The NAIC's Capital Markets Bureau monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of U.S. insurance companies. Please see the Capital Markets Bureau website at INDEX.

The Rise in the U.S. Insurance Industry's Exposure to Collateralized Loan Obligations as of Year-End 2019

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Executive Summary

- As of year-end 2019, U.S. insurers had about $158 billion in book/adjusted carrying value (BACV) of collateralized loan obligation (CLO) investments, up 23% from year-end 2018. The majority were high credit quality, with approximately 80% rated BBB or higher; although, there was a slight decline in credit quality.

- CLOs continue to represent a small proportion of total assets, at nearly 2% of total cash and invested assets as of year-end 2019.

- New issuance of U.S. CLOs, with respect to those collateralized primarily by broadly syndicated loans (BSLs), was about $117 billion in 2019, down from $128.1 billion in 2018. Outstanding CLOs totaled almost $700 billion as of year-end 2019.

- The majority of U.S. insurer CLO investments were held by large life companies—i.e., those with at least $10 billion in assets under management—many of which have CLO asset manager subsidiaries. The top 10 U.S. insurance groups accounted for almost half of the U.S. insurance industry's total CLO exposure.

U.S. Insurer Exposure

As of year-end 2019, U.S. insurers had approximately $158 billion in BACV exposure to CLOs, as reported in the annual statement filings, as well as through additional analysis, which identified securities that were CLOs but not reported by insurers as such. This represents a 23% increase in total CLO exposure for the U.S. insurance industry year-over year (YOY), as year-end 2018 exposure was approximately $130 billion. The majority, or almost 80% (at year-end 2019), was held by life companies, followed by 17.4% with property/casualty (P/C) companies.

Table 1: U.S. Insurer Exposure to CLOs – Year-End 2019 and Year-End 2018

Industry	$BACV YE2019	% of Total	$BACV YE 2018	% of Total
Life	125,793,864,021	79.4%	99,462,315,009	77.1%
Property/Casualty	27,598,425,027	17.4%	25,040,113,333	19.4%
Health	3,759,846,416	2.4%	3,983,202,131	3.1%
Fraternal	1,185,144,309	0.7%	448,976,646	0.3%
Title	181,044	0.0%	-	-
Total	**158,337,460,817**	**100.0%**	**128,934,607,119**	**100.0%**

Life companies have consistently accounted for the majority exposure, and CLOs have consistently accounted for a relatively small portion of the industry's overall bond investments—about 2% of total cash and invested assets at year-end 2019. As shown in Table 2, large companies, or those with more than $10 billion in assets under management, accounted for almost 80% of the U.S. insurance industry's CLO exposure at year-end 2019.

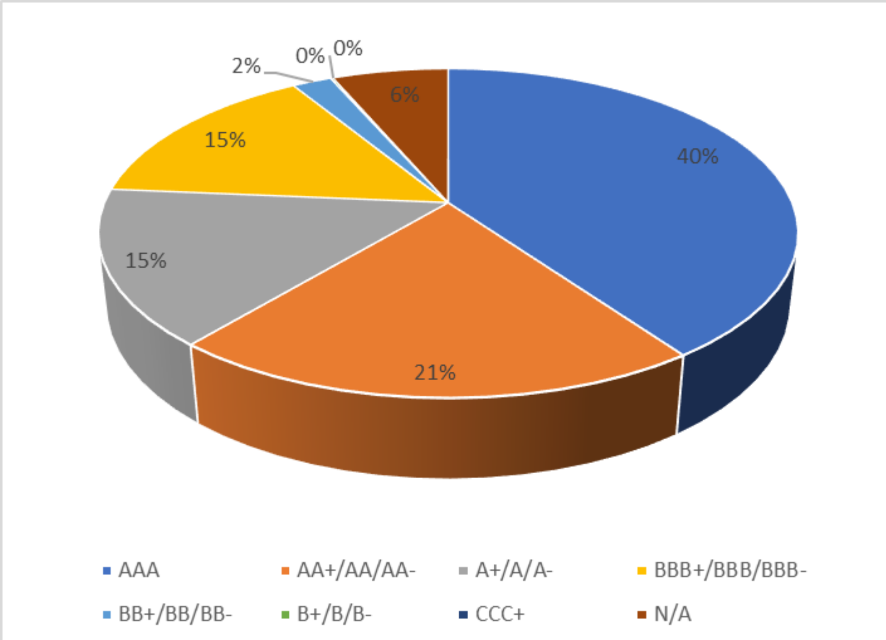
Table 2: CLO Exposure by Industry Type and Assets Under Management ($BACV), Year-End 2019

