OAKTREE INSIGHTS

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STRUCTURED CREDIT: THEN VS. NOW



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KEY POINTS

- In the first half of the 2000s, banks' efforts to feed growing demand for residential mortgage-backed securities (RMBS) created excesses in subprime home lending that helped set off the Global Financial Crisis (GFC).
- The association of structured finance with securitized products that financed the housing bubble, such as RMBS, made many investors uncomfortable with the asset class altogether, a bias that can still be seen today.
- However, not all structured products were affected the same during the GFC. As such, sweeping generalizations about structured products must be made with caution.
- Further, there have been significant regulatory and other changes to the structured credit asset class that have helped improve investor protection and rendered the market more attractive.

The structured credit asset class has been around for decades, but it remains a complex and less-understood segment within fixed-income investing (see Oaktree Insights publication Strategy Primer: Investing in Structured Credit for an overview of the asset class). Some investors experienced large losses in mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) during the GFC, as the buildup of heavily concentrated mortgage credit risk toppled over, revealing misaligned incentives among market participants and leading to economic dislocation. The structured credit asset class - along with the securitization process by which structured credit products are created - has since carried a stigma among certain investors of being unduly risky and reliant on intricate financial engineering.

STRUCTURED CREDIT, LEADING UP TO THE GFC

While abuses in parts of the securitization market did contribute to the housing bubble and the broader financial crisis, a closer look into the lineup of securitized products and their varying performance would show that not all of them experienced the same damage or had the same impact on the markets. For instance, U.S. collateralized loan obligations (CLOs) backed by pools of senior loans, as well as certain asset-backed securities (ABS), generally maintained a "track record of solid performance, including through the trough of the crisis," according to a report by the International Monetary Fund.¹ Market-value CLOs – a once-prevalent class of CLOs with triggers that permitted banks to liquidate the underlying loans if their market value fell by a certain amount - largely also fared well, with most avoiding events of default during the credit crisis.²

The IMF report argues it would be misleading to view the securitization market as a "single, homogenous asset class."

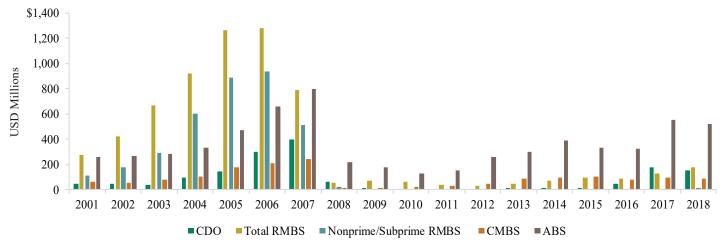
For greater context, we look at the industry developments preceding the GFC and review the performance of various structured products.

Securitization in the United States got its start in the 1970s, when the Government National Mortgage Association ("Ginnie Mae") securitized and backed qualifying home mortgages. MBS activity gained traction as government-sponsored enterprises (including "Freddie Mac" and "Fannie Mae") followed, with non-government deals starting to be issued in the late 1970s. During this time, securitization was largely considered to be a benign aspect of the financial system. The 1980s and 1990s saw the market grow to encompass other income-producing debt obligations, such as ABS and commercial mortgage backed securities (CMBS). At around the same time, the securitization market expanded into Europe.

Amid strong growth, and particularly between 2000 and 2007, certain areas of structured credit saw marked deterioration in credit quality and significant increases in the volumes of higher-risk issuances, such as CDOs and subprime RMBS (see Figure 1). It's been said the sharp decline in loan origination standards may be tied to the "emergence of private players ... as a force in MBS issuance."³ That is, private lenders securitized assets of lower quality than the government entities had utilized.

Adding to the market dynamic was the outsized reliance

Figure 1: U.S. Asset-Backed Securities Issuance



Source: SIFMA

investors and financial institutions had come to have on the credit rating agencies, given investors' increasing search for yield in a low-rate environment. Combined with poor lending practices and unprecedented issuance of opaque structured products, the conditions were present for the boom and subsequent bust we witnessed in the 2000s.

