# Risk Rating Guidelines for Hedge Funds, Alternative Mutual Funds & ETFs & Private Credit in Canada

***August 2022***

***3rd Edition***

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## EXECUTIVE SUMMARY

This 3rd edition focuses on the internal risk ratings placed on funds by IIROC (Investment Industry Regulatory Organization of Canada) dealers and how they may differ from the historical risk-adjusted return of the specific fund or strategy indices (and for alternative mutual funds and alternative ETFs, how it may differ from the prospectus risk rating, as mandated by the CSA).

To foster dialogue around risk ratings and hedge funds, liquid alternative funds and private credit funds, this 3rd edition is meant as a **guideline** for further discussion around these important strategies. We hope to clarify how to more accurately view these strategies' risk profiles, with regards to individual risk and how they can reduce an overall portfolio's risk.

In September 2017, the CSA implemented new risk rating guidelines to which all prospectus-based offerings must adhere. This methodology is based upon standard deviation, which is adequate for most traditional long-only strategies but may also understate the risk in alternative investment strategies, which tend to have "fat tail" risk events. However, IIROC dealers often place too high a risk rating on alternative funds, thereby significantly limiting their potential inclusion in retail client portfolios and reducing investors' access to these products than can provide diversification, volatility protection and non-correlated returns.

To more accurately reflect the historical risk-adjusted data for alternative funds, AIMA Canada and the CAIA Association have proposed a system based on the median trailing standard deviation of funds within CISDM indices. See Table 1 below.

**Table 1 – Proposed risk rating for hedge funds and alternative mutual funds based on the median trailing standard deviation of funds within CISDM indices**

| Low | Low to Medium | Medium | Medium to High | High |
|---|---|---|---|---|
| Not applicable to alternative strategies | 0% to 6% | 6% to 11% | 11% to 16% | Over 16% |
| | Market Neutral Equity | Equity Long-Short | Equity Long-Only | Digital Assets |
| | Multi-Strategy | Event-Driven | Emerging Markets | |
| | Long-Short Credit | CTA/Futures | | |
| | Relative Value Arbitrage | | | |
| | Global Macro | | | |
| | Distressed (hedge funds) | | | |

**Source**: CAIA Association, AIMA, CISDM. Data as of 11/30/2020.

This second edition paper proposes a methodology for risk ratings of private credit funds. Private credit funds make loans to largely corporate borrowers outside of the traditional banking system. These loans are privately originated and have a wide variety of borrower terms. Many funds are structured with a three-to-five-year life which assumes that loans will be held until maturity. Loans made to private credit borrowers are illiquid and are not typically offered for sale on a regular basis.

Many loans made to private credit borrowers are floating rate, where the interest rate charged on the loan rises with changes in the interest rate market. In times of rising rates, floating rate loans benefit from increases in interest rates, while fixed income investments such as sovereign bonds decline in value during times of rising rates.

The key consideration for the risks in private credit are the seniority vs. subordination of the loan and the degree to which the loan has covenants that reduce the risk to the lender/investor by requiring disclosures and limiting financial activities of borrowers.

The least risky loans in the private credit industry are those that are senior in the capital structure and secured by collateral such as the equity of the corporate borrower, property, plant, equipment, or receivables. Senior and secured loans will be rated in the low-to-medium risk category, while unitranche loans will be rated in the medium risk category. Unitranche loans are loans made by a single lender to a borrower that combine senior and subordinated debt into a single tranche. For example, a senior loan might only be extended at a level of 3-5 times the EBITDA of the firm. Debt levels in excess of that threshold would typically be made in a second and subordinated loan are included in the unitranche structure. Finally, other private credit strategies that may take substantial risks are classified with a medium-to-high risk rating. This includes leveraged private credit funds that borrow a portion of the capital used to originate loans, funds that invest primarily in covenant-lite, subordinated, or unsecured loans, as well as mezzanine loans offered to private equity borrowers at debt levels that can exceed six times EBITDA.

