Waterfall

Prime Time:
Seizing Opportunities in CRE Debt

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- **Commercial real estate is one of the few distressed asset classes within the US economy**. The sector has been uniquely affected by a combination of higher interest rates, challenged fundamentals and tightening credit availability.
- **CRE debt markets have swiftly adjusted to this distress, with spreads moving substantially wider across CMBS, CRE Loans and CRE related High Yield Corporate Debt.** The sector continues to see an expanding opportunity set as historically passive holders of CRE debt look to reduce their exposure given the fundamental uncertainty in the market.
- Unlike other structured credit asset classes, **CRE markets are characterized by high concentrations in individual loans, and are more prone to idiosyncratic risks**. The buildup of these risks across loans over time can result in market inefficiencies. **Significant alpha-picking opportunities have emerged for investors who can effectively navigate and underwrite this risk**.
- **We broadly categorize these loan-level risk factors into four areas** – a) **location,** b) **building quality,** c) **tenancy,** and d) **counterparty and loan structure**. The ability to underwrite each of these with greater precision can unlock incremental alpha.
- **The challenge in underwriting comes in two forms** – a) **Scalability** – the ability to cover thousands of loans with their own unique combination of risk and b) **Sustainability** – the capacity to maintain this market over time as new information emerges across all parameters of risk.
- **Sustained alpha generation in CRE requires infrastructure that can continuously collect, store, analyze, and update vast quantities of qualitative and quantitative loan data over time.** This includes deep data mining across diverse sources, leveraging market networks for localized insights, and a strong grasp of resolutions and workouts through asset management.
- **The CRE debt markets can offer attractive 15-20% returns* but remain an asset-picker's market where alpha depends on selective investment and careful underwriting rather than broad 'beta' recovery bets.** While anticipated interest rate cuts may seem positive, the market still faces poor fundamentals, limited credit availability, and unresolved lender losses. Unlike past crises, there hasn't been a sharp widespread sell-off to clear the decks for a pricing revival. Instead, the gradual pile-up of distress and slow capital inflows create ongoing inefficiencies, providing long-term opportunities for strategic investors.

* See Figures 7 and 8.

Commercial Real Estate: Uniquely Distressed

Commercial Real Estate (CRE) stands out as perhaps the only genuinely distressed asset class in the U.S. economy. This sector is characterized by cascading negative sentiment, falling asset prices, and a growing inventory of both performing and non-performing assets being sold at significant discounts. A combination of three factors have led to CRE being uniquely impacted in the current market environment. Consider the widely used (albeit simplistic) valuation technique:

$$\text{Property Value} = \frac{\text{Net Operating Income*}}{\text{Cap Rate}}$$

The Cap Rate is the cash flow yield required by an investor, essentially composed of benchmark interest rates plus a credit risk premium. Thus, the property value can be expressed as:

$$\text{Property Value} = \frac{\text{Net Operating Income*}}{\text{Benchmark Rate} + \text{Credit Risk Premium}}$$

What is unique about the current environment is that all three factors—benchmark interest rates, net operating income, and credit risk premium—are contributing to market distress.

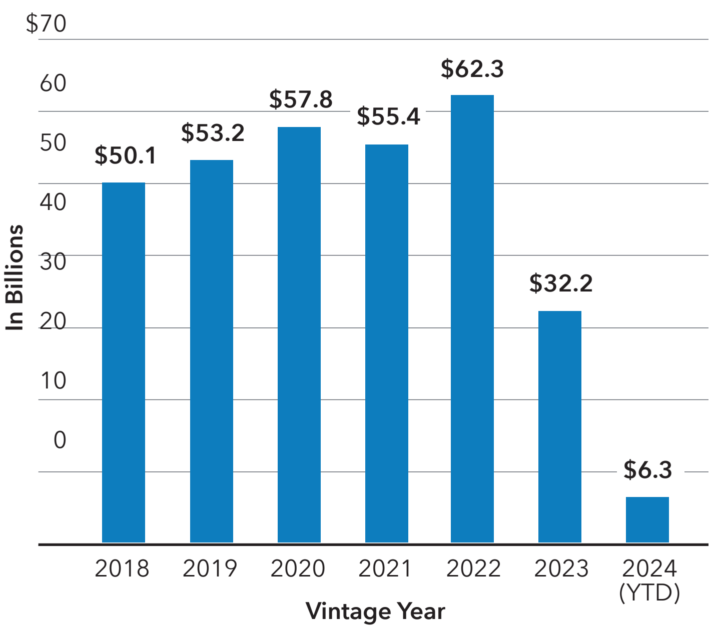
I. **BENCHMARK INTEREST RATES**: This factor is relatively straightforward. Over the past three years, benchmark rates have surged higher, leading investors to demand wider cap rates for CRE assets, which has in turn pushed valuations lower. The situation is further amplified if CRE assets are encumbered with floating-rate debt, where the rise in SOFR has driven financing costs far higher than initially anticipated, putting pressure on debt service coverage.