Against this backdrop, we reiterate that not all structured credit products grew exponentially and contributed to the crisis. For instance, performance as indicated by impairment rates shows significant variation among product types. Table 1 below shows a stark contrast between impairment trends of CLOs and RMBS.

*Table 1: 10-year Cumulative Impairment Rate by Original Rating*⁴ (1993-2016)

	U.S. CLOs	U.S. CMBS	U.S. ABS	U.S. RMBS Subprime	Global CDO (Ex-CLO)
Aaa	0.0%	1.6%	0.5%	8.4%	29.9%
Aa	0.0	7.8	4.9	38.4	40.2
А	0.2	14.1	3.9	69.7	45.4
Baa	3.0	18.6	9.0	89.0	49.1
Ba	5.1	42.4	25.4	93.7	47.5

Source: Moody's, Wells Fargo Securities

Table 2: Standard & Poor's Rated U.S. CLO Tranches (1994-2013)

	Number of ratings	% of rated CLOs
CLO tranche still rated and outstanding	3,995	65.05%
CLO tranche paid in full, rating withdrawn	2,121	34.54
CLO tranche defaulted, rating lowered to D	25	0.41
Total rated CLO tranches	6,141	100.00%

More specifically, CLOs have historically had solid credit performance and few performance-related downgrades for senior tranches. S&P data in Table 2 show that the majority of CLO tranches issued from 1994 through 2013 either have been paid in full or remain outstanding, with only 25 - or 0.41% - of the rated tranches having defaulted, mostly in the wake of the GFC.

POST-CRISIS CHANGES AND MARKET CHARACTERISTICS TODAY

Changes in Regulation

Following the crisis, regulatory and political actions brought on new standards for the practice of securitization. The U.S. regulatory responses to the GFC were primarily embodied in the Dodd-Frank Act and in the implementation of the Basel III international framework. The major regulatory changes were to require risk retention, increase disclosure, reform rating agencies and impose capital requirements.

Risk retention:

In 2014, pursuant to the requirements of Section 941 of the Dodd-Frank Act of 2010, credit risk retention rules were adopted by the Securities and Exchange Commission (SEC) jointly with federal banking and housing agencies.⁵ These rules, which were initially proposed in 2011, generally require an originator or sponsor of a securitization to retain an economic interest of at least 5% of the aggregate credit risk of the assets underlying an issuance.

The rules were intended to require originators to maintain "skin in the game," to address problems resulting from the widely practiced loan origination model under which lenders would sell off loans soon after they were made. With exceptions to the risk retention requirement – it excludes qualified residential mortgages, for instance – certain asset classes, such as CLOs and CMBS, have been under greater scrutiny than others.

Increased disclosure and reporting:

Section 942 of the Dodd-Frank Act requires issuers of structured credit securities to disclose standardized asset-level information. Disclosure requirements include data about the underlying assets that can shed light on the credit quality of the obligors and the cash flows related to the asset.

These rules are intended to "provide investors with timely and sufficient information, reduce the likelihood of undue reliance on credit ratings, and provide mechanisms to help to enforce the representations and warranties made about the underlying assets."⁶

Rating agency reform:

Under Section 943 of the Dodd-Frank Act, the SEC adopted new requirements to improve credit-rating quality and agency accountability. The rules mandate nationally recognized statistical rating organizations to "enhance governance, protect against conflicts of interest and increase transparency."7 Information required as a result of implementation of the rules includes the main assumptions used in the methodologies; potential limitations of the credit rating; and information relating to conflicts of interest. In the case where a rating is assigned to an asset-backed security, the rules require that information on the representations, warranties and enforcement mechanisms be available to investors, and that the issuer or underwriter of the security make publicly available the findings of any third-party due-diligence report it obtains.

Capital requirements:

The Federal Reserve, the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation implemented Basel III's liquidity coverage ratio in a combination of the Basel III capital requirements and the Dodd-Frank Act. The rules require investors in asset-backed securities to hold more capital than they would have had to hold in connection with investments in other types of securities.

