



Portfolio Strategy

# The ABCs of Asset-Backed Securities

**GUGGENHEIM**

## Summary

Asset-backed securities (ABS) finance pools of familiar asset types, such as auto loans, aircraft leases, credit card receivables, mortgages, and business loans. In one way or another, these asset types represent contractual obligations to pay.

These contractual obligations to pay often rank senior to a borrower's traditional debt obligations, reducing ABS investors' exposure to the borrower's financial health. ABS also have many other investor-friendly features that may help protect against loss and improve liquidity, such as tranching of risk, overcollateralization, and diversity of payers in each underlying pool. Despite these and other strengths discussed in this report, some ABS and other forms of structured credit continue to offer higher yields than similarly rated corporate or municipal bonds. ABS investors' principal job is to analyze the cash flows from these obligations to assess value and the possibility of loss, rather than relying solely on the current market prices of hard assets, the reputation of a sponsor, or the presence of an investment-grade rating.

During the 2008 global financial crisis (GFC), many investors experienced losses related to certain private label residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), and MBS-backed collateralized debt obligations (CDOs). In the aftermath of the crisis, the structured credit market underwent a painful yet necessary transformation as market participants returned to sustainable underwriting practices. However, the asset class remains complicated. At Guggenheim, we believe that identifying value and risk in ABS requires dedicated credit, trading, technology, and legal resources supporting a disciplined investment process.

# Report Highlights

- Securitization begins with the creation of a special purpose vehicle (SPV) that acquires a pool of assets and simultaneously raises debt financing to fund the purchase of those assets through the issuance of ABS.
- Assets backing a securitization must include contractual obligations to pay. Each asset features a payer (borrower, lessee, insurer, etc.) and a contract (mortgage, lease, loan, account receivable, etc.). A securitization typically pools contractual assets of the same type (auto loans, aircraft leases, credit card receivables, corporate loans, etc.).
- ABS carry investor-friendly features intended to help protect against loss and improve liquidity, including bankruptcy remoteness, prioritization of payments, overcollateralization, excess spread, amortization, professional servicing, and diversity of payers within each underlying pool.
- Lenders, lessors, and specialty finance companies commonly turn to the structured credit market for funding. Additionally, traditional corporate borrowers that receive payments under contract may securitize those contracts as an alternative to issuing corporate debt, particularly when the contracts are of higher credit quality. We illustrate such a situation with a case study (see page 10).
- Successful investment in structured credit requires dedicated credit, trading, technology, and legal resources, institutional knowledge, and a disciplined investment process.

## Investment Professionals

### Anne B. Walsh, JD, CFA

Chief Investment Officer,  
Guggenheim Partners  
Investment Management

### Karthik R. Narayanan, CFA

Head of Securitized

### Maria Giraldo, CFA

Managing Director and  
Strategist, Macroeconomic  
and Investment Research

---

## Contents

|                                                                       |   |                                                               |    |
|-----------------------------------------------------------------------|---|---------------------------------------------------------------|----|
| <b>Introduction to ABS</b> .....                                      | 2 | <b>Investor-Friendly Features of Securitized Credit</b> ..... | 6  |
| The Elephant in the Room .....                                        | 2 | ABS: What's in it for the Borrower? .....                     | 9  |
| Inside ABS: Securitizable Assets<br>and Contractual Cash Flows .....  | 3 | Securitization Case Study: Domino's Pizza .....               | 10 |
| SPVs: The Structure of Structured Credit .....                        | 5 | <b>Investing in ABS</b> .....                                 | 12 |
| More than MBS: ABS Collateral Types<br>Are Familiar and Diverse ..... | 5 | Common Mistakes in Structured Credit Investment .....         | 13 |
|                                                                       |   | Guggenheim's Structured Credit Investment Process .....       | 14 |
|                                                                       |   | <b>Appendix: Selected ABS Types and Related Data</b> .....    | 15 |

# Introduction to ABS

Securitization, structured products, structured credit, and ABS all refer to roughly the same thing: debt secured primarily by pools of contractual obligations to pay.

Too often, we find that reports on structured credit as an asset class rely on jargon, anecdotes, inaccurate definitions, and generalizations. Our goal is to provide a coherent description that answers the following fundamental questions: Why does securitization, the process that creates structured credit investments, exist? How does structured credit differ from traditional corporate credit, mortgage lending, or leasing? What distinguishes a “securitizable” asset from other assets such as real estate, guarantees, or equity interests? How are common features of structured credit intended to help protect debt investors? What roles do originators and servicers play? What are the benefits to the borrower? Asset-backed securities are complex investments and not suitable for all investors because these instruments are subject to many risks, including credit, liquidity, interest rate, and valuation risk<sup>1</sup>. We present this primer on securitized credit with the hope that investors can approach the sector with greater familiarity and perspective.

## The Elephant in the Room

During the GFC, many investors experienced losses related to private label RMBS, CMBS, and MBS-backed CDOs. This dislocation exposed investors who based their investment decisions primarily on ratings, guarantees from monoline insurers, and a blind reliance on historical experience of the 2003–2006 credit boom to anchor future performance expectations, especially in housing and commercial real estate.

The illiquidity and credit losses investors experienced during this period led many to steer clear of the sector. In the aftermath of the GFC, however, the structured credit market underwent a painful yet necessary transformation: Market participants, including investors, issuers, arrangers, and rating agencies, returned to sustainable credit underwriting. Diverse, appropriately capitalized, cautious buyers stepped into the vacuum created by the disorderly departure of overly levered, correlated investors, thereby improving market liquidity and stability.

