into CMBS (securitizations of commercial loans), whole mortgages, mortgage REITs, and other debt fund vehicles.

Nonagency CMBS: Private-label CMBS are rated securitization notes backed by pools of 30 to 100 mortgage loans (more traditional “conduit” CMBS) or backed by a single mortgage loan on one high-quality property or portfolio of properties (less-traditional SASB CMBS). The CMBS investor base is more limited, and given persisting concerns and stigma associated with CRE, the compensation available for rated notes can be highly attractive to investment grade investors, with senior AAA-rated conduit spreads ranging over 1% and senior AAA SASB from 1.5% to 2.5%. A-rated and BBB-rated tranches typically carry compelling spreads of between 2.5% to 5.5%, offering a substantial lift over similarly rated credit. Callability and extension risk is limited, but downgrade and write-down risk can be meaningful, particularly in conduit CMBS rated BBB and below.

SASB CMBS credit impairment risk is more idiosyncratic given the single-borrower profile. Weaker secondary market or concentrated industry exposure; an occasionally stressed property type, such as the current office environment; or deterioration in sponsor quality and commitment may present credit challenges to SASB trusts. In our experience, exploiting the value

in investment grade CMBS, particularly in more junior tranches, requires deep CRE sector knowledge and a conservative approach.

The junior-most residual tranche beneath conduit CMBS transaction, called a B-piece, is unrated and bears first-loss risk from every loan in the pool. Expected unlevered returns of 12% to 15% in B-pieces are subject to considerable volatility based on the performance of the poorest loans in a conduit pool and are typically purchased only by investors performing the deepest loan-level due diligence.

Whole mortgage loans: Given high commercial mortgage exposures, COVID-19-related property stresses, and a rapid rise in interest rates, regional banks have been forced to curb lending and shed some portfolio holdings at fire-sale prices. Insurance companies, on the other hand, have taken advantage to ramp up their presence in the commercial (\$700 billion) and residential (\$100 billion) whole loan mortgage, driven by both a doubling in annuity-linked products over the past five years and weakness at the regional banks. These mortgages tend to have long 10-year-plus tenors, are conservatively underwritten at 60% to 65% loan-to-value ratio (LTV), and offer compensation about 2% above Treasuries.

Commercial lending

Nonbank loans to corporations are a sizable \$2 trillion, a smaller size relative to the \$11 trillion corporate bond and \$5 trillion commercial and industrial (C&I) bank loan markets, but distinguished by below-investment grade ratings and elevated compensation vs. corporate bonds and bank loans. Nonbank corporate loans split naturally into public BSL to larger firms (\$1.2 trillion) and private direct loans (\$800 billion).

BSL: Below-investment grade floating-rate loans compose the corporate broadly syndicated loan market. These loans are liquid and typically have BB and B ratings that carry spreads averaging between 2.5% and 4.5% over the Secured Overnight Financing Rate (SOFR), respectively. Investors should decrement these spread levels for historical annual credit losses and option costs associated with the ready callability of loans. Loan indices also exhibit price and return volatility that are similar to high-yield bonds, particularly during risk market selloffs.

CLO: BSL are held directly at public mutual funds, private funds, banks, and insurers, but most are financed through and held in the collateral pools of CLOs. CLOs come in two flavors: the predominant BSL CLOs and the emerging MM CLOs. BSL CLO managers dynamically manage liquid BSL portfolios through primary and secondary market activity. The leading CLO managers have long histories of successful underwriting through market cycles and tend to retain their CLOs' equity. Spreads available in AAA to A tranches can range from 1% to 2%, while mezzanine BBB to BB tranches can return 4% to 6% over SOFR.

Like BSL, though, CLO debt investors should haircut return expectations given the high callability and price volatility of CLOs. CLO equity investors, on the other hand, gain the option value and collect reasonably stable cash flows, with typical internal rates of return (IRRs) of 14% to 20% through market cycles. Investors should be mindful, however, of the high leverage and extreme price swings in equity positions.

