

# Credit and Private Debt Performance and Risk Measurement:

*Making easier what the pandemic  
made harder*

## *Article by*

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The COVID-19 pandemic has put additional pressure on credit and debt managers in an area that is already a challenge - the measurement and reporting of risk and performance. If you and your shop can get this right, it can have a major positive effect on your daily experience, your investor communications, your costs and most importantly your track record.

You invest in loans – they may be leveraged loans, high yield, private debt or all of the above. It is early morning and you log in to start a typical day of analysis, trading and deal structuring. Quarter-end is approaching and the team has started on the investor letter. You need a quick snapshot of how the book is doing, so you open your daily performance reports, check the returns on key positions and strategies, and compare to your benchmark. The graphics show a new trend, so you forward the insight to your team.

It sounds like a typical day with standard reports and analysis - business as usual. Except it's not.

Prior to the COVID-19 pandemic, it was already notoriously difficult to handle performance, attribution and risk reporting in the alternative credit and private debt space. The data is often hard to access and keep accurate. It may be created manually on spreadsheets, using up valuable analyst resources and introducing potential for error. From restructurings and the flow of different ratings data to the creation and comparison of custom benchmarks, portfolio managers know exactly what they want, but getting the systems to produce this information accurately every day and without any army of analysts is something few have actually attained.

Now, in addition to greater market volatility and a flurry of rating downgrades that causes large day-to-day swings, the operational fallout of the pandemic has elevated the need for more granular detail and greater frequency and timeliness of information on performance, risk and investment exposures. It has also increased focus on resiliency, business continuity and remote working arrangements, creating greater demand for online scalable solutions rather than relying on spreadsheets or user-defined applications that reside on the desktop. And this unfolding black swan event has also demonstrated the benefit of outsourcing business processes as well as technology to tap into a global resource pool of subject matter experts rather than relying on a few key people.

As these ongoing challenges have become more urgent, what can be done?

## How is the growing credit and loan space evolving?

Through Q1 2020, the growth of asset managers trading various forms of loans, whether they be leveraged loans or private debt, has been phenomenal. Preqin reported in February 2020 that private debt assets under management (AUM) reached a record \$812bn as of June 2019 and that the asset class was now the third largest in private capital, ahead of infrastructure and natural resources. This growth is primarily due to banks cutting back on lending, credit managers stepping into the void, and investors increasing allocations to an area with a track record of attractive returns and risk profile. Over the five years prior to the pandemic, private credit has delivered average annual returns of 8.75%, and over the last 20 years delivered 10.42%, according to Cambridge Associates.

**82% of credit managers said transparency and reporting were important to align with investor interest**

As we come off the back of a decade of high growth and enter a period of higher volatility and retrenchment, investor appetite for reporting and transparency is increasingly driving the operational agenda of credit managers. The Alternative Investment Management Association's (AIMA) Alternative Credit Council (ACC) survey in November 2019 asked 60 private credit managers about the challenge of achieving alignment of interest with their investors. A resounding 82% of respondents said transparency and reporting was one of the most important factors.

## Why is it so difficult to achieving better measurement and reporting?

Successful credit and debt managers face increasing volumes of funds, positions, agent bank notices, resets, delayed compensation, restructurings, multiple track records and benchmarks. The pandemic brought with it extremely high volumes of rating changes effecting the public side of loan investing. The volume of items that need to be tracked and accounted for – and that ultimately need to make their way into accurate performance and attribution reports – has multiplied with the growth of the AUM in the space.

In more standard and automated investment strategies, like long/short equity hedge funds or 40-Act mutual funds, the increase in volumes would have little effect. However, the loan space is still rife with faxes, bespoke documentation, custom benchmarks and IRR calculations, etc. For example, BNY Mellon alone takes in over 3.3 million faxes on an annual basis in order to process loan transactions for its CLO and credit fund clients.

The ACC survey asked managers for the biggest challenges they face on the operational side of the business. Top concerns were items such as risk management and reporting requirements and lack of service provider support, all contributing to an overarching worry about their lack of ability to scale.