Industry Type	Less Than $250MM	Between $250MM and $500MM	Between $500MM and $1.0B	Between $1.0B and $2.5B	Between $2.5B and $5.0B	Between $5.0B and $10.0B	Greater Than $10B	Grand Total
Life	351,278,210	603,704,415	1,046,260,774	3,608,669,966	2,646,202,762	4,398,139,221	113,139,608,673	125,793,864,021
P/C	1,110,402,831	1,465,460,667	1,314,764,199	4,262,041,117	5,231,948,687	4,295,939,655	9,917,867,871	27,598,425,027
Fraternal	13,744,493	3,014,528	20,687,793	247,968,183	9,997,556		889,731,756	1,185,144,309
Title	181,044							181,044
Health	218,561,511	416,778,922	724,157,873	926,234,297	532,659,371	474,190,971	467,263,471	3,759,846,416
Grand Total	**1,694,168,089**	**2,488,958,532**	**3,105,870,639**	**9,044,913,563**	**8,420,808,376**	**9,168,269,847**	**124,414,471,771**	**158,337,460,817**
% of Total	1.1%	1.6%	2.0%	5.7%	5.3%	5.8%	78.6%	100.0%

The top 10 insurance groups with CLO exposure accounted for almost half, or 45%, of the U.S. insurance industry's total CLO exposure, while the top 25 accounted for 73%. About half of the top 10 have CLO management subsidiaries.

In terms of credit quality, as of year-end 2019, $63.5 billion, or 40%, of total CLO exposure was rated AAA (see Chart 5), which is an increase in $BACV terms from $52.4 billion but lower in percentage terms at 43% of the total as of year-end 2018. That is, the credit quality of U.S. insurer exposure slightly declined YOY. About 80% of U.S. insurer CLO investments were rated BBB or higher as of year-end 2019 (Note: This excludes CLO investments rated BBB-).

Chart 5: U.S. Insurer CLO Credit Quality



NAIC Stress Testing U.S. Insurer CLO Investments

The NAIC Capital Markets Bureau (CMB) and Structured Securities Group (SSG) are modeling U.S. insurers' year-end 2019 reported CLO exposure. The iteration of stress-test modeling is being conducted at two end dates, as of December 2019 and March 2020. The March 2020 stress tests will evaluate the performance of CLOs under severe stress as COVID-19 has adversely affected leveraged loans and CLOs. When completed, the modeling results will be available to state insurance regulators via StateNet under the sub-heading "Capital Markets Analytics."

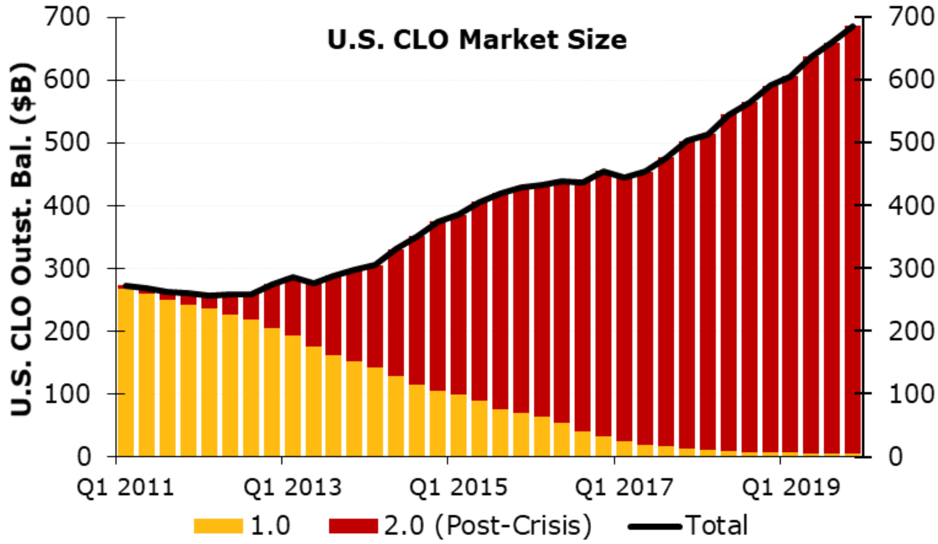
Statutory Accounting

For reporting and statutory accounting purposes, if a CLO is defined as a loan-backed and structured security (LBASS), then it follows the guidance of *Statement of Statutory Accounting Principles (SSAP) No. 43R—Loan-Backed and Structured Securities.* SSAP No. 43R securities are reported on Schedule D, Part 1, and the measurement method for the investment depends on the reported NAIC designation. For U.S. insurers that maintain an asset valuation reserve (AVR), a reserve to offset potential credit-related investment losses, CLOs that are LBASS "… shall be reported at amortized cost, except for those with an NAIC designation of 6, which shall be reported at the lower of amortized cost or fair value." For U.S. insurers that *do not* maintain an AVR, CLOs that are defined as LBASS are "… designated the highest-quality and high-quality (NAIC designations 1 and 2, respectively), shall be reported at amortized cost and CLOs that are defined as LBASS with NAIC designations 3 through 6 '… shall be reported at the lower of amortized cost or fair value.'"