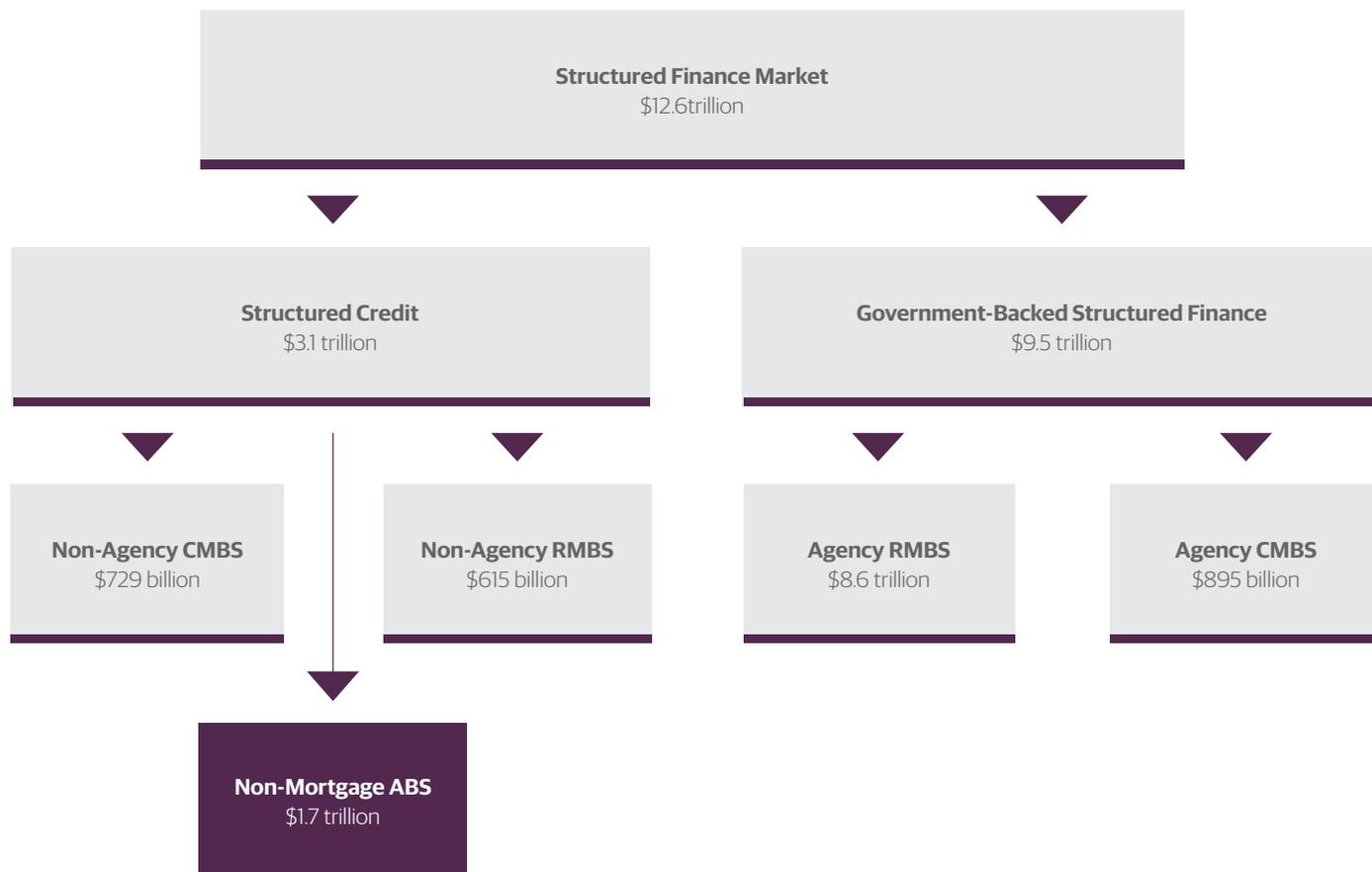
Despite these developments, losses and volatility always have the potential to return to certain corners of structured credit. Structured credit was not immune from downward ratings drift during the early stages of the COVID-19 pandemic, similar to what was experienced across other asset classes. However, structured credit in aggregate realized lower default rates in 2020 than corporate credit peers and their own historical averages. For example, CLOs did not experience a single default during all of 2020, and only five in 2021, according to S&P. This compares favorably to the high-yield bond market, which recorded default rates as high as 9 percent in August 2020, and the leveraged loan market, which recorded a default rate of 4.2 percent in September 2020.

Identifying which specific ABS types, structures, and securities may experience a dislocation requires dedicated credit, trading, technology, legal resources, and a disciplined investment process.

<sup>1</sup> Asset-backed securities are complex investments and not suitable for all investors. Investors in asset-backed securities generally receive payments that are part interest and part return of principal. These payments may vary based on the rate loans are repaid. Some asset-backed securities may have structures that make their reaction to interest rates and other factors difficult to predict, making their prices volatile and they are subject to liquidity and valuation risk. Please see “Important Notes and Disclosures” at the end of this document for additional risk information.

## Non-Mortgage ABS' Place in the Structured Finance Universe

Due to its small size and complexity, the ABS sector tends to be overlooked, but our focus on ABS reveals compelling investment opportunities.



Source: Guggenheim Investments, JP Morgan, eMBS. Data as of 2.28.2023.

## Inside ABS: Securitized Assets and Contractual Cash Flows

Securitization begins with an agreement. One party agrees to pay another party. A family buys a home and agrees to monthly mortgage payments. A software company borrows capital to purchase a smaller competitor and agrees to the terms of a bank loan. A regional airline, looking to add routes, enters a lease agreement on an Airbus A320. A franchisee opens a drive-through restaurant and agrees to pay 5 percent of sales to Wendy's Corp.

Look beyond the house, the software company, the airplane, and the restaurant. These agreements are all contractual obligations to pay that form the basic building blocks of securitization, or the assets backing the securitization.

You may be the proud owner of a vast vinyl record collection. Your record collection, however, doesn't belong in a securitization. In order to serve as the collateral backing an asset-backed security, an asset must represent a contractual obligation to make payments. In other words, the assets on the left-hand side of the securitization's balance sheet also exist as

liabilities on the right-hand side of the payer's balance sheet. Note that we refer to a "payer," because an asset may represent the obligation to pay by a borrower, lessee, customer, or licensee, among others. Contrary to common understanding, "hard" assets do not serve as the primary collateral for securitizations. Only contracts, such as leases, mortgages, loans, and agreements that define payment obligations create the contractual cash flows necessary for securitization.

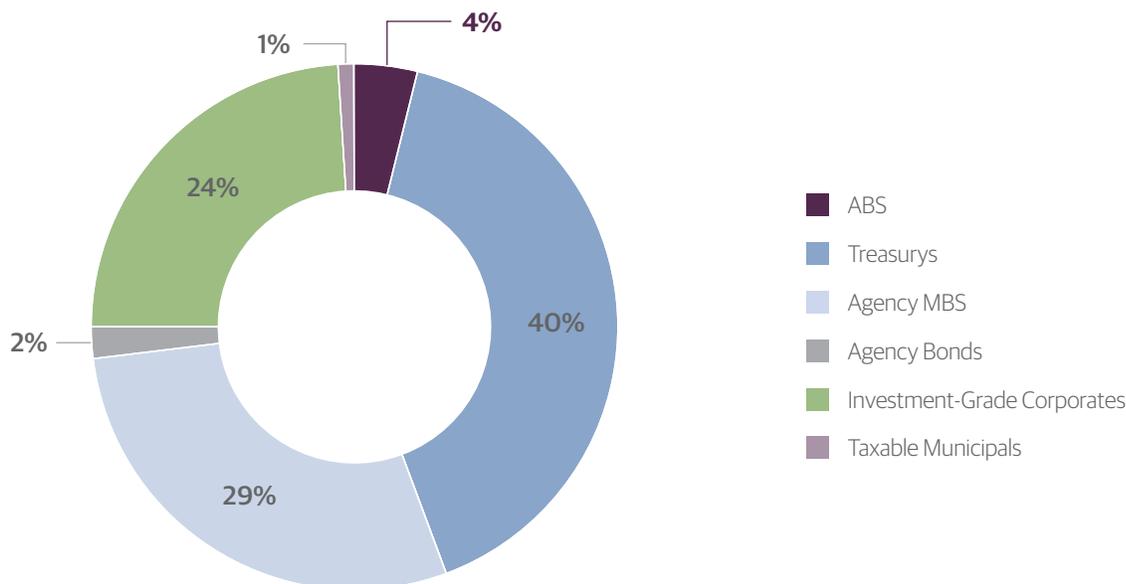
Other sources of value, such as real estate, airplanes, or a corporate guarantee, may also be available to repay ABS investors. However, these provide only secondary security. Disciplined structured credit investors rely primarily on contractual cash flows for repayment; these other sources of value represent methods of repayment only in break-glass-in-case-of-emergency situations. Experienced and capable ABS investors seek structures and collateral that avoid direct reliance on such secondary sources of value because the

history of markets has shown that the cause of a disruption in a payer's ability to honor a contractual obligation to pay will simultaneously lead to a depreciation in the value of the related hard assets (they share a "common risk factor").

For example, when large numbers of homeowners could not honor their mortgage payment obligations, counting on steady housing prices to support debt repayment turned out to be unrealistic. Leading up to the GFC, those who conservatively evaluated borrower ability to pay their mortgages rather than focusing upon property values generally sidestepped losses (and, in some cases, gained the insight to short the ill-constructed securitizations). Meanwhile, those investors who relied on continued home price appreciation and ignored the quality of the contractual cash flows fared poorly. We believe the specific values ascribed to real estate, companies, planes, ships, and intellectual property derive from the quality of the underlying cash flows, not the other way around.