Further complicating accurate reporting is that most loan tracking systems are very difficult to get data into and out of in an automated fashion. Most of the technology used in the market was developed when the leveraged loan space was smaller, before modern technology architecture solutions were available, and before there was such a demand for sophisticated performance and attribution reporting. The manual intervention these systems require to get data in and out can slow down reporting by days and can introduce errors. Errors don't just require costly re-work. They lead to lack of confidence in the reports and in the worst case can cause trading errors.

## How do we make this easier?

### The first two steps...

**Consolidating systems that produce analytics and measure risk allows for apples-to-apples comparisons and can help avoid the pitfalls of having different methodologies used across funds and benchmarks or utilizing several analytics providers. A proper risk management framework will empower the front office to make investment decisions informed by current market conditions. It will also allow the front office to understand their portfolio through the same lens that the investment risk team is using to assess risk.**

#### **Step 1:** Identify and solve for the toughest performance and attribution issues

Performance and attribution reporting, backward-looking analysis, presents a myriad of challenges for the credit and private debt manager. Here are some of the top challenges and what can be done about them.

THE ISSUE	THE PROBLEM	THE SOLUTION
<b>1. Accounting for Loan Refinancing Activity</b>	When a loan is refinanced with different terms, the loan administrator restructures the asset, resulting in the establishment of a brand new security identifier. This name change can be a hurdle in measuring performance over time.	The analytics need to link the original identifier and any new identifiers for a given loan so the performance can be tracked accurately through a restructure.
<b>2. Delayed Compensation</b>	The timing of loan cash flows can vary unexpectedly. When a secondary loan trade closes late, the convention of delayed compensation is used to make sure neither buyer nor seller is enriched by the payment lag.	All loan performance systems have to be able to handle this key feature of the loan trading marketplace.
<b>3. Long Settlement Periods</b>	Along similar lines, pay-downs can often occur for unsettled trades because of lengthy settlement periods.	Investors can make better trading decisions by delivering daily performance analysis to the front office and leaving their books open to pick up late or unexpected cash flows, adjusting the performance continually on a month-to-date basis.
<b>4. Foreign Exchange Decisions</b>	The timing and structure of foreign exchange transactions are often more complicated for credit strategies than other asset classes. For example, loan strategies may employ synthetic hedges and associated restatements at multiple levels of fund structures.	This requires a flexible data model, in order to support the associated performance and attribution models

<b>5. Attribution Model Choice for Credit</b>	<p>Different strategies require different attribution methodologies to ensure the analysis effectively articulates the value added by intentional active management decisions.</p>	<p>If a strategy focuses on credit instruments with less sensitivity to interest rates such as floating-rate secured loans, a single-factor attribution framework may be the most effective way to communicate value added from issue and industries. If the credit manager also focuses on high-yield fixed-rate bonds, a multi-factor model which includes the impact of decisions on yield curve and credit spread positioning may be appropriate.</p>
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## Step 2: Solve for toughest risk measurement issues

**Explaining past performance is critical, but decision-making tools for the front office and investment risk teams must also include forward-looking risk reporting as well. However, risk modelling for credit managers can be a challenge. Key considerations include:**

- 1. Identifying and Sourcing Terms & Conditions:** Attributes and market data for corporate debt is readily available, but can be difficult for bank loans. Procuring data elements such as issuer ratings, spreads over reference rates, reference rate floors, maturity dates and payment frequencies means getting data from loan servicing systems, accounting systems and data from multiple market data vendors. Without timely and accurate attributes, it is difficult to perform any risk modelling and adequately assess sensitivity to interest rates, credit spreads or even equity markets.
- 2. How to Use the Data:** A good risk system will produce traditional risk measures such as Standard Deviation, Value-at-Risk and more traditional fixed income and credit analytics such as Effective Duration, Spread, Duration, Option Adjusted Spread, Discount Margin and Yields, which are equally as important. Having a library of sensitivity measures and historical stress tests is also necessary to understand how a portfolio will behave under a variety of market conditions.
- 3. Full Revaluation:** A full revaluation approach to calculating risk can capture a wide array of possible outcomes, especially for callable instruments or other instruments with non-linear payoff structures. A full revaluation takes each individual position and fully revalues it based upon changing market conditions, e.g., credit spread, interest rate, or foreign currency exchange movements. A simulation-based risk approach, such as Monte Carlo, will produce forward-looking loss estimates using current correlations and volatility levels. Importantly, full revaluation has the ability to model events outside of normal market conditions, such as credit spreads widening 100 bps or recreating the market environment from the credit seize in 2008, which included emergency rate cuts by the Fed and two-year spreads increasing by over 200% on average. In addition, the COVID-19 pandemic will fuel development of previously considered far-fetched but now all too realistic shock scenarios. Simpler modelling techniques may not sufficiently capture a credit portfolio's risk factor sensitivities under extreme scenarios.