CLO Market Trends

U.S. insurer exposure to CLOs has been steadily increasing in recent years. CLOs, which are mainly floating rate, offer an attractive yield alternative to other more traditional asset types, such as fixed-rate corporate bonds. According to Wells Fargo research, there was about $686 billion in total CLOs outstanding as of year-end 2019 (see Chart 1), about $621 billion of which were BSL CLOs, with the remainder comprising middle market CLOs[1]—i.e., loans generally made to companies with less than or equal to $500 million in gross revenues and less than or equal to $50 million in earnings before interest, tax, depreciation and amortization (EBITDA).

Chart 1: Historical CLOs Outstanding in the U.S. ($bil), 1Q-2011–4Q-2019



Source: Intex, Wells Fargo Securities

Issuance of U.S. CLOs in 2019 was about $117 billion, across over 200 transactions, according to Wells Fargo, compared to a record high of $127 billion in 2018. The previous record was about $124 billion in 2014. Year-to-date new issuance of CLOs through early May was about $22 billion, according to S&P Global Leveraged Commentary and Data (LCD). Spreads on new-issue AAA-rated CLOs, which are the most commonly held rated tranches by U.S. insurers, were about 130 basis points (bps) over 3-month London Interbank Offered Rate (LIBOR) as of March 31, 2020, compared to 137 bps a year prior. While U.S. CLO new issuance has recently decreased, U.S. insurer exposure has been increasing; risk is dependent, in part, not only on the credit quality of the CLO investments held, but also on the concentration of exposure within each insurer's investment portfolio.

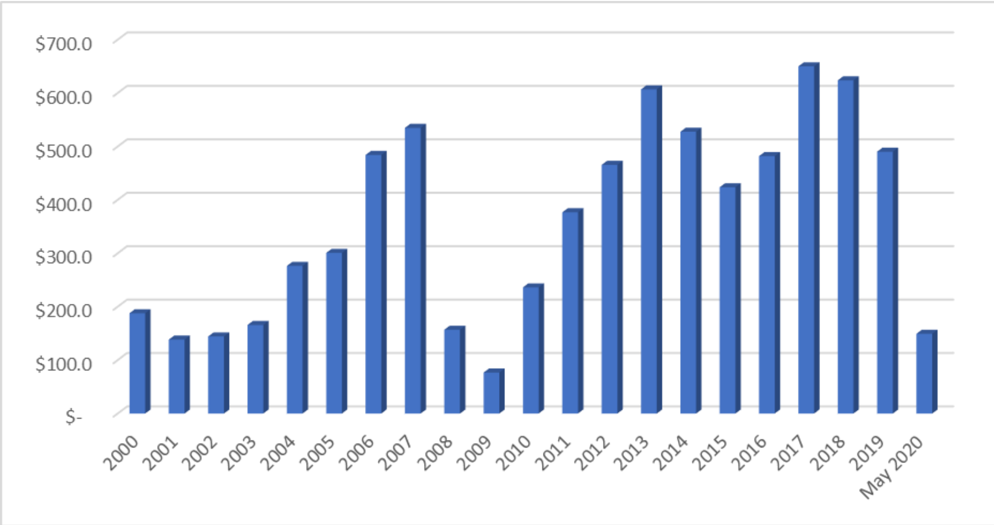
For more background on CLOs, please see the NAIC Capital Markets Bureau primer on Collateralized Loan Obligations published in August 2018.

[1] Wells Fargo Securities, *The CLO Monthly Market Overview*, February 2020.

Leveraged Bank Loan Trends – Decreased Issuance and Credit Quality

The underlying portfolio of a CLO consists most often, but not exclusively, of leveraged bank loans, in particular, BSLs. Total U.S. leveraged bank loans outstanding was approximately $1.2 trillion for institutional loans as of December 2019 according to Refinitiv LPC. New leveraged bank loan issuance has been on a declining trend over the last couple of years, decreasing from $650 billion in 2017 to about $490 billion in 2019 (see Chart 2). Year-to-date new issuance through early May was $149 billion.