Private direct loans

Private corporate lending has witnessed rapid growth in the past 10 years and enormous attention as a less liquid, lower volatility, and potentially higher return credit alternative to traditional high-yield investments. "Direct lending" and "private credit" are commonly used descriptors. Direct lending typically describes senior secured loans to middle-market companies with EBITDA of less than \$200 million. Private credit is more expansive, typically capturing private corporate lending more broadly (direct lending, second lien and mezzanine, distressed debt, and special situations) and sometimes nonrecourse asset-based lending.

There's a wide range of borrower types, structures, and situations across these loans, but the most common middle-market senior-secured direct loan is from a single lender to a PE sponsor, covenanted, at 5% to 6% over SOFR. Investors in unlevered funds should expect to decrement expected return by approximately 1% for annual loan loss and another 1%-plus for management fees, as well as expect no liquidity – though volatility in marks is commensurately lower than for liquid BSL.

BDCs and private funds: It surprises many to learn that corporate direct lending as a market has grown only marginally from its \$500 billion size 20 years ago.

What's transformative is its migration off the balance sheets of large independent finance companies into private credit funds post-GFC, and further into booming BDCs over the past 10 years. (Remarkably, BDCs hold almost half of direct loans.) This parallels the shift of real estate assets in the 1990s into REITs (which, like BDCs, are a publicly registered transparent vehicle suited to exchange listings and retail investing).

BDCs mostly invest in floating-rate direct loans and are legally restricted to 2-to-1 debt leverage – although they typically carry a more-conservative 1-to-1 leverage. Net-levered expected equity returns for strong BDCs are about 10%. Publicly listed BDCs offer immediate liquidity with elevated price volatility, while private BDCs tend to offer quarterly redemption at book value with more muted price volatility.

BDC unsecured debt and MM CLOs: BDCs are typically financed in two ways:

- Bank facilities and unsecured corporate bonds
- MM CLOs in the capital markets

BDC debt has ballooned in tandem with the growth of the market and is less familiar – both are technicals that favor current investors. Unsecured bonds have stable BBB ratings, and five-year notes are available in size at 2% to 3% over Treasuries, with minimal credit risk and moderate price volatility. MM CLOs are structurally similar to BSL CLOs, yet favorable technicals allow spreads over SOFR that can be 1% to 2% higher than comparably rated BSL CLO, with less leverage, more muted price volatility, and good ratings stability.

Consumer and other lending and the ABS market

Over the past decade, investors have focused on corporate direct lending. However, nonbank consumer and other lending outstanding in the U.S. (at least \$1.5 trillion) is considerably larger. In addition, independent lender balance sheets have grown over the past five years at the same blistering pace (15% annually) as BDCs and MM CLOs, driven both by demand and a strengthened competitive margin as banks retreat. Large parts of the ABS market – public and private placement – grow at even faster rates. The disparate and unfamiliar nature of this lending shows as a dimmer landscape vs. the bright light shone on corporate and

mortgage lending (although this may be changing).

There are more than 30 distinct consumer and other lending segments: auto loan and lease, variants of equipment lease, small business, specialized commercial, insurance-linked, personal consumer loan, credit card, student loan, data center, fiber, cell tower, tax lien, net lease, solar, floorplan, handset, catastrophe risk, and more. Independent lenders are typically private companies in concentrated industries, longtime profitable stalwarts in their specialized segments that finance themselves privately with bank lines and ABS in the capital markets.

A good part of the challenge of investing in this market is just knowing what and where it is. Those investors with experience in this market and its rewards would likely prefer it just stay that way.

ABS

Though much less levered than banks, independent finance companies also naturally rely on access to dependable bank and capital markets debt financing. The primary financing is ABS, supplemented by bank warehouse lines. Approximately \$1 trillion in ABS is outstanding across more than 30 asset types – only a small fraction of which is visible in the bond indices. Although collateralized by plentiful asset types, ABS can be grouped into three categories:

- **Public and 144A traditional ABS (prime auto, credit card, and student loans):** These are larger in size (often over \$1 billion), have one or two dozen issuers and several dozen institutional investors, and are rated.
- **Public and 144A nontraditional ABS:** These are typically smaller (\$150 million to \$500 million) in size and have a half-dozen or so issuers per asset type and just one or two dozen insurance and money manager investors.
- **Private placement ABS:** These range across different asset types, structures, and sizes (\$100 million to more than \$2 billion), but all are Regulation D private placements with a small club of one to six insurer investors.