**Table 2 – Proposed risk rating for private credit funds based on S&P & Cliffwater indices**

| Low | Low to Medium | Medium | Medium to High | High |
|---|---|---|---|---|
| Not applicable | 0% to 6% | 6% to 11% | 11% to 16% | Over 16% |
| | Senior/Secured | Unitranche | Leveraged | |
| | | | Mezzanine | |
| | | | Distressed (private credit) | |
| | | | Subordinated | |

**Source:** CAIA Association, AIMA/ACC.

Alternative investments are diverse and need to be evaluated properly and individually based on manager and strategy. They play a key role in a balanced portfolio by offering diversification, risk reduction and non-correlated returns to the investor. It is important, at all stages of the market cycle, that Canadian retail investors can access adequately both offering memorandum (hedge funds and private credit funds) and prospectus (alternative mutual funds and alternative ETFs) products.

# I. Introduction and purpose of this guideline

Within the retail investor channel, IIROC (Investment Industry Regulatory Organization of Canada) investment dealer firms have long overlaid additional internal risk rating policies over and above the CSA's requirement of using standard deviation alone to classify into risk categories. All too often, this unfairly results in all alternative funds being unfairly rated as high risk, thereby limiting the number of investors who can access these products. Historical data clearly shows that alternative funds offer diversification, risk reduction and non-correlated returns throughout the market cycle, especially amid a rising interest rate environment. For more AIMA/CAIA research on the benefits of alternative investments, see the AIMA/CAIA Trustee papers.

In September 2017, the CSA implemented new risk rating guidelines to which all prospectus-based offerings must adhere. This methodology is based upon standard deviation, which is adequate for most traditional long-only strategies but may understate the risk in alternative investment strategies, which tend to have "fat tail" risk events. For instance, many alternative investment strategies (e.g., market neutral equity and relative value fixed income) have low return volatility, which may result in a low-risk rating. This result may cause confusion at distribution channels as money market funds are also rated low risk. To add to the confusion, many distribution channels have only three risk rating categories (low, medium and high), as opposed to the five under the CSA framework (low, low/medium, medium, medium/high, and high).

To facilitate fair access of risk-reducing products to retail investors while allowing fair platform access to independent (and often emerging) fund managers, it is imperative to lower if not remove the automatic high-risk rating barrier across alternative fund strategies.

We advocate that:

1. Additional risk ratings systems at investment dealers be revisited for alternative funds to better reflect historical risk-adjusted data from funds within CISDM indices.
    a. Risk ratings must more fairly align with the true risk of an alternative fund strategy, which can often reduce risk and dampen volatility in a balanced portfolio.
    b. Alternative fund strategies should not be rated automatically high risk due to their ability to use short-selling, leverage, etc.
2. Any risk rating scale at the investment dealer or the fund manufacturer should include five categories of risk (rather than only three) to ensure greater flexibility and consistency with prospectus risk ratings.
    a. Those five categories should be: low, low-medium, medium, medium-high and high.

If investment dealers continue to believe that standard deviation is not sufficient as a sole metric to properly evaluate risk, perhaps the CSA or IIROC might consider exploring a more robust, mandated risk rating process for better industry consistency and transparency.

Specific rationale and considerations on these are outlined below.

**Table 3 – Nomenclature cited in guideline**

| | |
|---|---|
| *Alternative funds* | Hedge funds, alternative mutual funds, alternative ETFs and private credit inclusively |
| *Hedge Funds* | Alternative funds offered by offering memorandum (OM) in retail channel |
| *Alternative mutual funds* | Alternative mutual funds and alternative ETFs per NI 81-102 and offered by prospectus |

| | |
|---|---|
| *Risk rating category/scale* | *S*cale tiered by three (low, medium high), five (low, low-medium, medium, medium-high, high) or ten (1 lowest -10 highest) risk levels |
| *Fund category* | Canadian Investment Funds Standards Committee (CIFSC) category |
| *Liquid alternatives* | Including alternative mutual funds, alternative ETFs, U.S. alternative mutual funds and alternative UCITS, in general |

# II. Alternative UCITS and U.S. mutual funds risk rating methodologies

The inclusion of robust risk ratings in Canada is unique and not closely replicated in other large global markets.

