EXECUTIVE SUMMARY

- Securitized credit (or “structured product”) consists of bonds backed by mortgages, loans, and leases (the “collateral”). It is a diverse asset class that is not well represented within the Bloomberg Barclays (“BB”) Aggregate Index. As such, the asset class is typically underrepresented in institutional investor portfolios.

- Backed by a diverse range of collateral types, a dedicated structured product allocation may provide investors:
  » Diversification benefits to portfolios that are often dominated by corporate credit risk.
  » Reduction in interest rate risk due to the short duration and amortizing nature of the securities.
  » An attractive yield relative to other similar quality fixed income sectors.

- Investors should be aware that a dedicated structured product portfolio may:
  » Be less liquid than a portfolio that closely tracks the BB Aggregate or any of its subcomponents.
  » Be challenging to access for smaller investors.
  » Be more expensive than traditional fixed income strategies.
  » Be difficult to benchmark given the diverse nature of security types, structures, and manager strategies.

- Investors with mandates large enough to fund separate accounts could consider an investment grade focused mandate to complement other investment-grade allocations or a primarily below investment-grade mandate that serves as a complement to corporate high yield exposure.

Securitization Process

The securitization process is often described as intricate financial engineering; however, it is actually a fairly simple process that is summarized in the diagram below. Although the major sectors within structured product are collateralized by wide ranging asset types, the process of transforming relatively illiquid assets into a security, as described below, is the same across all sectors of the structured product market.

A bankruptcy remote special purpose vehicle (“SPV”) is created. Insulates investor from credit risk of originator.

SPV issues debt (multiple tranches) and typically an equity tranche. The proceeds are used to purchase the assets (e.g. auto loans, business loans, mortgages, etc.)

The assets generate cash flows which flow through to the debt holders in the form of interest and principal payments. The equity holder receives residual cash.
Asset-Backed Securities have structural protections in place (forms of credit enhancement) to lower the risk on senior tranches. Some examples include:

1. *Excess Spread:* The interest rate on the assets is greater than the interest rate on the debt.
2. *Overcollateralization:* Value of the assets is greater than the value of the liabilities.
3. *Subordination:* Losses are applied to the junior most tranches before affecting senior tranches.

The cash flow that the underlying collateral generates is used to make interest and principal payments to the bond holders. Typically, there is more than one bond class. Losses are applied to the junior most tranches before senior tranches are affected. A hypothetical capital structure is provided below to illustrate the “credit-tranching” typical of most deals.

**Opportunity Set**

Structured Product, outside of agency MBS, is an approximately $2.7 trillion market. To put that figure into context, that is approximately twice the size of the corporate high yield market. Structured product can be partitioned into three main sectors: non-agency RMBS, CMBS and ABS. ABS can be further divided into several sub-sectors.

1. Consumer ABS (e.g. student loans, credit cards, auto loans, consumer loans)
2. Corporate ABS (e.g. collateralized loan obligations, “CLOs”)
3. Commercial ABS (e.g. aircraft leases, containers)
4. Whole Business ABS (e.g. franchise royalties)

---

1. Agency MBS is not a focus of this paper given it has a 27.7% weight in the BB Aggregate as of June 30, 2016 and therefore it is typically well represented in most core fixed income portfolios.
2. RMBS = Residential mortgage backed securities, CMBS = Commercial Mortgage Backed Securities
Each of these sectors is unique and requires a comprehensive understanding of the liability structure, the quality of the servicer\(^3\), and the drivers of the collateral’s performance. Importantly, the drivers of the collateral performance across these sectors are different. For example, a portfolio can be built that has exposure to the commercial real estate market (e.g. CMBS), the consumer (e.g. auto loans), corporate exposure (“CLOs”) and the general macro environment (e.g. aircraft leases). Therefore, it’s our expectation that a dedicated structured product mandate will likely provide diversification benefits relative to portfolios that are dominated by corporate credit risk. The table below outlines the opportunity set in further detail.

While non-agency RMBS and Collateralized Debt Obligations (“CDOs”) caused investors immense pain during the financial crisis, we would submit that it is important to recognize that the composition of the structured product market is much different in 2016 than it was in 2008. Further, securitization does not inherently expose investors to undue risk. Rather, poor underwriting on the underlying collateral is typically the primary contributor to bad outcomes and was a major driver of the challenges experienced in 2008. As the table above highlights, CDOs are currently a nominal portion of the market and pre-crisis non-agency RMBS will continue to decline as a percentage of the overall market. While the non-agency RMBS market, in aggregate, is declining in size, there are segments of this market that have grown recently and are likely to experience greater growth prospectively. One such area is the credit risk transfer (“CRT”) market. CRT securities were created in 2013 in an effort to reduce the exposure taxpayers have to Fannie Mae and Freddie Mac. These bonds effectively transfer a portion of the credit risk associated with the mortgage pools from Fannie Mae and Freddie Mac to private investors. Notably, other sectors of the structured product market have experienced growth over the past several years due to regulatory changes. For example, there has been a material uptick in issuance across both single-asset/single-borrower CMBS and non-traditional consumer and commercial ABS (e.g. consumer loan and commercial equipment

\(^3\) Servicers manage the cash flow of most mortgage-backed securities as well as many other asset-backed securities. Servicers collect and process the payments from the loan pool and pay investors.
ABS). The less traveled segments of the ABS market, characterized as “non-traditional ABS” in the table above, offer a material yield pick-up relative to the more liquid ABS sectors that are included in the BB Aggregate (e.g. credit cards and autos).