II. **NET OPERATING INCOME**: In prior periods when rates sold off, the effect of widening cap rates was counteracted by expectations of cashflow and rent growth, which helped keep asset prices stable. This time, however, the aftermath of COVID and the inflationary spike have complicated the story. Some properties and sectors have continued to experience revenue growth but have been hit by accelerating expense inflation. Office properties have seen a dramatic decline in occupancy, making significant chunks of the sector functionally obsolete and putting downward pressure on rents. While a long-time darling of the CRE market, the multifamily sector is experiencing rent pressure from over supplied markets in the Southeastern parts of the U.S., resulting in year-over-year declining rents. Whether it is expense pressure, falling occupancy or excess inventory, the result for many markets and sectors is declining Net Operating Income ("NOI").

III. **CREDIT RISK PREMIUM:** The impact of rising interest rates and fundamental weaknesses across CRE has been exacerbated by a significant decline in credit availability. This is evident in the form of wider credit spreads and lower loan-to-value (LTV) ratios demanded by lenders on new loans.

Credit is tight partly due to significant market and regulatory pressure on regional banks following the collapse of several banks in 2023. This has led to a sharp pullback in CRE lending. Other debt providers, such as insurance companies, debt funds, and CMBS investors, are also dealing with accumulated losses in their portfolios, making them hesitant to expand CRE exposure. As a result, new lending is now concentrated in high-performing subsectors like industrial properties, data centers, and select multifamily assets, leaving much of the broader CRE market underfunded. This capital shortage is reflected in declining real estate fundraising as shown in Figure 1.

FIGURE 1: **CAPITAL RAISED FOR CLOSED-END REAL ESTATE AND DEBT FUNDS**



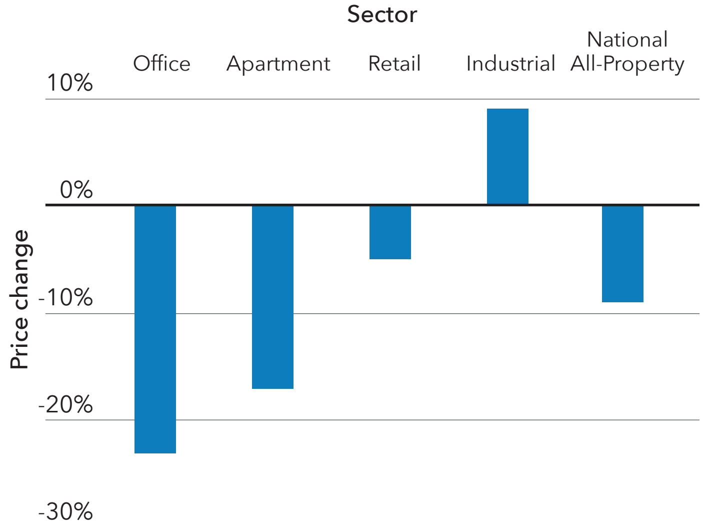
Source: The Townsend Group; PREA Quarterly Fundraising Report; all data as of June 30, 2024

* Net Operating Income = revenue – expenses

CRE Debt – Now is the Moment

Higher interest rates, declining fundamentals, and a lack of credit availability form a potent combination. Figure 2 illustrates valuation drops for some CRE markets since their peaks in March 2022, showing declines of 5-25% across most sectors.