For U.S. alternative mutual funds, each distributor has its own internal process with respect to determining suitability, but there is no national system for risk ratings.

In Europe, alternative UCITS use the value at risk method[1] and the commitment method for measuring global exposure. The commitment method is a standardized approach to calculating the gross notional exposure and global exposure (net leverage/gearing) arising from a portfolio's derivatives.

While risk ratings have likely served the Canadian investor and the financial services sector well, it is imperative to give investors the ability to access the diversification, risk reduction and non-correlated returns that alternative investments provide, and not block the inclusion of these in broad portfolios.

# III. Internal risk rating scales at investment dealer firms

IIROC investment dealers today are not required to adopt the risk rating outlined in fund manufacturer prospectuses (as per the CSA). However, most have their own proprietary internal risk rating scale. Often, this is a three-tiered scale (low, medium and high) or a five-tier scale (low, low/medium, medium, medium/high and high), though at least one dealer in Canada uses at ten-tier scale (1 lowest – 10 highest).

These internal risk ratings are intended to provide additional risk protection for the dealer, advisor and investor with regards to KYC (Know Your Client)/KYP (Know Your Product) suitability. However, the internal risk ratings have the net impact of reducing Canadian investor access to alternative funds due to the inaccurate and unjustly high-risk ratings imposed on these strategies vs their historical risk-adjusted returns.

Since the first edition of the AIMA/CAIA Risk Rating Guideline in January 2019, many IIROC dealers have reviewed their internal risk rating systems with some positive progress. For example, many IIROC dealers are accepting risk rating outlined in the prospectus for alternative mutual funds and alternative ETFs. On a case-by-case basis, IIROC dealers have lowered risk ratings for select hedge funds from high to a more appropriate level based on the fund's historical risk/return profile. However, for many hedge funds and private credit funds, where dealer platform access is granted, all too often the default remains high, contrary to the historical risk-adjusted return profile.

While we appreciate that neither we nor the CSA can enforce a risk methodology among the dealer community, we recommend IIROC dealers use a more flexible scale of at least five risk categories. This allows

[1] The value at risk method is discussed further below.

for greater flexibility and improved accuracy when placing a fund in any one category, while also providing consistency with the CSA's prospectus risk ratings.

## IV. Language in the fund OM and prospectus

Fund managers/manufacturers should include volatility band language in both the OM for hedge funds and private pools and in the prospectus for alternative mutual funds to ensure best guidance to dealer firms on suggested risk rating. This will ensure that investment dealers have a fair metric with which to commence their due diligence and review of the product.

## V. Global Hedge Fund & Alternative Mutual Fund Universes

While alternative mutual funds are still new to Canada and regulations require that these funds publish no track record at the fund's inception, there are other markets to refer to in order to estimate the risk of alternative mutual funds.

The global hedge fund universes are proxied by the Center for International Securities and Derivatives Markets (CISDM) or another provider of hedge fund indices. For U.S. alternative mutual funds, the Morningstar series of indices are also used as relevant comparisons. For alternative UCITS funds in Europe, relevant comparison indices are published by alternativeUCITS.com.

**Table 4 – Three-year trailing risk statistics for hedge funds and equity indices**

| 3-Year Risk Measure | CISDM Fund of Funds | CISDM Commodity Trading Adviser CTA | CISDM Equity Long-Short | CISDM Fixed Income Arbitrage | S&P TSX Composite |
|---|---|---|---|---|---|
| **Standard Deviation** | **4.7%** | **7.8%** | **10.1%** | **11.3%** | **18.8%** |
| **Maximum Drawdown** | -5.1% | -9.9% | -11.0% | -17.7% | -19.6% |
| **Skewness** | -1.5 | -0.3 | -1.3 | -4.9 | -0.4 |
| **Sharpe Ratio** | 0.54 | 0.48 | 0.31 | 0.07 | 0.72 |