ABS can have appealing attributes to investors: exceptional carry, mostly investment grade ratings, minimal

default and downgrade history, minimal call and pre-payment risk, short rate and spread durations, deleveraging through amortization, a good bid from insurers, and low return volatility and beta⁵ to credit markets.

Traditional ABS, major-rated with more investors and shrinking or stable supply, offer attractive yields of 0.5% to 1.5% over Treasuries for AAA to BBB bonds. Nontraditional ABS, with highly favorable demand and supply technical, often offer outstanding yields of 1% to 4% for investment grade bonds. Below-investment grade BB tranches can be 5% to 7% over Treasuries. The unrated junior or residual tranches of these transactions, when they are available and in the most stable collateral types, promise some of the highest expected returns available in credit markets – 15% to 25% – with low mark-to-market volatility, albeit with little liquidity.

Purely private Regulation D-issued ABS were historically uncommon, limited to a small corner of the general accounts of a few large U.S. insurers alongside private placement corporates. However, these have recently surged as:

- Issuers expand their placement options
- Large alternatives managers finance their lender acquisitions by securitizing loan assets and placing that ABS with affiliated insurers
- Insurance investors purchase whole loan pools from issuers and structure and securitize them for their portfolios

Rosy assessments of this rapidly growing segment are common, and private ABS does offer issuers and managers significant flexibility beyond the usual dealer channels and structures. That said, investor caution is warranted. In our experience, returns on offer are similar or marginally higher to nontraditional ABS, but there is no liquidity. ABS terms for large acquisition financings can be friendlier to equity than bond buyers. Private deals offer significantly less documentation than 144A and public. Structural novelty is not typically a credit plus.

There are great opportunities available across the stack in many private ABS, as in nontraditional ABS, but

alignment of interest, proper structuring, and expertise are critical to assuring similar strong credit performance to the broader ABS market.

Why does the opportunity set in nonbank lending persist?

Given the attractive compensation on offer, one would expect nonagency loans to have a wider investor base, but this has not been the case. In many of the sectors discussed – for example, nontraditional ABS – prospective investors are faced with multiple barriers that limit entry to a subset of insurance companies and specialized managers. While the outstanding debt issuance of nontraditional ABS is large, at nearly \$1 trillion, the sector is fragmented among dozens of loan types originated by small and mid-sized issuers. Each issuer may come to market just a few times a year, and issuance size can be small, typically below \$500 million. All these create challenges to investors large and small.

To start, the breadth of nonagency loan and issuance type requires a larger team of experienced professionals to cover its fullest range of opportunities. Smaller investment managers are typically resource-constrained. Conversely, larger managers are often reluctant to develop specialized teams. The smaller and irregular nonagency issuance common from nontraditional ABS, CMBS, RMBS, and finance companies isn't material for larger firms requiring substantial issuance size and frequency to invest hundreds of billions or trillions of assets under management.

Other barriers tend to preserve the attractive yield spreads available in the nonagency space to a select investor set. First, issuers understand their target market to be sophisticated investors who are also qualified institutional buyers (QIBs). They typically privately placed their issuance under Rule 144A or Regulation D, forgoing public markets.

Furthermore, many loan-backed issues may carry just one or no credit rating, with that rating from a more specialized nationally recognized statistical rating organization (NRSRO), such as Kroll and Morningstar DBRS, rather than the major companies (Moody's,

⁵ Beta is a measure of a portfolio's sensitivity to market movements. The beta of the broader equity market, as measured by the S&P 500, is 1.00 (Source: Morningstar).

S&P, and Fitch). Next, given the smaller average issue size, most are excluded from common fixed income benchmarks, absents them from a growing universe of passive investors.