FIGURE 2: **REAL ESTATE PRICE CHANGE FROM PEAK (MARCH 2022)**

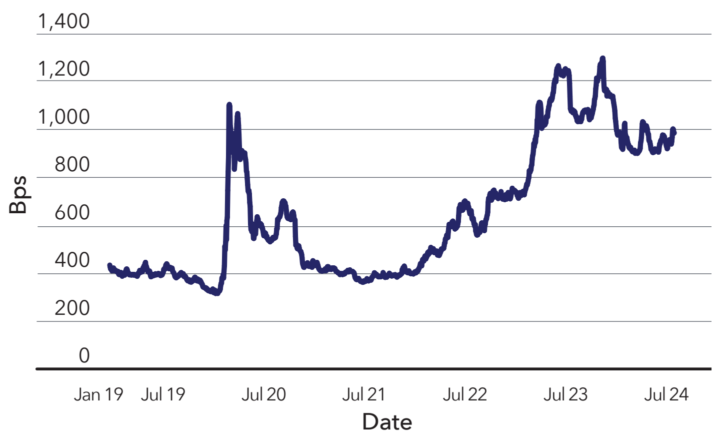


Source: RCA CPPI: National All-Property Index. As of May 2024.

These figures may understate the true extent of the market's decline due to the significant slowdown in transaction activity over the past few years. Large segments of the market are stuck in a stalemate, with bid-ask spreads between buyers and sellers widening to historically high levels. Many real estate assets are held in long-duration, private equity-style vehicles with little to no redemption pressure, resulting in property owners being reluctant to sell underperforming assets and realize losses. Lenders and servicers, on the other hand, have adopted an "extend and pretend" approach, granting modifications and extensions to stressed properties to avoid forcing foreclosures and sales in a down market.

With CRE equity markets essentially stagnant, pricing power has shifted to the more liquid debt markets, which have adjusted much faster. Unlike real estate equity owners, debt investors are more motivated to move risk at lower levels. CMBS BBB spreads have widened significantly [Figure 3], and senior loan coupons for mid-quality CRE assets have increased. **Mezzanine CMBS, levered senior loans, and B-notes can now generate mid to high teens net yields, offering equity-like returns for debt risk.**

FIGURE 3: **CMBX BBB 12 SPREADS**



Source: JPM. Data as of August 2024

Why are debt holders more likely to sell at wider levels?

Consider an investor holding an investment-grade ("IG") CMBS bond that was originated a few years ago at 50% LTV, or a bank with a senior CRE loan originated at 60% LTV. These assets were initially considered low-risk, making them ideal for large, diversified, high-grade portfolios with minimal tolerance for principal loss.

Fast forward to today. While the loan may still be performing, the current LTV has likely increased. The lack of recent comparable transactions for the underlying assets makes it difficult to accurately assess their true value and associated risk. Coupled with widespread negative headlines and isolated liquidations that reveal significant losses, there is a growing recognition that the risk of principal loss on certain assets is no longer negligible.

This 'high-grade' investor base is not naturally well-suited to manage this level of credit risk due to various internal and regulatory constraints. Consequently, there is an ongoing shift of assets from these 'spread' investors to credit funds that are better equipped to underwrite and manage credit risk. **As the entire debt market reprices downward to account for increased credit risk, significant value can emerge for investors who can effectively navigate and underwrite the associated uncertainties**.

Hidden Opportunities: The Mispricing and Potential Upside of Concentration Risk

Given the volatility prevalent in the space, what is an effective underwrite? Before we dive in, let's first touch on what we believe is the defining structural feature of the

CRE market: **high concentrations**. Most other structured credit asset classes, such as RMBS and Consumer ABS, are typically well-diversified, with loan counts ranging from 400 to 15,000 and single loans are relatively small.

In contrast, individual CRE loans are huge, ranging from $20mm to $1bn. Buying a $200mm CRE loan pool often means taking exposure to less than 10 assets. CMBS multi-borrower deals often feature top loans that constitute a significant portion of the deal, with top 10 concentrations exceeding 50%. Single Asset Single Borrower (SASB) deals and single CRE loans have 100% concentrations in one loan. This high concentration in individual loans is a defining characteristic of the CRE market and presents both risks and opportunities. [Figure 4]