**Source**: CAIA Association, CISDM. As of November 30, 2020.

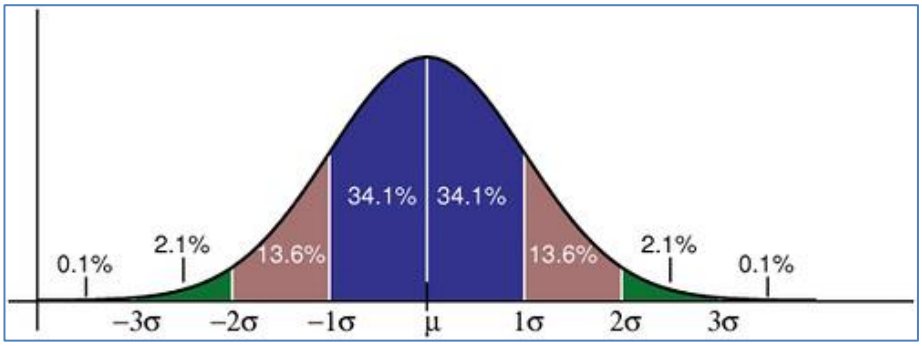
With the more complex portfolio construction of alternative funds, standard deviation alone is not a complete measure of risk. Notice that the skewness of funds of funds and equity long-short funds in the table above is much larger and more negative than that of the S&P TSX composite. That is, alternative mutual funds are more likely to have larger negative returns than is suggested by their standard deviation alone.

In order to avoid confusion between the risk ratings of long-only and alternative mutual funds, it is important to interpret the risk of alternative mutual funds using the same framework that the CSA presents for long-only funds. However, due to the more complex risks of alternative mutual funds, standard deviation cannot be used as a stand-alone risk measure. For example, including funds of funds and fixed income arbitrage in the low-risk category may be inappropriate, despite their historical standard deviation below 3%, as these funds clearly have higher risks than experienced by the money market and short-term fixed income funds that dominate the low risk category of long-only funds.

# VI. Proposed risk rating methodology for hedge funds and alternative mutual funds and digital assets

Standard deviation is the most widely accepted and easily understood measure of volatility risk. By measuring the amount that a fund's returns deviate from its mean return, standard deviation gives the investor an idea of the range in value that can be expected for their investment. Standard deviation is a risk measure that allows for easy, relevant comparisons across peer groups.

**Figure 1 – Standard deviation of a normally-distributed return series**




**Source**: CAIA Association

Effective September 1, 2017, Canadian mutual fund managers were required to adopt a new prescribed risk classification methodology to determine the investment risk levels of publicly offered mutual funds (including exchange-traded funds ('ETFs')) they manage. The new risk classification methodology requires managers to determine the investment risk level of their funds using 10-year standard deviation and to disclose that risk level in the Fund Facts document ('Fund Facts') and in the ETF Facts document ('ETF Facts'), as applicable, using a prescribed five-category risk level scale. The standard deviation ranges and investment risk levels are as follows:

**Table 5 – Standard deviation to risk rating**

| Standard Deviation Range | Investment Risk Level |
|---|---|
| 0 to less than 6 | Low |
| 6 to less than 11 | Low to Medium |
| 11 to less than 16 | Medium |
| 16 to less than 20 | Medium to High |
| 20 or greater | High |

**Source:** IFIC Classification Guidelines

From a sound practice perspective, risk ratings for hedge funds and alternative mutual funds should be:

- Calculated using the methodology outlined in Appendix F of NI 81-102;

- Calculated annually in conjunction with the filing of disclosure documents. Ideally, the calculations would be made not more than 60 days prior to the date of the applicable Fund Facts, ETF Facts, prospectus renewal or amendment; and

- Reviewed by the investment dealer's product area, legal and compliance areas with final approvals and any supporting documentation and/or rationale well-documented and stored in a secure location.

Although a system for rating funds that has a complex calculation across multiple risk factors could be devised, AIMA Canada and the CAIA Association have designed a system that is less complex, based on the median trailing standard deviation of funds within CISDM indices.

Note that no alternative mutual funds will be rated in the low risk category.