#### ABS Make Up Just 4 Percent of the Fixed-Income Market

The U.S. fixed-income universe is dominated by Treasuries, Agency MBS and bonds, and investment-grade bonds.



Source: Guggenheim Investments, SIFMA. Data as of 9.30.2022.

## SPVs: The Structure of Structured Credit

Securitization, the act of creating asset-backed securities, begins with the creation of a special purpose vehicle, or SPV. Think of an SPV as a company with no purpose other than to acquire assets and issue debt secured by those assets. The SPV, also called the “issuer,” purchases a specific pool of assets and simultaneously issues debt securities—the asset-backed securities—and equity interests to fund the purchase of those assets. The pool of assets are typically of one type (auto loans, aircraft leases, corporate loans, etc.) but often are comprised of diverse and numerous “payers.”

Often, but not always, the SPV issues multiple classes of debt with different priority of payment, which are called tranches. Other important steps in this securitization process include the assignment of a servicer or manager, assignment of a trustee, issuance of a rating on the issued debt tranches, and the establishment of an assortment of rules to govern the securitization. These rules dictate how the trustee distributes cash flow from the asset pool between the principal and interest due on the debt tranches and equity interests, what sort of assets the SPV can own, what to do when assets pay off early, and whether cash can be used to purchase new assets. They also prescribe what happens when things go wrong, such as when the assets do not generate enough cash, or there is a precipitous decline in their quantity and/or quality. The governing documents also establish the content of the periodic investor reports, spelling out the roles, ratings and rules, and much more. Usually, the bond indenture serves as the governing document, but some securitizations may use a credit agreement, a trust deed, or a servicing agreement. Needless to say, navigating these documents efficiently and thoroughly requires significant experience, dedicated resources, and a disciplined investment process.

## More than MBS: ABS Collateral Types Are Familiar and Diverse

At its inception in the mid-1980s, the non-mortgage ABS market began with securitizations of auto loans and credit card receivables. Since then, the sector has rapidly evolved into a highly diversified \$1.5 trillion market, running the gamut of collateral types. Within structured credit, investors can construct a portfolio of various collateral types, providing additional diversification benefits at the investor portfolio level. Real estate-related securitized credit, including Agency and non-Agency RMBS and CMBS, technically represent types of ABS, but their investment considerations differ significantly enough that we consider them distinct asset classes. Non-real estate ABS collateral types can be grouped into two main subsectors, consumer and commercial:

- **Consumer ABS** are backed by cash flows from personal financial assets, such as student loans, credit card receivables, and auto loans.
- **Commercial ABS** are constructed from pools of receivables, loans, or leases on assets, such as shipping containers, data centers, aircraft, and other commercial equipment. Commercial ABS also include collateralized loan obligations (CLOs) backed by corporate bank debt or commercial real estate loans, and, on occasion, collateralized bond obligations (CBOs) backed by high-yield bonds.

Other non-mortgage securitized assets include merchant credit card advances, oil and gas future production royalty agreements, commission agreements, drill-ship charter agreements, property assessed clean energy loans, wireless tower leases, billboard leases, consumer wireless contracts, and wireless spectrum agreements. For a more comprehensive list of ABS types, see Appendix A.

# Investor-Friendly Features of Securitized Credit

ABS include investor-friendly features intended to help protect against loss and improve liquidity, including bankruptcy remoteness, excess spread and triggers, overcollateralization, diversity of payers, amortization, and debt tranching.

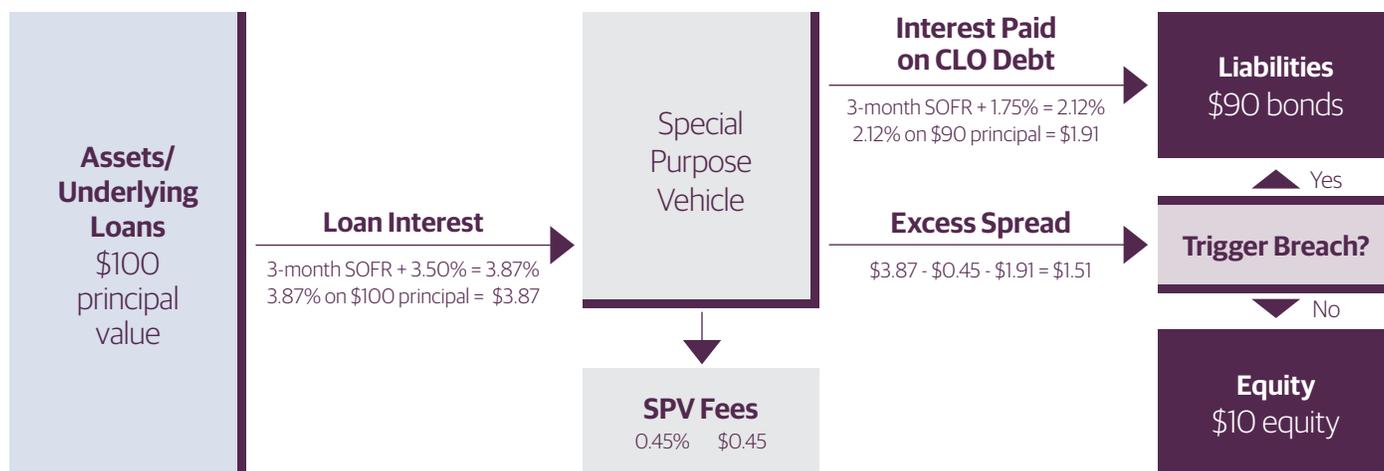
**Bankruptcy remoteness:** Most securitizations involve a sponsor, typically a lender, specialty finance company, institutional investor, or corporation. If that sponsor gets into financial trouble, it can usually file for protection of its assets from creditors under the bankruptcy code, forcing all creditors into a standstill. However, in a securitization, the SPV that issues the debt is separate and distinct from the sponsor. Bankruptcy protection for the sponsor does not extend to the liabilities of the SPV. Further, the assets of SPV will not be available to the sponsor's other creditors, providing ABS investors with a layer of protection from financial stress experienced by the sponsor.

**Excess spread and triggers:** As illustrated below, the expected yield or return of the underlying asset pool usually exceeds the average yield of the issued ABS debt.

In the normal course, excess spread cash flow goes to the SPV's equity investors. However, in the event of deterioration in the quality and/or quantity of the underlying loan pool, the CLO may breach a "trigger." A breached trigger will require that excess spread be diverted away from the equity investors to either repay principal of the CLO's most senior tranche or to purchase additional collateral. If pool performance deteriorates further, triggers may also require that interest be

## Anatomy of a Securitization

ABS may seem complex, but many embedded features are intended to act as investor protections. In this example, \$3.87 in interest income that is generated by the underlying asset pool pays \$0.45 in SPV fees and \$1.91 in interest expense to CLO debt holders. The use of excess spread is determined by trigger breaches.



Hypothetical example for illustrative purposes only. Secured Overnight Financing Rate (SOFR) is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities.

## Buyers Beware

Credit analysis that is overly reliant on loan-to-value ratios and asset prices in the presence of cheap debt financing can lure investors into a dysfunctional positive feedback loop.



diverted away from junior debt tranches to repay the senior-most tranche. As such, excess spread serves as a cushion for debt investors. It is important to note that not all types of securitizations have excess spread.