In addition, even seasoned investors retain concerns about securitized investments, associating them with the poor performance of private-label RMBS during the GFC. (In truth, mortgages aside, there were few impairments in securitizations through the financial crisis. For example, ABS proved a far sounder credit than corporate debt.)

Finally, misperceptions regarding the liquidity of asset-backed investments relative to other credit sectors, particularly corporate debt, discourage some investors. Our research on the contrary confirms that liquidity costs associated with nonagency 144A securitizations are measured and in line with corporate debt. Numerous broker-dealers and banks actively underwrite and support a healthy over-the-counter secondary market.

Investor portfolio optimization through loan-backed investments

We believe that NBL investments considerably expand the universe of compelling attribute mixes beyond what's available in a more traditional investment portfolio. These attributes should appeal to many investor types: demonstrated capital preservation, elevated in-

come opportunities, diversification, contractual-based cash flow streams, and structural protections.

A growing body of empirical evidence demonstrates improved portfolio outcomes, including higher returns, low volatility, demonstrated correlation benefits, and limited downside risk through multiple market cycles.

Additionally, current NBL investments have performed through a variety of challenging market environments, including the GFC, unprecedented commodity weakness, the COVID-19 pandemic, a surge in interest rates, and a regional banking crisis.

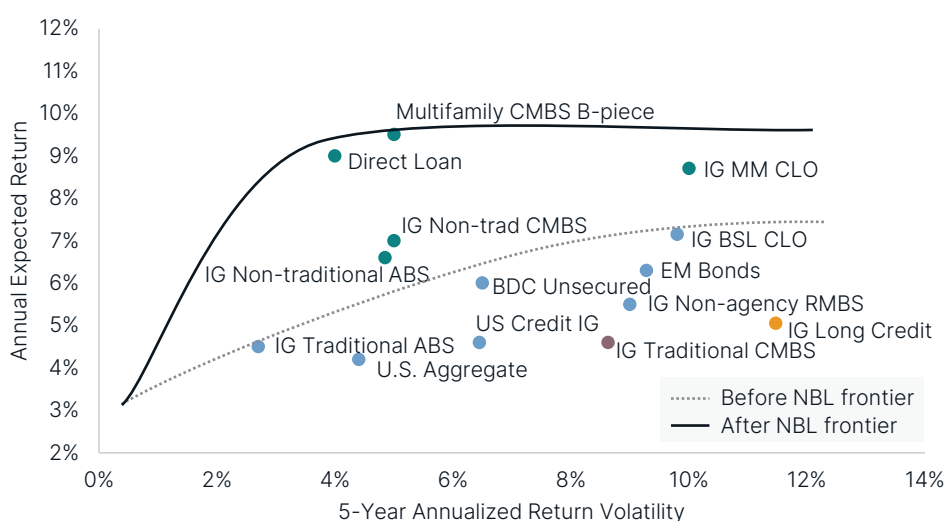
We have partnered with hundreds of clients to integrate these investments into portfolios and help meet their objectives. For prudent fit, we evaluate, among others, supply and demand technicals, credit risk, liquidity, mark-to-market volatility, credit ratings, loan type exposures, interest rate risk profile, and return correlations to other assets. Having the broadest range of NBL investment attributes available allows our clients an unusual degree of portfolio customization and return optimization potential.

Insurance

Our insurance clients commonly pursue higher return potential subject to specific ratings/capital charge and gain/sale constraints. Insurers typically seek investments that:

- Have higher-quality credit ratings that do not entail high risk-based capital charges
- Complement their internal and existing investing capabilities
- Reduce balance sheet volatility

Exhibit 9: Typical insurer's efficient frontier with and without NBL



Source: Refer to page 18.

Exhibit 9 shows the efficient frontier of the typical insurer opportunity set. Numerous NBL-sourced opportunities substantially expand the frontier, boosting the yield of their fixed income programs while satisfying capital and liquidity objectives. Investment grade-rated nontraditional ABS, CMBS and CLO positions offer expected returns

well north of the conventional frontier, offering a highly effective means of raising income while maintaining or lowering credit and price risk.