FIGURE 4: **SAMPLE STRUCTURED CREDIT CONCENTRATIONS**

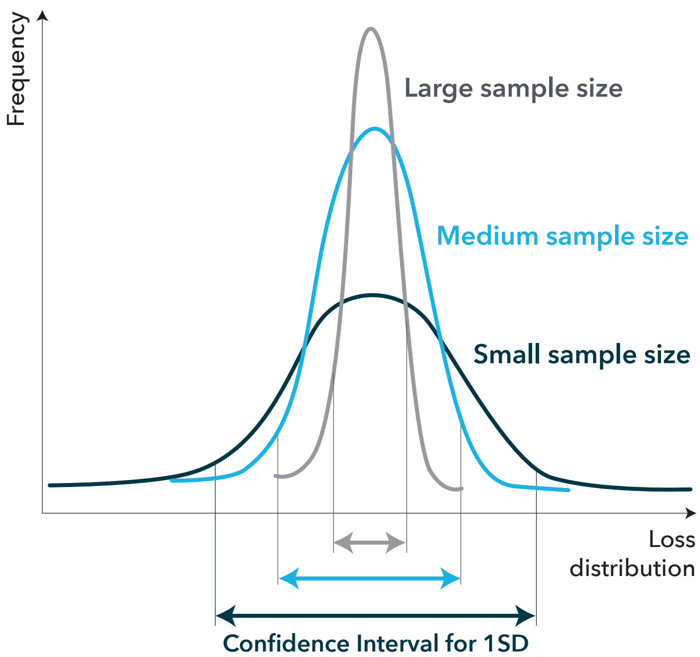
	Conduit CMBS	SASB CMBS	RMBS	CLO	ABS
Deal Name	BMO 2024-5C5	HILT 2024-ORL	MSRM 2024-3	GNRT 2024-14A	PNFED 2024-A
Top Loan Concentration (%)	7%	100%	1%	1%	1%
Top 5 Loan Concentration (%)	31%	100%	4%	4%	1%
Top 10 Loan Concentration (%)	50%	100%	7%	6%	1%
Loan Count	36	1	435	469	15289
Loan-to-Value	56%	57%	72%	N/A	N/A
BBB Credit Enhancement	9%	8%	1%	12%	2%
BBB Pricing Spread (bps)	465	325	298	375	215

Source: Waterfall, Intex. As of August 2024.

Diversification helps smooth out idiosyncratic risks. For instance, a BBB RMBS investor with exposure to a poorly performing market in Ohio might not be too concerned due to the low concentration in any single market. In contrast, a CMBS Conduit BBB investor with a 10% concentration in a single commercial property in Columbus, OH, could face significant losses if the downtown office market experiences a specific idiosyncratic shock, like a major company shutting down its headquarters.

This reflects the law of large numbers. In large, diversified asset classes like RMBS and Consumer ABS, outcomes are generally tightly clustered around the mean, requiring a significant systemic event, such as the 2008 housing crisis, to impact investment-grade classes. On the other hand, **CMBS deals have smaller, more concentrated sample sizes, leading to a wider range of potential outcomes.** Said another way, even relatively common events in CRE can cause substantial losses. [Figure 5]

FIGURE 5: **LOSS DISTRIBUTION BY SAMPLE SIZE**



Source: Waterfall Asset Management.

Concentration risk is a well-known challenge in commercial real estate, prompting rating agencies to impose significantly higher credit enhancements on CMBS BBB tranches compared to other structured credit asset classes. Investors, recognizing these risks, also demand a spread premium for CMBS relative to similarly rated assets. **This broadly applied credit premium, aimed at accounting for perceived idiosyncratic risks, often leads to market inefficiencies – high-quality assets may trade too wide, while riskier ones are priced too tightly**. As property fundamentals shift and idiosyncratic risks accumulate, these inefficiencies can intensify. Therefore, granular underwriting becomes crucial. **Credit managers who can precisely assess and monitor individual loan risks are well-positioned to capitalize on these dynamics and generate substantial alpha**.

IG CMBS – not like other high-grade debt

Despite higher Credit Enhancement and lower LTVs, originally-rated IG CMBS bonds have repeatedly taken losses even during the relatively benign post-GFC period. Figure 6 shows number of post-2009 issuances that have taken losses in different securitized asset classes through 2023. As expected, no RMBS or ABS took any losses, and only 1 CLO took a principal loss. In contrast, 15 CMBS BBB bonds have taken a principal impairment already and this does not even include losses that will likely be imposed by the current credit cycle, where realized losses are probably a few years away. This is primarily due to the effect of idiosyncratic adverse outcomes on individual large loans. One recent well-publicized event occurred in May where the note on 1740 Broadway in New York was recently sold and resulted in a ~25% loss to the most senior tranche originally rated AAA by S&P and DBRS.

FIGURE 6: **NUMBER OF BONDS ISSUED POST-2009 WITH PRINCIPAL LOSSES**

Original rating	US ABS	US RMBS	US CMBS	Global CLOs	Total
Aaa	0	0	0	0	0
Aa	0	0	2	0	2
A	0	0	5	0	5
Baa	0	0	15	1	16
Ba	2	0	35	10	48
B	5	0	42	15	67

Source: Moody's. Data as of YE2023.