### Overcollateralization or loan-to-value (LTV) ratios:

An SPV generally issues less debt than it has assets. In the example of the CLO on the previous page, for every \$100 of bank loans in the underlying pool of assets, the SPV only issued \$90 of CLO debt. The \$10 difference represents the amount of “overcollateralization,” which serves as a cushion for debt investors. Overcollateralization becomes tricky to envision when the SPV owns assets that have no explicit face amount. Each loan has an outstanding principal, and each receivable has an amount due. However, what is the face amount of a lease? The ABS market has a number of ways of dealing with this nuance. Often, investors look to the market value or appraised value of the hard asset related to the contractual cash flow, to calculate LTV or debt advance rate. For instance, in an aircraft ABS or triple net lease ABS, the market focuses on the appraised value of the pool of aircraft or the real estate properties, respectively. Alternatively, the market may calculate the present value of the contractual cash flows that have been securitized as a proxy for the face value.

Focusing exclusively on overcollateralization or LTV, particularly when the securitized assets do not have explicit principal amounts, is insufficient credit analysis. In a market in which debt capital is readily available and credit losses

are low, more favorable debt terms tend to fuel increased appraisals and calculated present values over time. Cheap debt increases hard asset values as firms enjoy a lower cost of funds and consequently have lower hurdle rates for investments, thereby bidding up asset prices. ABS investors observe higher hard asset values, point to additional overcollateralization, and extend more cheap debt, which increases appraisals further, and so on. Engineers refer to this circular reference as a “positive feedback loop,” an inherently unstable condition (see figure above).

**Diversity of payers:** Most securitizations, regardless of type, have pools of loans, leases, or other contractual cash flows with many unique underlying borrowers or lessees (collectively “payers”). A CLO’s underlying portfolio may contain over a hundred unique corporate borrowers. A shipping container lease ABS pool may include dozens of cargo shipping line operators as lessees. A credit card ABS master trust may include receivables from thousands of individual card holders. An aircraft lease ABS may include leases representing obligations of many different airlines. By design, ABS debt investors do not require every underlying payer to perform in order for the ABS debt to receive all principal and interest payments. This diversification is intended to help protect against a loss arising from the idiosyncratic default risks associated with individual payers.

**Tranching of risk and amortization:** Generally, securitizations issue multiple tranches, or classes of debt, that customize risk, rating, timing of repayment, and lien seniority

on the collateral. This tranching allows debt with diverse risk and reward characteristics to be created from a single pool of assets. The shorter maturity, more senior tranches carry higher ratings, and greater cushion against loss, while the longer-dated, more junior tranches have higher yields but carry lower ratings. In this way, tranching serves to create debt that will suit different investor preferences. Tranching is achieved in a securitization through a set of rules defining the priority of payments—commonly referred to as a waterfall—that is the backbone of any securitization’s governing document. While tranching represents a major benefit of securitization, excessive customization may adversely impact liquidity and, in extreme

cases, maybe be correlated with excessive investor confidence in the expected performance of the asset class. In practice, within each ABS subtype, we see standardized tranching, or “capital structures,” that allow market participants to more efficiently develop bids and offers in secondary markets.

### Balancing Risk and Return

This hypothetical CLO capital structure allows debt with different risk characteristics to be created from a homogeneous pool.

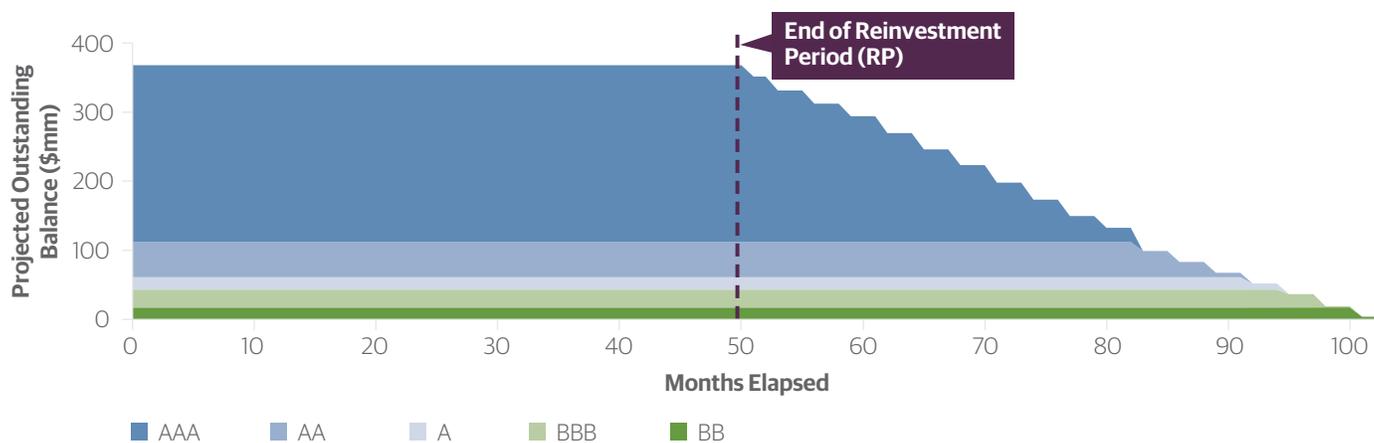
| Rating | Size (\$mm) | Coupon           | Credit Enhancement | Weighted Average Life |
|--------|-------------|------------------|--------------------|-----------------------|
| AAA    | 256         | 3-month SOFR+120 | 36.0               | 5.6                   |
| AA     | 51          | 3-month SOFR+175 | 23.3               | 7.3                   |
| A      | 18          | 3-month SOFR+225 | 18.8               | 7.9                   |
| BBB    | 26          | 3-month SOFR+325 | 12.3               | 8.3                   |
| BB     | 17          | 3-month SOFR+600 | 8.0                | 8.6                   |
| Equity | 37.8        |                  |                    |                       |

The capitalization table and amortization graph below belong to a hypothetical CLO. The capitalization table shows the tranching, with the AAA entitled to repayment before other classes, resulting in the shortest weighted average life (WAL). This is illustrated graphically in the amortization timeline below. The AAA class amortizes through repayment of its principal before any of the junior classes, which only begin to amortize once the AAA class is paid off. The same principle applies down the capital structure with the junior classes having longer WALs because they amortize only once more senior classes have been paid off.

Closely tied to the concept of cash flow tranching, most securitizations provide for amortization, or return of principal, ahead of the expected maturity, which may mitigate risk of loss without any investor action or hedging. The most prominent example being in RMBS where collateral prepayments are the majority contributor to bond amortization. Compare this to corporate or municipal debt where amortization is rare and a large principal payment

### Hypothetical CLO Amortization Timeline

Many securitizations provide for significant principal amortization ahead of the expected maturity, which may mitigate risk of loss without any investor action or hedging.



Hypothetical example for illustrative purposes only. Please see Disclosures for a more complete discussion of risks of investing in ABS. By design, CLO equity tranches receive much of their return from excess spread distributions. Return of stated principal is highly variable.

by the borrower at maturity (usually from refinancing proceeds) are typically required, introducing an element of term or maturity risk. As a result, securitized credit investors usually take less borrower refinancing risk than corporate or municipal debt investors or commercial mortgage lenders<sup>2</sup>.

**Professional servicing and active management:** The servicer, also referred to as the collateral manager, seeks to maximize the certainty and quantity of cash flows from the underlying pool of assets. Responsibilities of the servicer may include evaluating credit quality of payers and assets prior to inclusion in the pool, negotiating pricing and terms of loans and leases, remarketing equipment for lease, negotiating with nonperforming lessees or borrowers, obtaining appraisals, and selling hard assets. In many transactions, the servicer or an affiliate owns the equity or residual interest in the securitization, which generally creates a favorable alignment of interest with the debt investors. A major distinction exists between static pools and actively managed pools. In static pools, cash flows from the collateral may not be reinvested in new collateral. In actively managed, or reinvesting, securitizations, the manager may purchase new assets with proceeds received from existing assets, subject to strict eligibility criteria.