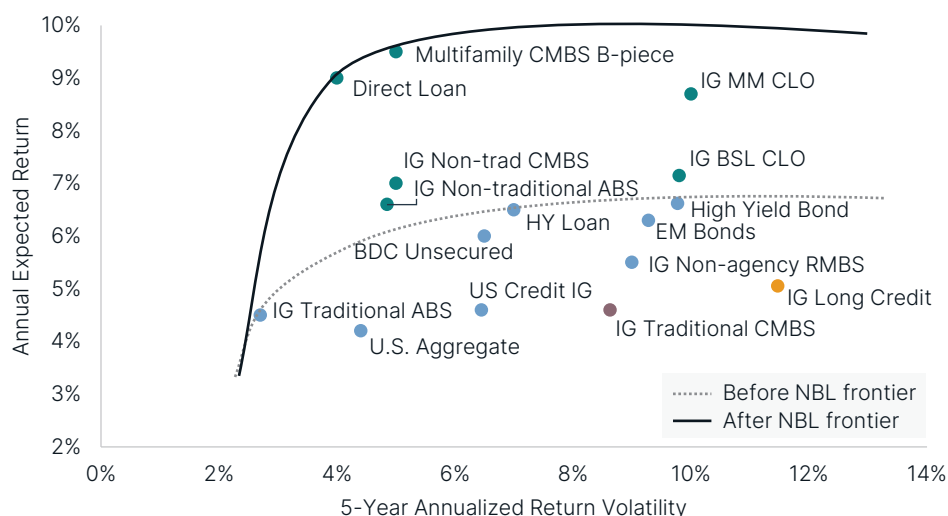
Pension plans

The breadth of NBL investments solutions for pension plans is as wide as the breadth of types of plans themselves. They can address the plans' many goals: enhancing traditional fixed income portfolios, bridging the risk/return divide between fixed income and equities, and achieving returns comparable to but diversified from their public equity strategies.

The first objective we hear from pensions is enhancing their existing fixed income portfolio. Pension clients typically seek to enhance their existing fixed income portfolios without adding lower-quality credit risk or related return volatility. They seek higher-quality, liquid, and fixed-rate instruments. Exhibit 10 shows how the inclusion of many NBL investments (green) can enhance a fixed income portfolio comprising more publicly available active fixed income investments (blue).

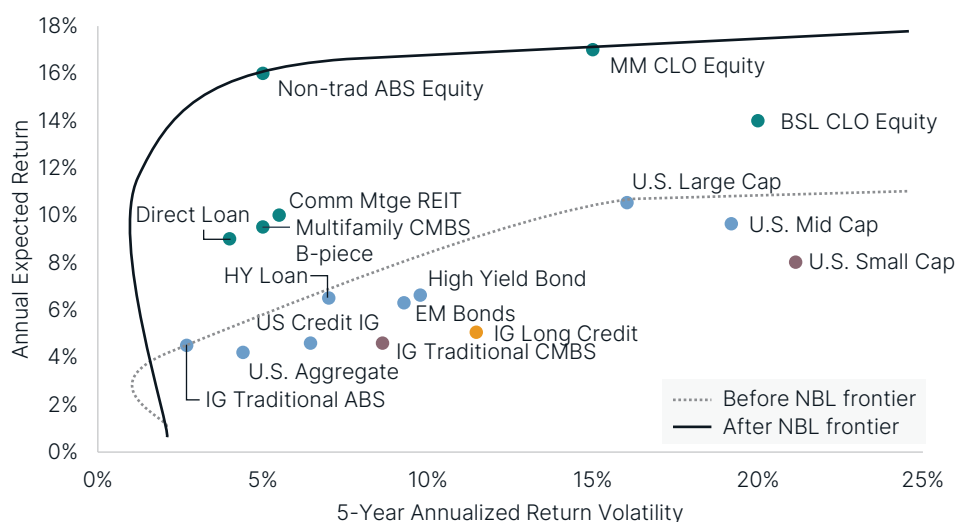
Many NBL investment opportunities can offer returns that better public market equities. Their returns are driven by loan contractual cash flows, are disconnected from public market valuations, tend to be stable and diversifying, and can exceed equity return levels. Exhibit 11 shows investment types that can jointly push out a pension plan's efficient frontier. Unrated direct loans, junior multifamily mortgage, junior ABS, and CLO positions can offer a substantial boost in return above the conventional frontier with modest price and return volatility, albeit with some give in liquidity.