In addition to offering sector diversification, structured product typically has:

1. A shorter duration relative to the BB Aggregate (2-3 years v. 5.5 years for the BB Aggregate).
2. A higher yield than corporates of a similar credit quality (4-5% for an investment grade ABS portfolio v. 2.8% for the Bloomberg Barclays Corporate Index).
3. Arguably less credit risk than corporates.

Currently, an investment grade structured product portfolio can be constructed that provides a significant yield advantage relative to the BB Aggregate and investment grade corporates. In addition, the loss rate on investment grade structured product, excluding securities backed by residential or commercial mortgages, has historically been meaningfully lower than the loss rate on investment grade corporates. The strong credit performance is a function of several factors: 1) Most structured product securities tend to amortize fairly quickly resulting in shorter timeframes of principal outstanding, 2) Collateral in many of the deals has been tested through multiple cycles, and 3) Issues typically have strong structural protections.

**Implementation Considerations**

The ABS and CMBS sectors have a combined weight of approximately 2% in the BB Aggregate. Most publicly available structured product benchmarks do not capture the entire opportunity set and are dominated by autos, credit cards and high quality CMBS. Therefore, structured product is a segment of the fixed income market that is likely underrepresented in investors’ portfolios. Investors considering adopting an investment-grade structured product mandate should view this as a strategic allocation that potentially could constitute 3 – 5% of an investor’s total portfolio and serve as a complement to strategies that tightly track the BB Aggregate. In regards to implementation, there are only a handful of structured product strategies that have an investment-grade and broad sector focus that are offered via pooled vehicles. With that being said, larger investors may want to consider implementing via a separate account.

Investors may also consider complementing their corporate high yield corporate exposure with a structured product mandate that is primarily below investment grade. In the current environment, a below investment-grade structured product mandate can yield 8-10% (vs. 6.3% for traditional high yield corporate bonds). Given the relative attractiveness, investors could fund this mandate by selling equities or a portion of their corporate high yield portfolio. This segment of the market can be accessed via a fund or a separate account. However, management fees for funds tend to be expensive relative to traditional corporate high yield funds and may also have a lock-up period. Due to regulatory constraints, ERISA investors are not able to participate in certain segments of the below investment-grade structured product market. Therefore, ERISA compliant separate account portfolios that allow for BBB rated securities
and below investment-grade securities will be positioned differently than portfolios for Non-ERISA investors, all else equal.

While structured product offers a yield premium to similar quality corporates, investors contemplating making an allocation to the asset class must gain comfort with:

1. Liquidity profile
2. Higher fees
3. Benchmark challenges

A structured product mandate is challenging to benchmark as most publicly available structured product indices do not capture the entire opportunity set and there is not a benchmark that tracks the non-traditional ABS sectors. Investors could consider using a corporate index that has a similar credit quality to the mandate; however, a structured product portfolio will display significant tracking error to a corporate benchmark, particularly when Treasury rates and/or corporate spreads are volatile.

It’s challenging to make sweeping statements in regards to the liquidity of the market. Certain sub-sectors of the ABS market and the CMBS market will have a liquidity profile that is in line with corporates. However, other segments of the structured product market (e.g. below investment-grade CLO liabilities) offer less liquidity. A structured product portfolio will generate “natural liquidity” through principal amortization and interest payments; however, investors should not view a structured product portfolio as a primary source of liquidity.

Managers of investment-grade structured product mandates will likely demand a modest fee premium relative to active core fixed income manager fees and below investment-grade structured managers will likely demand and warrant a fee premium relative to most corporate high yield strategies.

**Conclusion**

We believe that investors should consider making a strategic allocation to structured product. The asset class is of sufficient size to justify a dedicated allocation and consists of a diverse group of sectors that should provide diversification benefits to portfolios that are dominated by corporate credit risk. Further, in the current low yield environment, structured product generally offers an attractive yield relative to other fixed income sectors especially relative to the duration of the securities. The asset class can serve as a complement to the BB Aggregate, in the case of an investment grade mandate, or it can be part of a below investment grade allocation for investors that are willing to take on more illiquidity and credit risk.

---

4 The ERISA eligibility status varies on the type of security, specifically debt vs. certificate. Debt securities, or securities that have a debt for tax opinion can be ERISA eligible irrespective of the rating. Securities that are issued as certificates face rating restrictions.
An Introduction to Securitized Credit

Disclosures

Rocaton is registered as an investment adviser with the U.S. Securities and Exchange Commission. Rocaton’s Form ADV, Part 2 is available upon request. The information included in this publication has been taken from sources considered reliable. No representations or warranties are made as to the accuracy or completeness of this information and no responsibility or liability (including liability for consequential or incidental damages) is assumed for any error, omission or inaccuracy in this information. This information is subject to change over time. This publication is not intended as investment or actuarial advice. Before acting on any information contained in this material you should consider whether it is suitable for your particular circumstance and consult with your actuary. Any opinions expressed in this publication reflect our judgment at this date and are subject to change. No part of this publication may be reproduced or redistributed in any manner without the prior written permission of Rocaton Investment Advisors, LLC.

Performance Information and Return Expectations

The analysis contained in this document may include projections of long-term return and risk expectations. There is no guarantee that the projected returns or risk will be realized. The projections are based in part on historical performance of various asset classes, and past performance is no guarantee of future performance. The projections include assumptions, including those regarding risk and return. These assumptions are used for modeling purposes only and may not be realized. Because the analysis is based on assumptions and projections, there can be no warranties or guarantees.