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Philip Barlow  
Chair, Risk-Based Capital Investment Risk and Evaluation (E) Working Group ("RBC-IRE")  
NAIC  
via email to Dave Fleming ([dfleming@naic.org](mailto:dfleming@naic.org))

April 8, 2024

Dear Chair Barlow:

Re: Proposal 2024-02-CA; Oliver Wyman Residual Tranche Report

The Alternative Credit Council ("ACC")<sup>1</sup>, the private credit affiliate of the Alternative Investment Management Association Ltd ("AIMA"), appreciates the opportunity to provide a few additional comments to supplement the RBC-IRE committee's discussion of the Oliver Wyman ("OW") analysis of asset-backed securities ("ABS") residuals. In addition, we would like to present new data analysis that further demonstrates the relative safety and outperformance of CLO equity tranches compared to common stock.

#### Claims of 100% cliff losses versus historical track record

One concern raised by regulators is whether ABS residual tail losses during periods of market stress could be 100% in absolute terms and much greater in comparison to public equities. However, Larry Cordell, an economist at the Federal Reserve Bank of Philadelphia, along with Professor Michael Roberts of the Wharton School at the University of Pennsylvania, performed a detailed analysis of CLO residuals from 1997 to 2021. The results of their analysis were published in the Journal of Finance and found

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<sup>1</sup> The Alternative Credit Council (ACC) is a global body that represents asset management firms in the private credit and direct lending space. It currently represents 250 members that manage over \$1trn of private credit assets. The ACC is an affiliate of AIMA and is governed by its own board which ultimately reports to the AIMA Council. ACC members provide an important source of funding to the economy. They provide finance to mid-market corporates, SMEs, commercial and residential real estate developments, infrastructure, and the trade and receivables business. The ACC's core objectives are to provide guidance on policy and regulatory matters, support wider advocacy and educational efforts and generate industry research with the view to strengthening the sector's sustainability and wider economic and financial benefits. Alternative credit, private debt or direct lending funds have grown substantially in recent years and are becoming a key segment of the asset management industry. The ACC seeks to explain the value of private credit by highlighting the sector's wider economic and financial stability benefits.

Alternative Credit Council (ACC)



that CLO equity outperformed the S&P 500 during that time period.<sup>2</sup> Their study also found that on a risk-adjusted basis, CLO equity outperformed equity “against a variety of public benchmarks.”<sup>3</sup> A key finding of this study was the relative stability of CLO equity during two periods of significant market instability, namely the 2001 dot-com bubble and the 2008 Great Financial Crisis. The authors noted that CLOs’ “equity performance highlights the resilience of CLOs to market volatility.”<sup>4</sup> The authors attributed the outperformance of CLO equity to several of the structural features of CLOs, including “their closed-end structure, long-term funding, and embedded options to reinvest principal proceeds.”<sup>5</sup>

The Cordell study provides a clear historical track record that CLO residuals do not suffer complete losses during periods of financial stress. In addition to the reasons cited above, residuals are priced well below par (unlike corporate bonds), reflecting both the high discount rates and an expectation of some credit losses. As a result, the interest payments are a meaningful contributor to the overall value--again, unlike corporate bonds. Even in a severe stress, both the Cordell and OW studies demonstrate that CLO equity investors can still expect to receive cash flows.

#### CTE 90 vs VAR 95-99 percentile

Some RBC-IRE members have asked about the difference between contingent tail exposure (“CTE”) 90 and Value at Risk (“VaR”) at the 95<sup>th</sup> or 99<sup>th</sup> percentile. While CTE represents the average probability-weighted loss above a certain probability level, VaR represents the loss at a specific probability level. The American Academy of Actuaries is using a CTE approach, so if the CTE 90 level is what becomes adopted, that would calculate the average of losses above the 90<sup>th</sup> percentile. The OW study examined losses at both the 95<sup>th</sup> and 99<sup>th</sup> percentiles. Those are both specific percentile points of the loss distribution but are at the higher end of the CTE 90 average range. This difference can also be explained by the fact that the OW study used stress tests during three different periods of financial stress, which is not compatible with the kind of Monte Carlo simulation used to calculate CTE. Also, the purpose of the OW study was to compare the interim capital charge for ABS residuals to that of established NAIC capital charges for similar assets, and the NAIC has historically used a 94-96<sup>th</sup> percentile VaR to establish capital charges.