Mastering the Art: Underwriting Credit Risk

What does this underwriting entail, and how can an investor reduce uncertainty with a deep, granular approach to analyzing each loan? While many factors influence CRE loans and asset values, they can be broadly categorized into four areas:

1. **Location — The old cliché still holds: location is the most critical element in real estate analysis.** Precision is key — and each additional layer of precision can unlock more alpha. General views on states or cities (e.g., Sunbelt multifamily or San Francisco office) provide a baseline but may not be sufficiently differentiated from what the market is already pricing in. A more refined understanding at the street or neighborhood level is far more valuable. For example, knowing which part of a retail center faces a high-traffic road versus back roads, where rents and demand are lower, is essential. Similarly, for warehouses, understanding the ease of truck access to interstates is crucial. **This level of precision is especially important in stressed markets such as office where overall occupancy has permanently declined due to external shocks and tenants tend to gravitate toward better-located assets.** Identifying buildings with significant location advantages, particularly those poised to capture a larger share of a declining occupancy market, is vital.

2. **Building Quality — Once a location's viability is established, the next step is to assess the building's quality**. Even well-located assets can have property-specific issues that pose challenges. Problems like insufficient parking in a suburban office building or low ceilings in an industrial warehouse can be difficult to address and may require material reconfiguration or even a change in use to preserve value. **Identifying issues such as a dated lobby, lack of amenities, or outdated elevator systems can guide the correct underwriting of a value discount to fund the necessary capital expenditures for improvements.**

3. **Tenancy** — CRE asset classes carry different levels of tenancy risk. Hotel and multifamily properties have rents and occupancies that fluctuate daily or yearly and are spread across many tenants. **In contrast, office, retail, and warehouse buildings often rely on a few large tenants for the majority of their revenue, making lease specifics critical**. Each large lease is a bespoke contract with unique factors such as free rent periods, step-ups, and termination options, making detailed underwriting of every large lease essential. For example, consider a retail center with a Macy's store up for renewal in 2026. The likelihood of renewal depends on factors like Macy's financial health, shifts in their broader brick-and-mortar strategy, and store-specific performance metrics. If renewal happens, underwriting must account for potential rent discounts and tenant improvement costs. If Macy's vacates, it's crucial to evaluate which other tenants might be looking for large spaces and whether the building could accommodate them.

4. **Counterparty and Loan Structure**
The previous three factors relate to the actual real estate, but CRE loans also differ significantly in terms

of loan structure and counterparties. **Loan-level financial covenants, recourse guarantees, maturity extension tests, required cash flow reserves, and the borrower's ability to release parts of the collateral from the loan are structural features that can either mitigate or exacerbate underlying real estate issues**.

Additionally, much like distressed corporate credit investing, CRE asset resolutions often depend on the counterparties involved. These include equity owners, controlling class investors, special servicers and major bank lenders, many of whom may have competing interests at play and can influence workouts to favor one over the other. **Substantial alpha can be generated by identifying loans with favorable structural mechanics and control provisions**, influencing loan resolutions and effectively navigating this emerging "tranche warfare" in commercial real estate.

A Sustainable Advantage

In the previous section, we outlined the key factors we believe are essential for generating alpha in the CRE debt market. While identifying those factors is important, the real challenge lies in effectively underwriting the associated risks. This undertaking has two main components:

1. **Scalability** – Covering the CRE universe requires underwriting hundreds of thousands of loans, each with its own unique combination of location, building quality, tenancy, and loan structure.
2. **Sustainability** – Once these loans are underwritten, maintaining the process over time is equally critical. The factors to track are constantly evolving, with new information emerging continuously across these numerous loans.

Long-lasting alpha generation demands an infrastructure capable of collecting, storing, and updating this qualitative and quantitative information over large quantities of loans over long periods of time.

Quantitative data can be collected by aggressively mining data from organized and unorganized sources such as remittances, financial statements, rent rolls, SEC filings, property records, and document diligence, which quantify loan-level factors on a granular level.

This needs to be paired with a wide range of **qualitative data** to fully understand the state of specific buildings, often involving site visits and direct conversations with loan officers, leasing brokers, asset owners, tenant representatives, special servicers, and asset managers. This data must be integrated with sourcing and analysis of individual securities and loans to generate sound investment ideas in the ever-changing CRE landscape.

And finally, there is often substantial alpha to be collected from **superior asset management**, working out defaulted assets through foreclosures, recapitalizations and modifications.