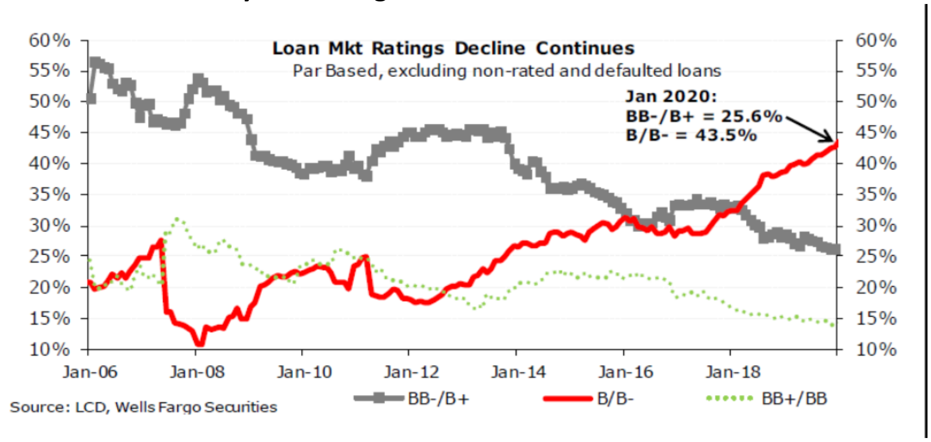
Chart 2: Historical Leveraged Loan New Issuance ($bil)



Source: S&P Global LCD

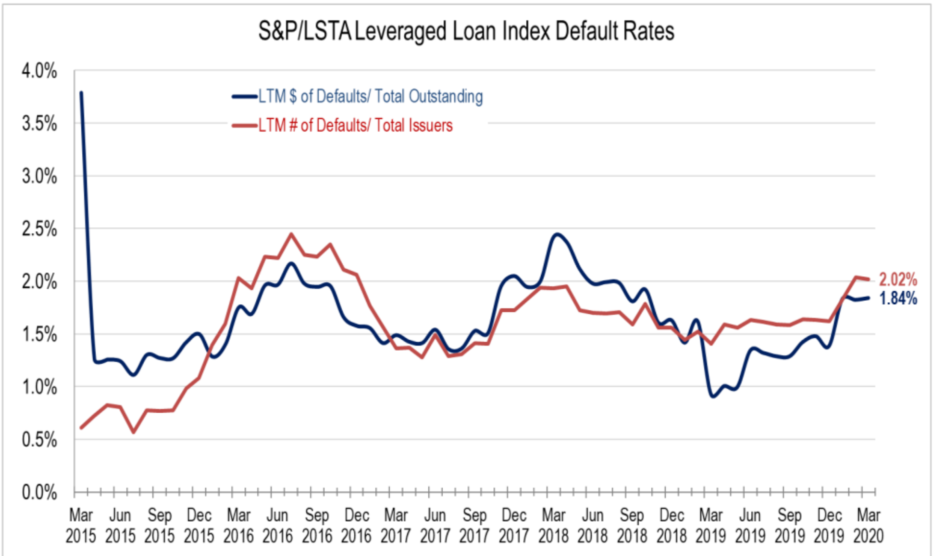
There has also been a decline in credit quality of leveraged loans, with loans rated B/B- representing a larger proportion of the market than in prior years (see Chart 3); they were 43.5% of the leveraged loan market as of January 2020, compared to BB-/B+ rated leveraged loans at 25.6% of the market.

Chart 3: Credit Quality of Leveraged Bank Loans



Due to a relatively benign credit environment, the last-12-month (LTM) U.S. leveraged loan default rate was 1.8% as of March 2020 (based on dollar amount of defaults), or about 2% based on the number of defaulted loans according to S&P Global LCD (see Chart 4).