Restriction on speculative investments by banks:

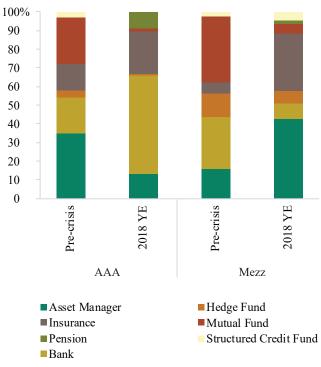
Section 619 of the Dodd-Frank Act, commonly known as the Volcker Rule, prohibits banks from investing in what it classifies as "covered funds," which include hedge funds and private equity funds, as well as CLOs with a bond component. Loan-only CLOs are exempt from this rule and can be owned by banks. Most CLOs that were issued in the wake of the December 2013 adoption of the rule are loan-only securities, while earlier CLOs had small bond buckets. Many have been "volckerized" to remove non-loan assets from the collateral.

Re-regulating securitization and the structured credit market is no doubt a challenging task. While the above regulatory measures may not render the sector foolproof, and while each of these alone may not be sufficient to stabilize the system in times of dislocation, post-crisis regulatory and other initiatives have surely made progress in building a more robust and standardized market.

Changes in Investor Base and Issuance

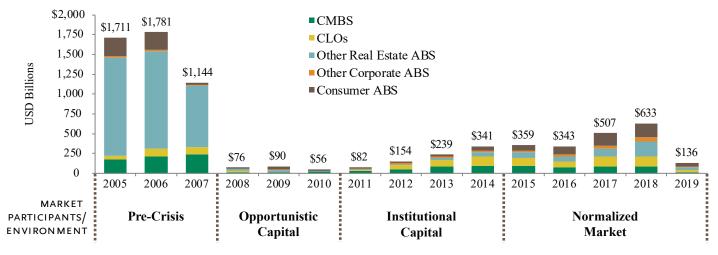
In addition to regulatory mandates, the makeup of the structured credit market also has changed over the past decade. The investor base has diversified and matured to include buyers with longer-term investment horizons. For instance, asset managers and insurance companies account for a much larger portion in the mezzanine CLO tranches today than prior to the crisis (see Figure 2). The proportion of mutual funds and hedge funds has decreased significantly, likely owing to the liquidity mismatch potentially entailed in investing in CLOs. The decrease in banks' share can largely be attributed to regulatory changes.

Figure 2: Investor Base for CLOs Then vs. Now



Source: Citi

Figure 3: Historical U.S. Structured Credit Issuance



As of March 31, 2019 Source: Bloomberg, S&P LCD

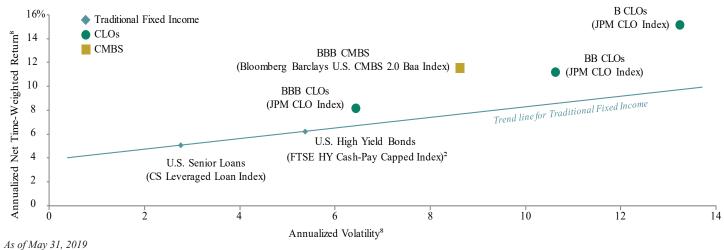
As for volumes, issuance all but halted during and immediately after the GFC but has picked back up in recent years, as shown in Figure 3.

This gradual comeback in issuance has been helped along by an improvement in perception, global economic growth and the attractive risk/return profile the asset class generally offers relative to other fixed-income products. Volumes remain lower than pre-crisis levels, but more disciplined issuance in what is now a more normalized market provides opportunity for investors seeking to incorporate a structured credit component in a diversified portfolio. Further, the existence of a pool of "dry powder" dedicated to structured credit investments also indicates a focused investment objective that could help support structured credit prices during periods of market declines. See Figure 4 below for a comparison of structured credit's risk/return potential to that of traditional fixed-income instruments.