Default Resolutions: Who calls the shots?

Investing in performing CMBS and CRE loans is typically passive. As long as net operating income remains stable and loan terms are met, returns come from coupon payments and par accretion. However, when property performance declines and borrowers default, the dynamic shifts from passive to active management, and the rights of different parts of the capital structure come into play.

CMBS

- In CRE securitizations, the most junior bondholder typically has workout control alongside the special servicer to decide on modifications, foreclosures, or note sales.
- Updated appraisals (every 9-12 months) can shift control to more senior bondholders if losses imply significant devaluation.
- As implied losses grow, control can revert to the servicer, with junior bondholders retaining consultation rights.
- Senior IG bondholders can sometimes replace the special servicer, influencing resolution strategies.

CRE Loans

- CRE loans involve more direct borrower-lender relationships, unlike CMBS.
- Asset management remains with the lender, who must navigate legal, tax, and property-specific considerations to drive an effective resolution.
- Subordinate positions like mezzanine or B-notes must deal with intercreditor agreements that specify their rights versus the senior lender in the event of a default. These could include the right to cure borrower default, buying out the senior debt or negotiating a tripartite modification involving the senior, mezzanine and the borrower.

Building a Balanced Portfolio: Diversifying across an uneven market

At the single security level, we have emphasized how effectively underwriting idiosyncratic risks is paramount for generating alpha, each bet representing a unique opportunity to capitalize on specific, localized factors that can drive value. However, at the portfolio level, we believe **it's essential to diversify across a large number of these idiosyncratic bets to avoid excessive concentration in any single asset, sector or geography**, thereby reducing the impact of unforeseen macro or property specific events. This means finding several market inconsistencies and alpha opportunities, and not be over exposed to a few. Once again, this comes down to the ability to underwrite with depth and scale across the CRE universe.

Finding the best product to express our fundamental views is crucial. CRE risk exists across a range of debt products, each with its own set of supply and demand technicals, and varying levels of investor sophistication.

In Figures 7 and 8 below, we list the universe of CRE debt opportunities across both the public and private markets. As noted, the distress in CRE markets is widespread and each of these products can offer substantial value for fundamental underwriting focused investors. However, relative value and supply between products can vary significantly across time – for instance, last year CMBS conduits appeared very dislocated and offered very interesting relative value over other assets. This year, we believe the relative value of CMBS conduits has declined and the opportunity set has transitioned towards CRE Loans where both primary and secondary supply has zoomed higher. The market remains in flux, and these trends could continue or reverse. **The ability to access multiple products allows an investor to move as the market opportunity shifts**.

FIGURE 7: **OPPORTUNITY SET – PUBLIC MARKETS**

	CMBS			CRE CLOs	High Yield REIT/Bank Debt
Asset Types	SASB	Conduit	Agency Multifamily		
Investment Overview	Low leveraged tranches, backed by attractive single properties in strong locations	A/BBB rated tranches of seasoned multi-borrower CMBS deals where market is mispricing credit/ extension risk	Non-guaranteed subordinate tranches in cash and synthetic securitizations issued by Freddie and Fannie	A/BBB rated tranches of CRE CLOs backed by primarily multifamily collateral	Unsecured corporate bonds issued by REITs and Banks
Market Backdrop	Acquiring mispriced bonds coming out of money managers/insurance companies, based on deep credit analysis	Multi-borrower pools are hard to underwrite for large sections of the CMBS investor base leading to pricing inefficiencies	Multi CRT and Agency B-pieces are unrated and continue to have a limited buyer base.	Take advantage of negative headlines related to transitional multifamily lending to buy mispriced parts of the capital stack	Corporate HY investors in REITS and Banks are unsophisticated about CRE risk, leading to market inefficiencies
Loan-to-Value	40-65%	40-55%	60-70%	60-70%	50-60%
Credit Enhancement	5-20%	8-12%	0-5%	15-20%	Substantial junior debt stack and common equity
Price	$80-90	$65-85	$50-$100	$90-100	$70-85
Levered Yield to Maturity*	12.5-17.5%	17.5-22.5%	14-18%	10-15%	15-20%

Based on proprietary trading data observed in 2024.

* Leverage applied to public assets and senior loans is estimated at 50%-75% advance rate dependent on asset type.