**Table 6 – Proposed risk rating for hedge funds and alternative mutual funds based on the median trailing standard deviation of funds within CISDM indices**

| Low | Low to Medium | Medium | Medium to High | High |
|---|---|---|---|---|
| Not applicable to alternative strategies | 0% to 6% | 6% to 11% | 11% to 16% | Over 16% |
| | Market Neutral Equity | Equity Long-Short | Equity Long-Only | Digital Assets |
| | Multi-Strategy | Event-Driven | Emerging Markets | |
| | Long-Short Credit | CTA/Futures | | |
| | Relative Value Arbitrage | | | |
| | Global Macro | | | |
| | Distressed (hedge funds) | | | |

**Source**: CAIA Association, AIMA, CISDM. Data as of 11/30/2020.

New alternative mutual funds will have no track record and will be benchmarked relative to a global hedge fund or liquid alternatives index. Once the individual funds have a sufficient track record of their own returns, such as three to five years, the risk rating will transition from being based on an external index to being based on the fund's own results.

The chart above is based on the performance of individual funds, not fund indices. Note that the standard deviation of hedge fund indices is calculated by taking the average of all funds within a given month and then taking the standard deviation of that average over time. The assumption is that investors are accomplishing diversification within each given strategy, which would require investing in a number of funds. Table 6 is based on the median standard deviation of funds within CISDM indices, which will more likely approximate the experience of investing in a single fund or a small number of funds within each strategy group. For example, while the standard deviation of a managed futures index might be 7.4%, the standard deviation of the median fund in that index may be closer to 11%.

**Risk Ratings for Digital Assets**

Despite recent market volatility, digital assets are a fast-growing sector of the global financial markets. The two dominant cryptocurrency protocols are Bitcoin and Ethereum. While there are over 20,000 cryptocurrencies and digital assets listed on coinmarketcap.com with a total market cap of $1.09T, as of

August 2022. Bitcoin and Ether comprise nearly 60% of the total value, with the next 50 assets containing about one-third of the market capitalization.

Cryptocurrencies are designed to be global and decentralized, meaning that they are generally unregulated. There might be over 500 cryptocurrency exchanges in the world, some of which offer up to 100 times leverage. This unregulated marketplace and the use of high leverage can lead to substantial volatility, as any substantial decline in value is exacerbated by liquidations of highly leveraged long positions. These markets trade 24/7 and volatility might increase during times of lower trading volume, which has largely been driven by retail investors to date, though some institutions and hedge funds are slowing dipping into the space.

From November 2017 to August 2022, the annualized weekly volatility of bitcoin was 78.9% while Ether had annualized volatility of 104.7%. Note that the average weekly moves in bitcoin are 8.1%, while Ether has an average weekly price change of 10.5%. When measured daily or hourly terms, the volatility would be substantially higher.

| | Annualized Weekly Volatility | Absolute Value of Average Weekly Price Change |
|---|---|---|
| Bitcoin | 78.9% | 8.1% |
| Ether | 104.7% | 10.5% |

Source: Yahoo Finance, as at Aug 5 2022.

While bitcoin and Ether are the two largest and some might say the most mature in the cryptocurrency market, many other cryptocurrencies and digital assets might have even a higher level of volatility.

Given the unregulated and leveraged nature of the cryptocurrency market and the substantial volatility that persists more than ten years into the price history of bitcoin, we place all cryptocurrencies and digital assets in the highest risk category.

Despite stablecoins being designed to have low volatility, with values often pegged to a fiat currency such as the US dollar or euro, we also place stablecoins in the highest risk category

There are questions about how to safely custody stablecoins and there can also be concerns about the collateral pools backing these digital assets, though AIMA's Industry Guide to Digital Asset Custody, AIMA's pending Industry Guide to Trading and pending AIMA Digital Asset Due Diligence Questionnaire are helping to bring institutional sound practice to this evolving space.

# VII. Hedge Fund & Alternative mutual fund strategies: Further risk rating metrics considerations

If an investment dealer is seeking a more advanced process of risk ratings for alternative fund strategies than standard deviation alone, we recommend reviewing the following risk metrics and developing a fair framework that includes some of these outlined below.