Exhibit 10: NBL can expand the efficient frontier in pensions' fixed income portfolios



Source: Refer to page 18.

Exhibit 11: Pensions can enjoy plan-level benefits from including NBL



Source: Refer to page 18.

Endowments and foundations

Endowment and foundation (E&F) clients prefer higher return opportunities away from traditional fixed income sectors. They are less concerned with liquidity and credit ratings. NBL opportunities open up diversifying, high-income sectors where contractual cash flows, rather than public equity multipliers, drive performance.

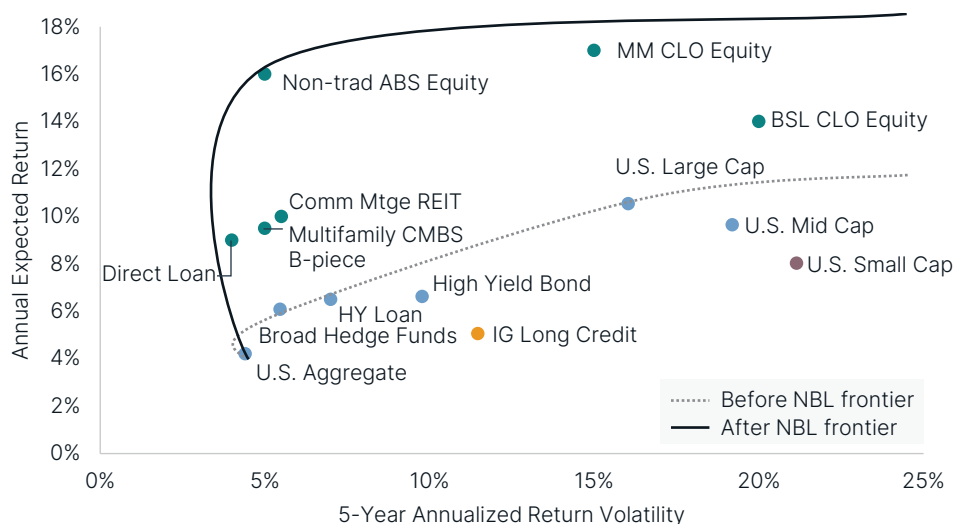
Exhibit 12 shows that including some whole loan, equity, and securitization residuals can be highly additive to investment plans. Junior positions in ABS and CLOs offer transformational opportunities to shift up the return frontier by 10 points or more.

Other investors

BBH partners with several other varieties of investors to embrace emerging NBL sectors that enhance the income and volatility profile of their portfolios.

- **Corporate and not-for-profit plans' operating cash pools** benefit from liquidity, shorter-duration, and high investment grade credit ratings of ABS, CMBS, and BDC debt.
- **Registered investment advisors (RIAs)** seek novel credit ideas to deliver differentiated and complementary solutions for their clients, spanning sectors and credit ratings.
- **Non-U.S. institutions** seek highly rated investments to enhance income with minimal capital loss.

Exhibit 12: Expanded frontier with NBL for E&F clients



Source: Refer to page 18.

Conclusion

As it has filled the multidecade vacuum left by the retreat of banks, NBL growth has spurred tremendous markets and opportunities for investors to exploit. However, extracting this value requires knowledge of these investments, direct relationships with and access to their originators, and a rigorous time-tested research approach. This paper illuminates NBL markets and their evolution – and how adding lending-related investments can improve performance results in multiple ways, including higher returns, lower volatility, and stronger risk-adjusted returns. These investments can be compelling complements to traditional bond and equity market investments that demand an investor's attention.