FIGURE 8: **OPPORTUNITY SET – PRIVATE MARKETS**

Asset Types	Primary Loan Origination	Secondary Loan Acquisition	Recapitalization/ Workout	Warehouse Lending	Credit Risk Transfer
Investment Overview	Financing solutions for maturing CRE loans, in a senior or mezzanine format	2-5 year seasoned Senior Loans at low leverage and strong locations	Non-performing loans acquired at low basis	1-2 year revolving warehouses to smaller CRE lenders focused on specific sectors and geographies	Synthetic instrument levered to high-quality, bank originated loans
Market Backdrop	Banks/ Debt funds have retrenched from new CRE lending, leading to a large market opportunity	Regional Banks, REITs and Insurance companies looking to derisk from legacy CRE loan portfolios	Acquiring delinquent loans at low basis allows for various workouts including modifications and foreclosure ("loan-to-own")	Existing CRE lenders need enhanced financing to keep up originations, as CMBS, bank warehouse lines retrench	Banks want to reduce CRE exposure given headline and regulatory risks
Loan-to-Value	60-75%	60-75%	65%-85%	50-65%	60-75%
Credit Enhancement	Covenants, triggers	Covenants, triggers	Covenants	Revolving asset base, enhanced covenants	Banks may retain pari-passu or first-loss piece
Price	$100	$85-95	$30-$70	$100	$100
Levered Yield to Maturity*	15-20%	15-20%	18%-30%	13-17%	15-20%

Based on proprietary trading data observed in 2024.

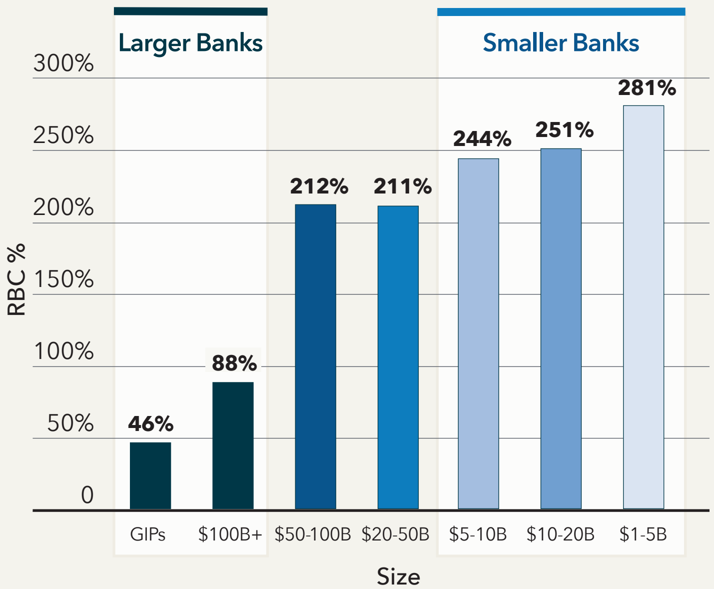
* Leverage applied to public assets and senior loans is estimated at 50%-75% advance rate dependent on asset type.

Banks Grapple with a Growing CRE Problem

U.S. banks are experiencing a rise in delinquent commercial property loans. Nearly half of all banks hold CRE as their largest loan category, making them highly exposed to market shifts. Regulatory scrutiny has increased prompting a need to reassess risk strategies, especially for smaller banks with higher CRE exposure and lower reserves as shown in figure 9 to the right. This environment presents significant opportunities for investors who can effectively underwrite the underlying CRE risk held by banks. These include:

- Bank-issued corporate debt trading at attractive levels as traditional IG investors reduce exposure to CRE-heavy banks.
- Opportunities to acquire loan portfolios as banks seek to reduce CRE concentration.
- Synthetic risk transfer transactions where banks offload risk by purchasing insurance against losses in CRE loan pools.

FIGURE 9: **CRE LOANS HELD ON BALANCE SHEET AS A % OF TOTAL RISK BASED CAPITAL**



Source: KBW Research, S&P Capital IQ, and FactSet
Report date: May 30th 2024

Alpha Over Beta: The Path Forward in CRE

We are observing extensive opportunities across the CRE debt markets which provide the potential to earn attractive 15-20% returns [see Figures 7 and 8] with well-managed risk. However, we firmly believe this remains an **asset-picker's market, where generating alpha depends on meticulous underwriting and selective investments rather than broad-based bets on a general CRE recovery**.