**Investment-grade ratings:** Securitizations represent a bankruptcy remote lien on diverse, contractually cash flowing assets, and consequently rating agencies generally assign investment-grade ratings to many of the issued debt tranches. However, the repayment of debt relies on contractual cash flows and does not generally benefit from recourse to the sponsor or asset originator. As a result, securitized debt ratings rely solely on those cash flows and do not give significant credit for potential active management of the collateral or refinancing. “Rated” maturities are therefore in excess of 20 years, even though the expected maturities generally range from one to 10 years, depending on the product type.

**Professional reporting:** Each securitization employs a third-party trustee that, among other responsibilities, distributes periodic performance reports to investors. These reports, generally prepared by the servicer, relay information about the underlying collateral’s composition, quality, and payment performance. While the content of the reports varies by securitization type, in each case these reports meaningfully contribute to liquidity and facilitate risk management, as they allow existing and prospective investors to evaluate the performance and outlook of the securitization.

### ABS: What’s in it for the Borrower?

Securitizations provide debt capital to two types of borrowers: They may fund the loans or leases originated by lenders, lessors, or other specialty finance companies. Alternatively, securitizations may provide debt capital to traditional corporate borrowers who have contracts or own assets that are of higher financial quality than their own full faith and credit.

For all borrowers, a benefit of securitization is that the term of ABS borrowing matches the term of the underlying assets, insulating them from mark-to-market or refinancing risks. From the traditional corporate borrower’s perspective, the benefits of financing through securitization include:

- Term of financing matches tenor of assets, reduces refinancing risk, and eliminates potential for forced asset sales
- Lower borrowing costs than alternatives such as senior unsecured bonds
- Non-recourse to the sponsor, may provide off-balance sheet treatment
- Diversity of funding sources may improve enterprise valuation for sponsor

In each case, borrowers pledge loans, leases, or other securitizable assets as collateral that exceeds the same borrower’s intrinsic creditworthiness. In other words, the securitization investor tables the difficult question, “Will the borrower repay me?”—indeed, payments are not guaranteed by the corporation—and instead asks the simpler question: “Will these assets (loans, leases, etc.) generate enough contractual cash flow to repay me?”

**The following case study** illustrates the benefits of securitization to a traditional corporate borrower. This \$2 billion securitization by Domino’s Pizza employed the basic structure, mechanics, and priority of payments for ABS. In contrast to multi-tranche ABS structures, this securitization is characterized by a single-term tranche of debt and a pari-passu (equal rank to the term tranche) revolver backed by the same assets.

2. Investors in asset-backed securities may be subject to other types of risks. Please see the end of the document for risks related to this asset class.

# Securitization Case Study: Domino's Pizza<sup>3</sup>

Domino's Pizza, one of the largest pizza restaurant chains in the world, accessed the securitization market to borrow \$2 billion. As part of the transaction, Domino's established a bankruptcy remote SPV into which it sold substantially all of its revenue-generating assets. The SPV financed the acquisition of these assets by issuing ABS.

The SPV pledged the assets it acquired from Domino's as collateral to secure its repayment obligations to ABS noteholders. Additionally, Domino's provided ABS investors a battery of performance-based tests to support the repayment of the notes in the event of a business decline. In consideration for those terms, Domino's obtained an optimal mix of note tenors and coupon types to fit its business needs, and received an investment-grade rating on the debt, lowering its cost of funds.

## How Securitization Served as the Optimal Financing Solution for Domino's

Founded in 1960, Domino's currently has over 17,000 restaurant locations globally with over \$16 billion annual system-wide sales. Since 2010, average same-store sales have increased 7.4 percent annually. Domino's primarily operates as a franchisor of its brand, where 97 percent of its stores are owned and operated by franchisees.

In the franchise model, Domino's (as the franchisor) grants a store owner/operator the right to operate using all of Domino's intellectual property in consideration for an upfront license fee and an ongoing sales royalty. By paying the fees and royalties, the store operator benefits from Domino's brand, store look and design, menu, ingredient sourcing network, information technology, and advertising campaigns. From Domino's perspective, the franchisees shoulder the cost of expanding the chain's footprint while providing Domino's with a stable stream of royalty payments.

The stability of the royalty payments comes from the fact that franchisees pay Domino's a fixed percentage of stores sales,

not profits, therefore removing the risk of decreasing franchisee operating margins. The stability and predictability of the royalty payment streams, combined with the value of Domino's intellectual property, allowed Domino's to access the structured credit markets and issue investment-grade debt. Below we describe in summary the steps the company took to achieve its goals:

1. Domino's created an SPV, called Domino's Pizza Master Issuer LLC, into which it sold its revenue-generating assets. These assets include: existing and future franchise agreements, existing and future intellectual property, franchisor-owned store royalties, supply-chain business segment real estate and operational profits, and SPV transaction accounts.
2. The SPV issued ABS notes to finance the purchase of the acquired assets. The SPV pledges its assets as collateral for the benefits of noteholders to secure its repayment obligations.
3. Domino's entered into a management agreement with the SPV, which essentially requires it to continue operating the business on a daily basis as franchisor.

3. This case study is for illustrative purposes only to show the structure of an asset-backed security and should not be considered as investing advice or a recommendation. The Domino's Pizza example was chosen for its relatively simple structure and its recognizable brand name. Guggenheim Securities, LLC, part of Guggenheim Partners, LLC, served as an underwriter for the security.

4. Domino's retains a substantial equity interest in the SPV and is permitted to collect cash flows in excess of required ABS noteholder payments. Domino's retained equity aligns its interest with that of ABS noteholders; both benefit from a well-performing business. Details below describe how performance triggers within the securitization help protect noteholders by redirecting excess cash flow away from Domino's and to the ABS.
5. In the event Domino's were to default on a non-ABS obligation, any such creditor would be subordinate to all ABS investors in right, title, and claim to the SPV's assets.

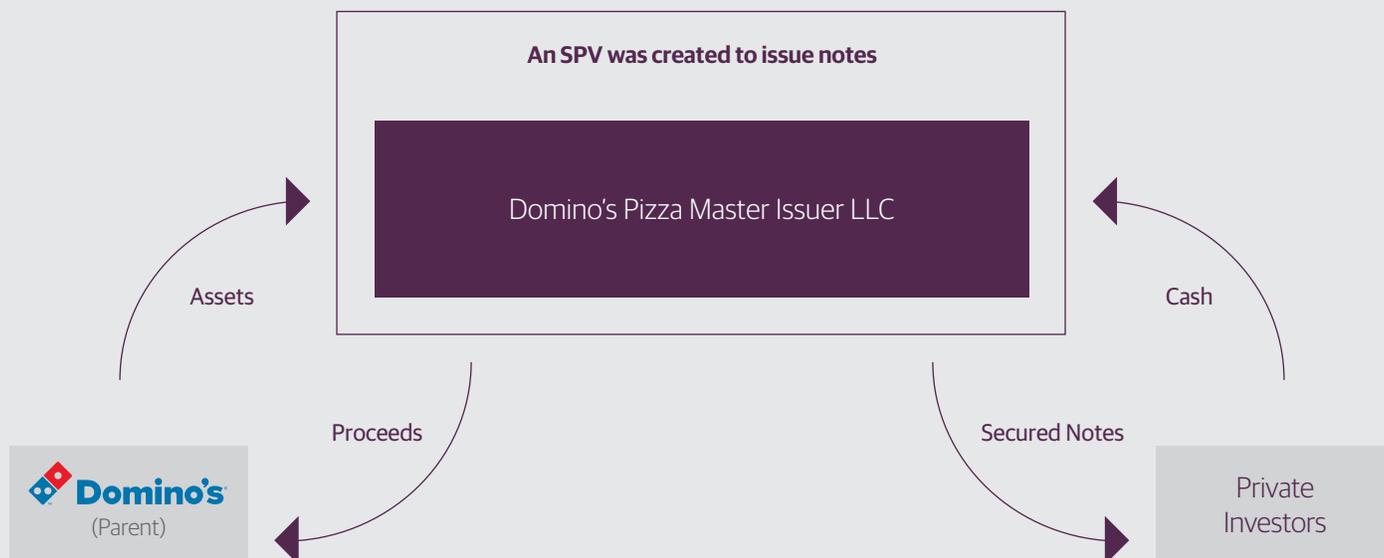
### How Credit Enhancements Help Protect ABS Investors