AN ASSET CLASS RESHAPED

The story of structured credit is one of evolution. What was a decades-old concept found itself in a period of unprecedented, unchecked growth and deteriorating standards, helping trigger one of the worst economic recessions in recent history. Then ensued a large-scale re-observation of the asset class, which brought on new or strengthened regulatory requirements that focus on investor protection; rating agencies determined to repair their reputations; and skeptical investors who no longer rely exclusively on outside resources such as rating agencies for their due diligence. The combination of these factors has led to increased oversight, greater transparency and improved understanding of structured credit, reshaping it as an investment opportunity that now counts key structural protections as part of its makeup. Exposure to this asset class can provide investors with the potential to improve risk-adjusted returns and can serve as an important tool for diversification of a fixed-income portfolio.





Source: Bloomberg, Bloomberg Barclays Index Services, FTSE Global Markets, Credit Suisse, JP Morgan Research

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Mr. Guichard joined Oaktree in 2007. He is a managing director and co-portfolio manager for Oaktree's Real Estate Debt and Structured Credit strategies. In addition to his strategy management responsibilities, Mr. Guichard is responsible for investing capital for Oaktree's Real Estate Debt, Real Estate Income, Real Estate Opportunities, Structured Credit and Global Credit strategies. Prior to Oaktree, he worked for Barrow Street Capital which, he joined in 2005. Mr. Guichard began his career in Merrill Lynch & Co.'s Real Estate Investment Banking group. He received a B.A. degree from University of California, Los Angeles, where he was an Alumni Scholar, and an M.B.A. from MIT's Sloan School of Management.



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Mr. Beer is a managing director and co-portfolio manager for Oaktree's Structured Credit strategy. In addition to his role within the Structured Credit strategy, Mr. Beer also assists with the arranging and optimization of Oaktree-managed CLOs. He joined Oaktree in 2017, having previously worked at Guggenheim Partners Investment Management, serving as a managing director and co-head of structured credit. At Guggenheim, he managed a team responsible for in excess of \$40 billion, which performed credit analysis, trading and risk management across private label RMBS, CMBS, ABS and CLOs, with Mr. Beer specializing in CLOs and Esoteric ABS. Prior thereto, he was a vice president at Citigroup Global Markets, as a secondary CDO trader and in securitized products distribution. Mr. Beer previously spent eight years in the Navy, as a division officer aboard a fast-attack nuclear submarine and as a classroom physics and chemistry instructor. He earned an M.B.A. from the University of Rhode Island, an M.S. in nuclear engineering from the Massachusetts Institute of Technology, and a B.S. in mathematics (honors track) with distinction from the United States Naval Academy.



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Mr. Koury joined Oaktree in 2016 and is the product specialist for the U.S. Senior Loans and Structured Credit strategies. Before joining Oaktree, Mr. Koury worked in the Investment Banking Division at Goldman, Sachs & Co., most recently as a vice president in the Leveraged Finance department. Prior experience includes work at Barclays in the firm's Leveraged Finance and High Yield Capital Markets groups. Mr. Koury graduated with a B.A. degree in economics and political science from Columbia University.

ENDNOTES

- ¹ IMF Working Paper. Securitization: Lessons Learned and the Road Ahead. Miguel Segoviano, Bradley Jones, Peter Lindner and Johannes Blankenheim. November 2013.
- ² Moody's Investors Service.
- ³ IMF Working Paper. Securitization: Lessons Learned and the Road Ahead. Miguel Segoviano, Bradley Jones, Peter Lindner and Johannes Blankenheim. November 2013.
- ⁴ The impairment rate calculation includes the average number of newly impaired tranches as a percentage of the average number of total tranches outstanding between 1993 and 2016. The table indicates the cumulative rate based on this average over a 10-year period.
- ⁵ Office of the Comptroller of the Currency; Board of Governors of the Federal Reserve System; Federal Deposit Insurance Corporation; Federal Housing Finance Agency; and Department of Housing and Urban Development.
- ⁶ U.S. Securities and Exchange Commission.

7 Ibid.

⁸ Reflects the annualized gross returns and standard deviation of monthly returns since January 1, 2012, which aligns with the inception date of the JPM CLO Index.

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