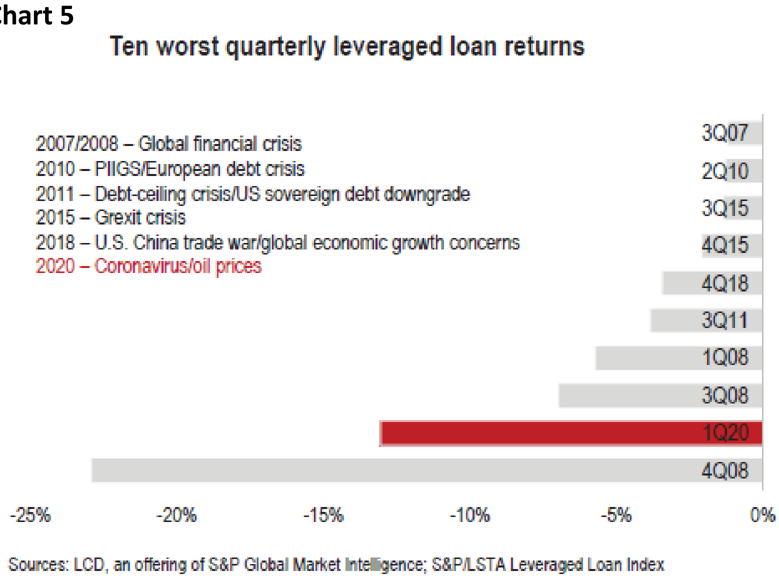
Chart 4



Source: S&P/LSTA Index.

Because of challenging economic conditions that resulted in part from the COVID-19 pandemic and oil price volatility, the S&P/LSTA Leveraged Loan Index (S&P/LSTA Index) experienced its second largest monthly decline in terms of returns in its history, dropping by 12.37% in March 2020. Before COVID-19, the three largest negative quarterly returns all occurred in 2008[2] (see Chart 5).

Chart 5



[2] S&P Global Market Intelligence, *S&P/LSTA Index Monthly*, April 2020.

The Federal Reserve's response to boosting the economy through lowering the federal funds rate to near zero, along with providing credit and liquidity support through various facilities, has resulted in a "bifurcation," or a division of pricing between B-rated and BB-rated loans. According to LCD, "at the end of February, before the March sell-off, 92% of single-B loans were bid at and above 90, versus 98% of BB loans"; however, as of April, "57% of outstanding U.S. leveraged loans rated single-B are priced at 90 and above, compared to 92% of double-B loans."[3] Distressed loans, or those priced below 70% of par, accounted for about 5% of B-rated loans in mid-April, compared to almost none at year-end 2019.

More background on leveraged bank loans can be found in the NAIC Capital Market Bureau's primer on Leveraged Bank Loans published in November 2018.

CLO Bank Loan Collateral – Declining Credit Quality

For the underlying bank loans that make up CLO collateral, according to S&P Global research, a combined impact of COVID-19 and oil price declines presented a challenge to speculative (below investment grade) issuers. Since early March, the average collateral quality of CLOs decreased to below B, with B-rated issuers accounting for 24.5% of the total as of May 1, and the average allocation to CCC-rated collateral increased to almost 12% from about 4% two months prior.[4] The tripling of CCC-rated collateral is attributed mostly to downgrades of bank loans rated B-.

In a CLO ratings stress test analysis, S&P Global found that the declining credit quality of the underlying collateral pool put pressure on the lower mezzanine and subordinate tranches. However, even under stressful scenarios, the AAA-rated CLO tranches were well-protected and withstood no losses even with up to 60% of their collateral defaulting, assuming a recovery rate of 45% or less, and CCC-rated collateral exceeding 7.5% of the total portfolio, accounting for at 60% of total par, or market value. Stress test results show that no tranches rated A or higher defaulted under any scenario. Further, almost 99% of the AAA-rated CLO tranches received rating affirmations or one-notch downgrades as a result of the analysis. This lends comfort to U.S. insurer CLO investments since a significant proportion is in the high credit quality range.

Conclusion

CLOs represent an alternative investment option to traditional assets, such as corporate bonds for U.S. insurers. Exposure to CLOs has been increasing over time; as of year-end 2019, U.S. insurers had approximately $160 billion in CLOs under management, representing a 23% increase from year-end 2018. The underlying bank loan collateral has been experiencing a decline in credit quality, with B-rated loans representing the majority of outstanding leveraged loans. However, lending some comfort, the majority of U.S. insurer exposure has been in senior, high credit quality tranches. U.S. insurer

[3] S&P Global, *Fed Rally & Default Fears Bring Bifurcation Back to Leveraged Loans*, April 2020.
[4] S&P Global, *Scenario Analysis: How Credit Distress Due to COVID-19 Cold Affect U.S. CLO Ratings*, April 2020.

investments in CLOs is also predominantly with large companies, or those whose assets under management exceed $10 billion. In many cases, these insurers have CLO asset management subsidiaries, which have investment and credit professionals with experience in analyzing CLOs and the underlying bank loans.

The NAIC Capital Markets Bureau will continue to monitor trends with CLOs and leveraged bank loans and report as appropriate.

Useful Links:

NAIC Capital Markets Primer – Leveraged Bank Loans, November 2018

NAIC Capital Markets Primer—Collateralized Loan Obligations, July 2018