As we write this in September 2024, the Fed appears poised to ease interest rates in the coming months. **While lower rates may seem like a blanket positive for the CRE market, this view oversimplifies the landscape**. Key sectors continue to face significant headwinds: office occupancy challenges and multifamily oversupply issues remain stubbornly uncorrelated to interest rates and will take time to resolve. Additionally, if rate cuts coincide with a slowing economy and reduce consumer discretionary spending, previously resilient sectors like hospitality and retail may experience fundamental shifts to the downside, revealing fresh opportunities for investors.

Credit availability remains tight across much of the CRE landscape. We expect a lower rate environment to primarily benefit 'safer' CRE sectors—such as data centers, industrial, and select multifamily—where leveraged ROIs will improve with reduced financing costs. This is where public equity REITs are largely concentrated. In contrast, sectors where most CMBS and CRE loans are concentrated will likely remain constrained as lenders grapple with underperforming loans. **Regional banks, holding significant CRE exposure, still face regulatory pressure to de-risk, and insurance firms' CRE balance sheets are similarly strained**.

Finally, unlike previous disruptions like COVID or the 2008 financial crisis, we haven't seen a widespread, cathartic sell-off that would clear the decks for a pricing revival. Such an event may never materialize. The market's structure has allowed bad news in the CRE sector to emerge gradually, with major investors able to offload supply patiently. On the demand side, capital raises for real estate debt remain at decade lows, undermining the possibility of a sharp, broad-based recovery. **This opportunity to capitalize on CRE distress is unlikely to dissipate quickly; instead, it will likely persist for several years, creating market inefficiencies and ongoing opportunities for prudent investors to deploy capital wisely and generate substantial returns**.

Waterfall was founded in 2005 by Jack Ross and Tom Capasse, who established Merrill Lynch's ABS Group in the 1980s. Members of the senior team were early participants in many of the asset finance sectors the firm now targets. Since our founding we have grown to $12.8 billion in AUM with more than 150 employees across our New York City headquarters and offices in London and Dublin. Institutional investors comprise approximately 90 percent of Waterfall's client-base, including a broad range of public and corporate pensions, endowments, foundations, sovereign wealth funds, insurance companies, and family offices.

Waterfall's Integrated CRE Platform

- CRE investments constitute more than 40% of total AUM across Waterfall's $12.8 billion[1] platform
- Multiple capabilities across the CRE landscape through investments in bonds, loans and equity
- Manager and advisor to Ready Capital Corporation, the 4th largest commercial mortgage REIT[2]

Over $17B+ in Gross Commercial Real Estate Exposure					
ABS			Ready Capital		
CMBS	CRE LOANS	CRE EQUITY	BRIDGE LENDING	AGENCY LENDING	SMALL BALANCE COMMERCIAL
Current: $2.5B ITD: $12.8B	Current: $2.2B ITD: $4.7B	Current: $500M ITD: $568M		Current: $12.1B ITD: $52.5B	
• Conduit • Single Asset Single Borrower ("SASB") • Freddie / Fannie • CRE CLOs • CMBX	• Primary / Secondary Loans • Senior / Mezzanine Loans	• Distressed • Borrower Recapitalization / Preferred Equity • Value-Add	• Transitional lending for renovation and Value-Add commercial real estate • Regular issuer of CRE CLOs with retention of B-pieces	• 1 of 11 Freddie Mac licensed Small Balance Multifamily Lenders • Contributor to the FRESB securitization program	• Lending on CRE with Appraised value <$5M • Regular issuer of SBC securitizations with retention of B-pieces

1. AUM data is approximate and estimated as of 7/1/24. Includes 5/31/24 NAV plus known June additions of capital and withdrawals by investors. Also includes unfunded commitments for drawdown funds. Exposure data is as of September 2024. ITD data refers to 2010 for CMBS, 2015 for CRE Loans, 2017 for CRE Equity and 2011 for Ready Capital.
2. https://www.alston.com/en/insights/news/2023/06/ready-capital-corporation-completes-acquisition

Waterfall Capabilities

- **Integration of multiple data sources to create streamlined property level insights, central to surveillance and trading**

Daily refresh on 4M properties	1M rent roll pages analyzed. 100 new pages added each day	Data automatically scraped 24/7, 3-months ahead of public sources	Automated daily newsletters and commentaries to highlight trading opportunities

- **Breadth of Waterfall's CRE platform and deep relationships provide a key sourcing edge to invest across products**

CRE Debt Purchased over the Last 5 Years	Controlling Class Rep through CMBS	JV Partners	Dedicated CRE Professionals
$13B+	90 deals	15+	66

Data as of September 2024.

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