Notes issued under an ABS transaction are wholly backed by the assets owned by the SPV, but what happens if the cash flows generated by those assets diminish? As noted earlier, ABS transactions often carry several structural protections to help protect the bondholders from losses. Domino's ABS include a number of such structural protections:

- **Required Amortization.** Domino's is required to repay 1 percent of the original debt amount annually while its leverage is over 5.0x EBITDA—earnings before interest, taxes, depreciation, and amortization—to incrementally reduce dollars at risk for debt investors.
- **Performance triggers.** Two performance triggers in the Domino's securitization serve to help protect the ABS investor. Both tests are used to redirect cash from Domino's to either hold in a reserve account or repay debt in the event that business performance deteriorates:
  - **Cash trap** requires excess cash flows to be diverted from equity to a reserve account if the debt service coverage ratio or system-wide annual sales decline below specified test levels.
  - **Rapid amortization** diverts all excess cash flow from the equity (owned by Domino's) to repay the ABS. Rapid amortization is triggered under various conditions, including further debt service coverage ratio or sales declines, failure to repay the loan by a certain date, or if Domino's declares bankruptcy.

### ABS Structure Aligns Domino's Interests with Investors

Domino's retention of equity in the SPV means both the ABS investors and Domino's gain from a well-performing franchise.



# Investing in ABS

Any investor considering an allocation to ABS should ask two questions in order to understand pricing of structured credit.

A prospective ABS investor must answer two questions: First, despite the previously mentioned risk-mitigating attributes of securitization, why has structured credit continued to offer additional yield when compared to similarly rated corporate, municipal, or Agency debt? Second, within structured credit, which factors help investors understand the relative pricing of different ABS?

**As to the first question**, the reasons for ABS's yield premium mostly concern liquidity, information discrepancies, and historical experience:

- Most broad market indexes, including the Bloomberg U.S. Aggregate Bond Index, do not include structured credit securities. Investors thus perceive, unfairly in some cases, reduced liquidity versus competing fixed-income products.
- Structured credit securities trade over the counter, not on an exchange or electronic trading system.
- ABS reporting, while appropriate for their structure, does not resemble the quarterly disclosures of traditional corporate borrowers. This may tend to hinder crossover interest from traditional corporate debt investors.
- A shifting regulatory landscape has created uncertainty, particularly for banks' capital charges.
- Price volatility, rating downgrades, and credit losses experienced during the financial crisis still haunt some securitized credit investors.

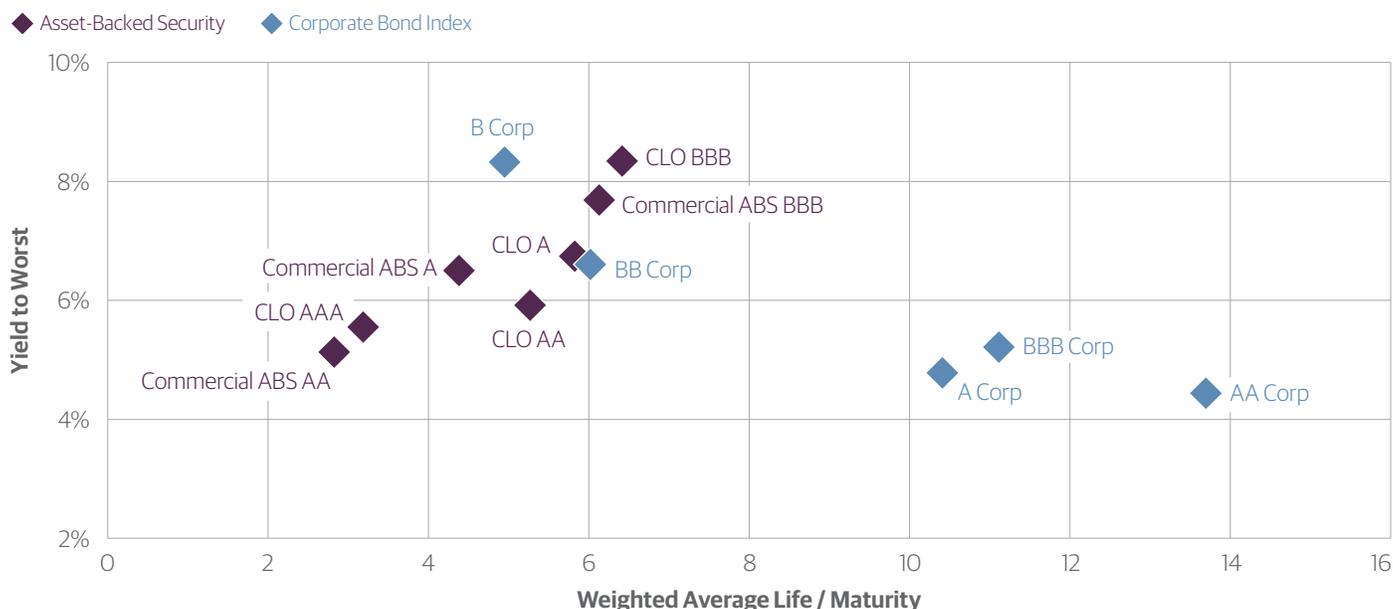
- Finally, the complexity of the documentation and structure of ABS and other securitized products requires a deeper investment in the necessary resources, including human capital, technology, and data.
- Note that none of these reasons are related to creditworthiness or the likelihood of return of full principal and interest. Rather, the reasons are all technical, which supports our belief that structured credit offers attractive incremental return without additional risk of loss.

**For the answer to the second question**, investors will need to consider a number of key variables when negotiating pricing:

- With regard to the underlying assets, investors should consider the liquidity, diversity, and transparency of the underlying asset and the availability of accurate historical performance information to inform stress scenarios.
- With regard to the ABS securities themselves, investors should factor into pricing such characteristics as rating, credit enhancement, position in capital structure and tenor, the effectiveness of portfolio limits, triggers, and covenants, and each tranche's ability to withstand hypothetical stress scenarios.
- Equally important in evaluating pricing are such factors as the allowance for reinvestment, call protection, availability of effective hedges, the manager's resources and track record, and the quality of periodic reporting.

## Discovering Yield in Structured Credit

ABS has offered higher yields than similarly rated corporate bonds. The shorter duration of ABS securities relative to comparably rated corporate bonds also helps protect against rising rates.