#### BSL residuals vs the other ABS residuals in the OW study

The OW study clearly demonstrates that all three analyzed types of ABS equity outperformed common stock during periods of market stress, including the 2001 dot-

2 Cordell, R, and Schwert, M, CLO Performance, Journal of Finance, 2023. <https://doi.org/10.1111/jofi.13224>

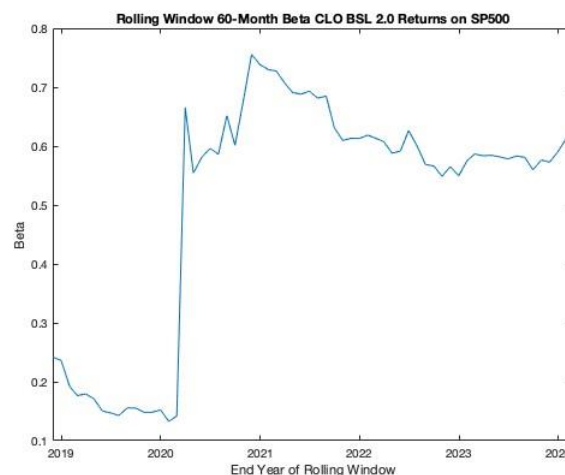
3 *Id.* at 2. “Our central finding is that CLO equity tranches provide statistically and economically significant abnormal returns, or “alpha,” against a variety of public benchmarks...”

4 *Id.* at 20.

5 *Id.* at 1. See also Jeff Helsing, Can CLO Equity Outperform if the Economy Tips into Recession?, September 26, 2022, [Can CLO Equity Outperform If the Economy Tips Into Recession? | Western Asset](#)

com bubble, the 2008 Great Financial Crisis, and the 1930s Great Depression. However, given that the equity of one sub-type of collateralized loans (“CLOs”), namely broadly syndicated loans (“BSLs”), performed better overall than common stock but similar in the two medium-tail stresses, we asked finance Professor Daniel Svogun to perform a beta analysis to determine whether or not BSL equity has lower volatility than common stock.<sup>6</sup>

Professor Svogun was able to use time series data from Bank of America on CLO BSLs monthly median equity prices to calculate BSL equity beta using the NAIC’s formula for measuring monthly volatility over a 60-month rolling window. The results of Professor Svogun’s analysis (see chart below) demonstrate that the 60-month rolling beta of BSL equity is well below 1 (any beta result lower than 1 indicates less volatility relative to the S&P 500). This beta analysis compared the monthly CLO equity price change to the S&P 500 index performance each month. The beta of the full period studied (Dec 2013 - Feb 2024) with over 750 BSL CLOs included is .4989, which is well below the NAIC’s .75 beta threshold for the lowest charge of 20%. The chart shows the 60-month rolling average beta following the NAIC’s formula. During that time period, the beta of BSL equity remains below the .75 threshold in all but one month, where it reaches .7564. Note the time indicated in the x-axis is the ending period of the 60-month rolling beta. As a result, to be consistent with the principle of equal capital for equal risk, it would be more appropriate for the NAIC RBC charge for BSL equity to be adjusted to 20% using the NAIC’s formula to adjust the equity capital charge according to its level of volatility compared to the S&P 500.



Bank of America CLO data; calculations from finance professor Daniel Svogun, Ph.D., Busch School of Business, CUA

<sup>66</sup> Professor Daniel Svogun is a professor of finance at the Busch School of Business, Catholic University of America, whose research specializes in the “time value of money, ratio analysis, [and] the valuation of stock and bonds.” <https://business.catholic.edu/faculty-and-research/faculty-profiles/svogun-daniel/index.html>

This finding that BSL equity is less volatile than the S&P 500 should not be a surprise because it is consistent with the results of both the OW study and the Cordell CLO equity research paper. Furthermore, it provides additional evidence of the relative outperformance of BSL CLO equity compared to common stock.