SOURCES FOR EXHIBITS 9, 10, 11, 12

Label	Source
US Credit IG	Bloomberg U.S. Credit Index
U.S. Aggregate	Bloomberg U.S. Aggregate Index
IG Long Credit	Bloomberg Long U.S. Credit Index
High Yield Bond	Bloomberg U.S. Corporate High Yield Index
Broad Hedge Funds	Eurekahedge Hedge Fund Index
Emerging Market Bonds USD	J.P. Morgan EMBI Global Total Return Index
U.S. Large Cap	S&P 500 Index
U.S. Small Cap	Russell 2000 Index
U.S. Mid Cap	S&P Midcap 400 Index
IG Traditional CMBS	Non-Agency Investment Grade CMBS: Eligible for U.S. Aggregate
IG Non-traditional ABS	J.P. Morgan Other ABS Index
Non-trad ABS Equity	BBH
Multifamily CMBS B-piece	BBH
IG Non-agency RMBS	BBH
IG Non-trad CMBS	BBH
Comm Mtge REIT	BBH
HY Loan	J.P. Morgan Leveraged Loan Index
IG BSL CLO	J.P. Morgan CLOIE
BSL CLO Equity	BBH
Direct Loan	BBH
IG MM CLO	J.P. Morgan CLOIE
MM CLO Equity	BBH
BDC Unsecured	BBH
IG Traditional ABS	Bloomberg U.S. ABS Index

Authors



Neil Hohmann, Ph.D.
Partner, Portfolio Manager,
Head of Credit Alternatives



Chris Ling
Managing Director,
Portfolio Manager



Thomas Brennan, CFA
Vice President,
Fixed Income Product Specialist



Vaidas Nutautas
Managing Director,
Credit Analyst



John Ackler, CFA
Managing Director,
Institutional Relationship Manager



Anthony Sylvester, CFA
Assistant Vice President,
Taxable Fixed Income



Timothy Rourke, CFA, CAIA
Managing Director,
Institutional Relationship Manager

Risks

Investing in the bond market is subject to certain risks including market, interest-rate, issuer, credit, maturity, call and inflation risk; investments may be worth more or less than the original cost when redeemed. Bond prices are sensitive to changes in interest rates and a rise in interest rates can cause a decline in their prices. Mortgage-backed securities have prepayment, extension, and interest rate risks.

Asset-Backed Securities ("ABS") are subject to risks due to defaults by the borrowers; failure of the issuer or servicer to perform; the variability in cash flows due to amortization or acceleration features; changes in interest rates which may influence the prepayments of the underlying securities; misrepresentation of asset quality, value or inadequate controls over disbursements and receipts; and the ABS being structured in ways that give certain investors less credit risk protection than others.



NEW YORK BEIJING BOSTON CHARLOTTE CHICAGO DUBLIN GRAND CAYMAN HONG KONG HOUSTON JERSEY CITY
KRAKÓW LONDON LUXEMBOURG NASHVILLE PHILADELPHIA TOKYO WILMINGTON ZÜRICH [BBH.COM](https://www.bbh.com)

NOT FDIC INSURED NO BANK GUARANTEE MAY LOSE VALUE

Opinions, forecasts, and discussions about investment strategies represent the author's views as of the date of this commentary and are subject to change without notice. Brown Brothers Harriman & Co. ("BBH") may be used to reference the company as a whole and/or its various subsidiaries generally. This material and any products or services may be issued or provided in multiple jurisdictions by duly authorized and regulated subsidiaries. This material is for general information and reference purposes only and does not constitute legal, tax or investment advice and is not intended as an offer to sell, or a solicitation to buy securities, services or investment products. All information has been obtained from sources believed to be reliable, but accuracy is not guaranteed, and reliance should not be placed on the information presented. This material may not be reproduced, copied or transmitted, or any of the content disclosed to third parties, without the permission of BBH. All trademarks and service marks included are the property of BBH or their respective owners. © Brown Brothers Harriman & Co. 2025. All rights reserved.