Source: Bloomberg, Guggenheim Investments. This information is provided for informational purposes only and is intended to reflect the general characteristics of certain fixed income sectors in the recent market environment. The characteristics shown herein do not represent characteristics of any client portfolios and there is no guarantee that assets with similar characteristics will be available in the future. **Corporate bond** index data is based on the yield to worst (YTW) and maturities of the AA-, A-, BBB-, BB-, and B-rated sleeves of the Bloomberg U.S. Corporate Bond Index and the and the Bloomberg U.S. Corporate High Yield Index (BB and below) as of 10.11.2022. **Collateralized loan obligation (CLO)** data is based on the YTW and weighted average life (WAL) of the Palmer Square CLO Senior Debt Index (AAA and AA or equivalent) and Palmer Square CLO Debt Index (A, BBB) as of 10.11.2022. CLO index yields assume that forward benchmark rates are realized. **Commercial ABS** information is derived from the aircraft, equipment, railcars, utility, and franchise subsectors of the ICE BofA AA-BBB U.S. Fixed Rate Asset Backed Index as of 1.31.2023, and does not include auto, consumer, student loans, single family rentals, collateralized mortgage obligations, manufactured housing, credit cards, home equity, payment rights, and non-performing loans subsectors. The subsectors included in commercial ABS are generally issued less frequently, backed by less familiar assets, and potentially higher yielding than those subsectors that are excluded. Because they are less common, they may be more susceptible to liquidity and valuation risk than other ABS subsectors. Weighting for the selected commercial ABS universe is based on the current face value in index for the WAL and market value in index for YTW.

## Common Mistakes in Structured Credit Investment

When analyzing a poorly performing securitization, in hindsight, we find that debt investors failed to rationally assess one or more of the below risks. A disciplined, thorough investment process and common sense will help guard against these common missteps.

- Focusing on enterprise value, hard asset values, or sponsor reputation instead of the contractual payer's ability, willingness, and incentives to pay
- Overreliance on rating agencies in lieu of independent credit work and commercial judgment
- Correlated outcomes, particularly, but not limited to the strong connection between payer performance and hard asset values in times of distress
- Overreliance on quantitative models calibrated on historical data to forecast credit performance in changing market regimes. This problem is magnified in subordinated tranche investments and their inherently non-linear loss profiles
- Collateral obsolescence or technological advances diminishing residual values or prospects for new contracts

## Overview of Guggenheim's Structured Credit Investment Process

To confidently enter the structured credit market, an investor needs to have the necessary resources, including human capital, technology, and data. At Guggenheim, we believe we not only have the resources for rigorous security analysis, including a deep credit research team and legal team, but we also have built a disciplined investment process. The diagram below illustrates the process we employ to source, evaluate, and select investment ideas.

Structured credit represents a unique challenge for asset managers. Strong capabilities in corporate credit analysis are

an absolute necessity when evaluating structured credit given its complexity as an asset class. Asset management firms without a substantial structured credit team, corporate credit team, legal team, and a dedicated portfolio construction group may overlook important factors when determining suitability.

Guggenheim's fixed-income investment team manages or updates credit opinions on an ongoing basis. This pre-existing research allows our structured credit team to form a comprehensive view of any structured credit's relative merit. The legal documents associated with each distinct deal within a structured credit contains nuances, which may require collaboration with our team of dedicated legal professionals.

### Due Diligence Is Paramount in Security Selection

The security selection process requires deep, deliberative analysis, and should not be rushed.

**Sector Outlook and Investment Sourcing** — Develop and evolve an investment thesis and outlook for each sector; determine asset class health and prospects; monitor and assess regulatory developments; source potential investment opportunities directly through issuers and Wall Street relationships.

**Credit and Collateral Analysis** — Confirm or revise collateral performance, value, and refinance-ability forecasts based on Guggenheim estimates of borrower credit, payment history, collateral condition, remaining useful life, and current and residual collateral values, as applicable.

**Structural Analysis** — Conduct comprehensive securitization structure review, including: trust structure and mechanics; forms of credit enhancement; cash waterfall priorities; performance triggers and amortization events; indenture definitions and allowances.

**Servicer, Manager, and Equity Sponsor Analysis** — Perform due diligence on manager, servicer and/or equity sponsor through in-person meetings and independent research; review remittance reports for quality and data transparency; consider "skin in the game" and alignment of incentives.

**Stress Analysis** — Design scenarios incorporating plausible combinations of linear and nonlinear stresses: linear – stress collateral performance in historically extreme environments; nonlinear – identify tail risks (regulatory change, disruption in credit availability, single entity failure, etc.) to future transaction performance.

**Investment Proposal** — Submit investment for investment committee review and approval.

## Appendix A: Selected ABS Types and Related Data

| ABS Type                   | Primary Payment Source                                             | Payer                         | Payer Type             | Contingent Payment Source                         | Sponsor                                   |
|----------------------------|--------------------------------------------------------------------|-------------------------------|------------------------|---------------------------------------------------|-------------------------------------------|
| Credit Card                | Credit Card Receivables                                            | Cardholder                    | Consumer               | Bank Sponsor (implied)                            | Bank                                      |
| Auto Loan                  | Auto Loan                                                          | Auto Owner                    | Consumer               | Automobile                                        | Automobile Finance Company                |
| Auto Lease                 | Lease Agreements<br>Automobile Residuals                           | Driver                        | Consumer               | Automobile                                        | Automobile Finance Company                |
| Student Loan               | Student Loan                                                       | Borrower<br>Guarantor/Parents | Consumer               | Individual Recourse                               | Student Lender                            |
| Marketplace Lending        | Unsecured Consumer Loans                                           | Borrower                      | Consumer               | Individual Recourse                               | Online Lender                             |
| Timeshare                  | Timeshare Contracts                                                | Resident                      | Consumer               | Individual Recourse,<br>Fractional Unit Ownership | Timeshare Company                         |
| Residential Solar          | Solar Power Purchase Agreements<br>Solar Equipment Loans           | Resident                      | Consumer               | Individual Recourse<br>Equipment/Fixture Filing   | Solar Finance Company                     |
| Rate Reduction             | Right to recoup expenses via utility bills                         | Residents<br>Local Business   | Consumer<br>Commercial | Recourse                                          | Utility                                   |
| Equipment                  | Equipment Lease Agreements                                         | Equipment Operator            | Commercial             | Equipment Disposition Proceeds                    | Equipment Leasing Company                 |
| Whole Business             | Franchise & Royalty Agreements                                     | Franchisee                    | Commercial             | IP and Enterprise Value                           | Brand Owner and Manager                   |
| Structured Settlement      | Insurance Settlement<br>Lottery Annuity                            | Insurance Company             | Commercial             |                                                   | Structured Settlement Originator          |
| Aircraft                   | Aircraft Lease Agreements<br>Maintenance Agreements                | Airline                       | Commercial             | Aircraft Disposition Proceeds                     | Aircraft Leasing Company                  |
| Triple Net Lease           | Triple Net Lease Agreements                                        | Business Operator             | Commercial             | Real Estate                                       | Triple Net REIT                           |
| Single Family Rental       | Residential Rental Agreements                                      | Tenants                       | Consumer               | Real Estate                                       | Single Family Owner/Operator              |
| Shipping Container         | Container Lease Agreements                                         | Shipping Line                 | Commercial             | Container Sale Proceeds                           | Container Leasing Company                 |
| Railcar                    | Railcar Lease Agreements                                           | Rail operators                | Commercial             | Railcar Disposition Proceeds                      | Rail Leasing Company                      |
| Royalty                    | Royalty and Licensing Agreements                                   | Agreement Counterparty        | Commercial             | Sale Proceeds from Intellectual Property          | Royalty Acquirer                          |
| Diversified Payment Rights | Dollar wires and flows from US or Europe destined for foreign bank | Originator of dollar flow     | Commercial<br>Consumer | Recourse to Bank Sponsor<br>Sovereign (implied)   | Foreign Bank                              |
| CLOs                       | Bank Loans                                                         | Non-IG Corporations           | Commercial             | Proceeds from foreclosure on corporations         | Credit Asset Manager<br>Bank Loan Manager |
| CRE CLOs                   | Commercial Mortgage Loans                                          | Real Estate Owners            | Commercial             | Real Estate                                       | Commercial Mortgage Lender                |

## Important Notes and Disclosures

The **Bloomberg U.S. Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment grade, USD-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (Agency fixed-rate and hybrid ARM pass-throughs), ABS, and CMBS (Agency and non-Agency).