A good forward-looking, holdings-based risk system can also capture benchmark holdings to facilitate benchmark relative analysis. Forward-looking beta and tracking error have a major advantage over the traditional beta and tracking error metrics calculated using past returns in that the forward-looking risk measures will better reflect how instruments and the resulting portfolio are likely to behave in the current yield and spread environment.

## Conclusion

As the private credit/debt market continues to grow and evolve in a newly volatile market and economic environment, there will continue to be demand for solutions to help managers address internal structural challenges and provide the best reporting/risk management experience. This pandemic has also demonstrated the benefit of outsourcing business processes as well as technology to tap into a global resource pool of subject matter experts rather than relying on a few key people. Implementing some of the solutions discussed here could not only help you execute a scalable model, but also provide you and your investors with a more accurate and efficient reporting and risk management experience.

For managers whose alternative investments tend to thrive during periods of market volatility or uncertainty, being able to accurately measure their positions by using scalable, comprehensive analytics is one of the most important factors in distinguishing a firm in what has become a crowded field. To get this right in the credit and loan space, a manager has to tackle a myriad of issues related to timing, restructurings and loan tracking systems that typically were not engineered to work seamlessly with accounting systems.

If you and your credit/debt shop can get this right, either done in-house or through the scale of an external service provider, you will be able to power up in the morning – be it at the office or at home – with a comprehensive set of performance, attribution and risk reports, graphics and data. The numbers are fully reconciled with accounting, up to date with the latest restructurings, and you can see it all together in graphs in one view. You can be in control, with greater confidence in the data's accuracy so you make decisions without second-guessing the fact base. That could have a major effect on your daily experience, your monthly or quarterly investor communications, your operating costs and your track record.



**Peter Salvage**  
MANAGING DIRECTOR  
CREDIT AND PRIVATE DEBT SOLUTIONS

Peter Salvage leads the bank's services to North American credit fund managers, including managers of private debt, direct-lending, CLOs and syndicated loan portfolios. His role includes developing the bank's long-term strategy to drive growth in the space and executing the delivery of those services to the bank's credit fund manager clients. Peter joined BNY Mellon in 2017 as the Global Head of Hedge Fund Services from SS&C Technologies, where he was a Managing Director based in London and New York.

Prior, Peter was Citibank's Managing Director in charge of Hedge Fund Services in EMEA and North America, where he founded Citi's bank loan and OTC derivative services and was head of Citi Prime Brokerage's portfolio management technology service. Before joining Citi, he led J.P. Morgan's single manager hedge fund services business and was a management consultant to the securities services industry. Prior to his financial services career, Peter was a war correspondent based in Berlin, Brussels and London.

Peter is on the Board of Directors of the Managed Funds Association. He holds an MBA from Northwestern University, an M.S. from Columbia University, and a BSc. from the London School of Economics.



**Frances Barney, CFA**  
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Frances Barney, CFA leads the Global Risk Solutions business within BNY Mellon Asset Services, which includes performance and risk analytics, attribution, enterprise risk, and other investment analysis services. Frances has more than 20 years of investment industry experience, most of it in performance and risk analytics services.

Prior to joining BNY Mellon in 2006, Frances worked at State Street Corporation, where she oversaw one of three regional offices supporting the delivery of performance analytics for its U.S. custody clients and managed the U.S. performance outsourcing service for investment managers and consultants. Prior to that, she worked at Deutsche Bank Trust Company Americas, where she was head of performance analytics. Frances started her career at Bankers Trust, where she held a variety of product and risk management roles in the global markets and investor services divisions.

Frances received a BA from Yale University, an MBA from The Wharton School of the University of Pennsylvania and is a Chartered Financial Analyst. Frances is also an active volunteer with the CFA Institute for the Certificate in Investment Performance Measurement (CIPM) program.





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