### The punitive nature of a single ABS residual charge

In response to regulators' requests, we were able to anecdotally confirm that insurers invest in CLOs, investment-grade auto loan and student loan ABS residuals. However, several of our insurance and investment members noted that they invest in other types of ABS as well and expressed concerns about the inequity of a single residual C-1 charge of 45% for all ABS regardless of the type or quality of the underlying collateral.

One specific example where a 45% residual C-1 factor would be unwarranted is for Commercial Property Assessed Clean Energy (C-PACE) ABS<sup>7</sup>. C-PACE ABS are backed by loans to U.S. commercial property owners that finance energy efficiency, water conservation and renewable energy projects. C-PACE loans are high-quality, super senior to a mortgage loan on a property, given that the loans are repaid as a benefit assessment on the property tax bill. However, it is uneconomic and unfeasible to rate or invest in individual C-PACE loans at scale due to the relatively small average ticket size. As a result, these loans are aggregated in a securitization or structured product so that insurers can invest in the C-PACE asset class. However, the 45% C-1 charge on the residual tranche, even if it is a small part of the structure, can negatively impact the capital-adjusted risk-return profile of a C-PACE ABS. Insurance investors in C-PACE ABS are already subject to higher capital charges compared to investing directly in the underlying, so the interim 45% residual charge makes it even harder to justify the relative risk-reward analysis for an insurance investment. Investors are aware that the 45% residual charge is meant to be an interim one, but the reality is that it may be in place for many years, particularly for smaller ABS asset classes. This would, in effect, significantly disincentivize insurers from investing in high-quality and sustainable C-PACE assets.

### Conclusion

At a high level, the OW analysis and findings demonstrate that expected losses in stress scenarios can vary depending on the underlying collateral and structure, which makes a 45% residual charge inappropriate. As more information is gained on insurers' residual exposure, it is very likely that there are other types of ABS beyond the ones in the OW study and C-PACE ABS for which a 45% charge would not be appropriate based on their specific level of risk. As a result, we respectfully request the NAIC to reconsider

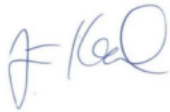
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<sup>7</sup> C-PACE loans are used by commercial property owners to finance climate and environment-related projects, including climate resiliency, renewable energy, and water and energy efficiency improvements. *See generally*, "Credit FAQ: ABS Frontiers: The C-PACE Space Explained, (2024) at <https://www.spglobal.com/ratings/en/research/articles/231213-credit-faq-abs-frontiers-the-c-pace-space-explained-12943764>.

imposing the highest capital charge level in its history until the impact of this charge on all ABS residuals is better understood and determined to be appropriate. In addition, since the only two available empirical studies demonstrate that CLO equity outperforms common stock during periods of financial distress—and we now have evidence that BSLs have a lower beta—we respectfully urge the NAIC to maintain the 30% charge until additional analysis can be performed on what ABS residuals insurers actually hold on their balance sheet and whether a 45% charge would be appropriate.

We welcome the opportunity to discuss these supplementary comments and additional data analysis. From our perspective, there are now only two data-driven analyses available to you, both of which demonstrate that a single 45% charge on ABS residuals would not correspond to the actual levels of risk. If you have any questions about this new information, please reach out to me or Joe Engelhard, Head of Private Credit & Asset Management Policy, Americas, at 202-304-0311 or [jengelhard@aima.org](mailto:jengelhard@aima.org). The ACC will provide a similar comment letter to the Capital Adequacy Task Force, given that they have proposed a 45% charge for ABS residuals for the property casualty and health insurance RBC formulas.

Respectfully,



Jiří Król  
Global Head of Alternative Credit Council