The **Bloomberg U.S. Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers.

The **ICE BofA AA-BBB U.S. Fixed-Rate Asset Backed Index** is the AA-rated to BBB-rated subset of the ICE BofA U.S. Fixed-Rate Asset Backed Securities Index, which tracks the performance of USD-denominated investment-grade fixed-rate asset backed securities publicly issued in the U.S. domestic market.

The **Palmer Square CLO Senior Debt Index** is also a rules-based observable pricing and total return index for CLO debt for sale in the United States, rated at the time of issuance as AAA or AA or equivalent rating. Such debt is often referred to as the senior tranches of a CLO.

The **Palmer Square CLO Debt Index** is a rules-based observable pricing and total return index for collateralized loan obligation debt for sale in the United States, original rated A, BBB, or BB or equivalent rating.

### Past performance is not indicative of future results.

**Investing involves risk, including the possible loss of principal.** Investments in fixed-income instruments are subject to the possibility that interest rates could rise, causing their values to decline. **Asset-backed securities are complex investments and not suitable for all investors.** Investors in asset-backed securities, including collateralized loan obligations ("CLOs"), generally receive payments that are part interest and part return of principal. These payments may vary based on the rate loans are repaid. Some asset-backed securities may have structures that make their reaction to interest rates and other factors difficult to predict, making their prices volatile and they are subject to liquidity and valuation risk. CLOs bear similar risks to investing in loans directly, such as credit, interest rate, counterparty, prepayment, liquidity, and valuation risks. Loans are often below investment grade, may be unrated, and typically offer a fixed or floating interest rate. High yield and unrated debt securities are at a greater risk of default than investment grade bonds and may be less liquid, which may increase volatility.

This material is distributed or presented for informational or educational purposes only and should not be considered a recommendation of any particular security, strategy or investment product, or as investing advice of any kind. This material is not provided in a fiduciary capacity, may not be relied upon for or in connection with the making of investment decisions, and does not constitute a solicitation of an offer to buy or sell securities. The content contained herein is not intended to be and should not be construed as legal or tax advice and/or a legal opinion. Always consult a financial, tax and/or legal professional regarding your specific situation.

This material contains opinions of the author, but not necessarily those of Guggenheim Partners, LLC or its subsidiaries. The opinions contained herein are subject to change without notice. Forward looking statements, estimates, and certain information contained herein are based upon proprietary and non-proprietary research and other sources. Information contained herein has been obtained from sources believed to be reliable, but are not assured as to accuracy. Past performance is not indicative of future results. There is neither representation nor warranty as to the current accuracy of, nor liability for, decisions based on such information.

**Applicable to United Kingdom investors:** Where this material is distributed in the United Kingdom, it is done so by Guggenheim Investment Advisers (Europe) Ltd., a U.K. Company authorized and regulated by the Financial Conduct Authority (FRN 499798) and is directed only at persons who are professional clients or eligible counterparties for the purposes of the FCA's Conduct of Business Sourcebook.

**Applicable to European Investors:** Where this material is distributed to existing investors and pre 1 January 2021 prospect relationships based in mainland Europe, it is done so by Guggenheim Investment Advisers (Europe) Ltd., a U.K. Company authorized and regulated by the Financial Conduct Authority (FRN 499798) and is directed only at persons who are professional clients or eligible counterparties for the purposes of the FCA's Conduct of Business Sourcebook.

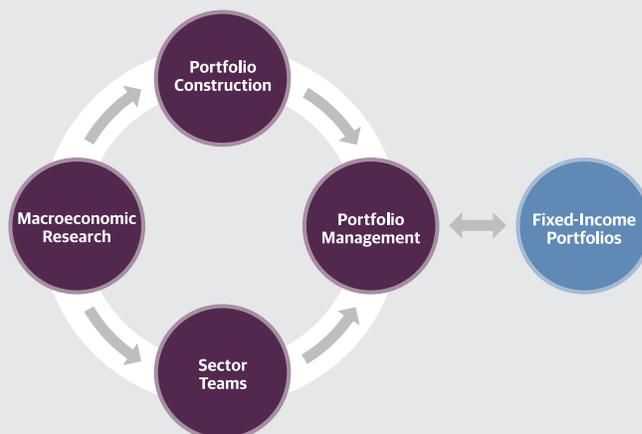
**Applicable to Middle East investors:** Contents of this report prepared by Guggenheim Partners Investment Management, LLC, a registered entity in their respective jurisdiction, and affiliate of Guggenheim Partners Middle East Limited, the Authorized Firm regulated by the Dubai Financial Services Authority. This report is intended for qualified investor use only as defined in the DFSA Conduct of Business Module.

© 2023, Guggenheim Partners, LLC. No part of this article may be reproduced in any form, or referred to in any other publication, without express written permission of Guggenheim Partners, LLC.

Guggenheim Funds Distributors, LLC an affiliate of Guggenheim Partners, LLC. For more information, visit [guggenheiminvestments.com](http://guggenheiminvestments.com) or call 800.345.7999.

## Guggenheim's Investment Process

Guggenheim's fixed-income portfolios are managed by a systematic, disciplined investment process designed to mitigate behavioral biases and lead to better decision-making. Our investment process is structured to allow our best research and ideas across specialized teams to be brought together and expressed in actively managed portfolios. We disaggregated fixed-income investment management into four primary and independent functions—Macroeconomic Research, Sector Teams, Portfolio Construction, and Portfolio Management—that work together to form a predictable, scalable, and repeatable process. Our pursuit of compelling risk-adjusted return opportunities typically results in asset allocations that differ significantly from broadly followed benchmarks.



## Guggenheim Investments

Guggenheim Investments is the global asset management and investment advisory division of Guggenheim Partners, with more than \$217 billion<sup>1</sup> in total assets across fixed income, equity, and alternative strategies. We focus on the return and risk needs of insurance companies, corporate and public pension funds, sovereign wealth funds, endowments and foundations, consultants, wealth managers, and high-net-worth investors. Our 250+ investment professionals perform rigorous research to understand market trends and identify undervalued opportunities in areas that are often complex and underfollowed. This approach to investment management has enabled us to deliver innovative strategies providing diversification opportunities and attractive long-term results.

## Guggenheim Partners

Guggenheim Partners is a diversified financial services firm that delivers value to its clients through two primary businesses: Guggenheim Investments, a premier global asset manager and investment advisor, and Guggenheim Securities, a leading investment banking and capital markets business. Guggenheim's professionals are based in offices around the world, and our commitment is to deliver long-term results with excellence and integrity while advancing the strategic interests of our clients. Learn more at [GuggenheimPartners.com](https://www.guggenheimpartners.com), and follow us on LinkedIn and Twitter @GuggenheimPtnrs.

1. Guggenheim Investments assets under management are as of 12.31.2022 and include leverage of \$15.2bn. Guggenheim Investments represents the following affiliated investment management businesses of Guggenheim Partners, LLC: Guggenheim Partners Investment Management, LLC, Security Investors, LLC, Guggenheim Funds Distributors, LLC, Guggenheim Funds Investment Advisors, LLC, Guggenheim Partners Advisors, LLC, Guggenheim Corporate Funding, LLC, Guggenheim Partners Europe Limited, Guggenheim Partners Japan Limited, GS GAMMA Advisors, LLC, and Guggenheim Partners India Management.

**GUGGENHEIM**

Innovative Solutions.  
**Enduring Values.®**