## 1. Maximum drawdown

Drawdown measures the percentage lost from the peak of an investment's value to the trough or the low point of the investment's value during any given time frame. The maximum drawdown ('MDD') is the largest percentage peak-to-trough decline during the time frame. MDD is a good representation of how a fund reacted to previous market declines. It can be used as a relative measure against its peers and provides some insight into the effectiveness of the manager's risk mitigation techniques and loss

prevention strategies. Note that, for a given group of investments, risk as measured by MDD may differ substantially from risk as ranked by standard deviation.

## 2. Sharpe ratio

The Sharpe ratio is the average return earned in *excess* of the risk-free rate per unit of volatility or total risk. The Sharpe ratio is a measure of risk-adjusted return comparing an investment's excess return over the risk-free rate to its standard deviation of returns. Generally, the greater the value of the Sharpe ratio, the more attractive the risk-adjusted return. The Sharpe ratio has shortcomings, it reprimands upside and downside volatility. Because the Sharpe ratio assumes that investment returns are normally distributed, it does not capture non-symmetric distributions and may not fully reflect tails in return distributions.

## 3. Up/Down capture

"Up capture" indicates how well a fund performed when the market was up. If the up capture is greater than 1, it means that the fund outperformed the market when the market was up. Conversely, "down capture" measures how well the fund performed when the market was down. A down capture greater than 1 means that the fund has underperformed the market during periods when the market was down. Up/Down capture is a good indication of how the fund manager captures profits to the greatest extent possible while implementing effective risk mitigation techniques.

## 4. Sortino ratio

The Sortino ratio is a popular downside measure used as an alternative to the Sharpe ratio. The Sortino ratio improves upon the Sharpe ratio by isolating downside volatility from total volatility by dividing excess return by the downside deviation. The Sortino ratio is a variation of the Sharpe ratio that differentiates harmful volatility from total overall volatility by using the asset's standard deviation of negative asset returns, called downside deviation. The Sortino ratio replaces, in the denominator, the standard deviation of returns that are below the target return. The Sortino ratio takes the asset's return and subtracts the risk-free rate, and then divides that amount by the asset's downside deviation. Just like the Sharpe ratio, a higher Sortino ratio is better.

## 5. Batting average

"Batting average" is a quantitative measure that shows how frequently the fund manager produces a positive return. A batting average greater than 50% means that the manager has produced a return greater than zero in more than half the performance periods. When considered with compound returns, the batting average indicates whether or not the fund manager is consistent with performance (high batting average and high returns) or if positive returns are the result of just one or two periods of excellent return (low batting average with high returns).

## 6. Value at Risk ('VaR') and Conditional VaR ('CVaR')

VaR and CVaR are risk measures used to assess the tail risk of an investment fund. VaR is a measure of the risk of loss for investments. It estimates how much a set of investments might lose (with a given probability), given normal market conditions, in a set time period.

An extension to VaR, the CVaR measure is more sensitive to events that happen in the tail end of a distribution. While VaR represents a worst-case loss associated with a probability and a time horizon, CVaR is the expected loss if that worst-case threshold is ever crossed. CVaR, in other words, quantifies the expected losses that occur beyond the VaR breakpoint.

# VIII. Proposed Risk ratings for Private Credit funds

## 1. Strategies in private credit

There are three main strategies in the corporate private credit space: senior direct lending/bank loans, mezzanine, and distressed. Private credit loans often back merger and acquisition activities as well as leveraged buyouts of mid-cap firms. While investment grade borrowers may carry a debt load of three times EBITDA, today's leveraged buyouts often have debt loads of more than six times EBITDA. Private credit strategies therefore primarily involve sub-investment grade or similar credit risk exposure.

Direct lending or 'par' lending focuses on extending finance to performing companies, usually at the top of the capital structure. Generally, the funds in this space require their team to have a wide variety of skills. Beyond credit analysis, the underwriting of debt requires relationships that provide access to borrowers. Lenders also need to understand the distressed and workout processes as well as the value of collateral. Much of the direct lending space is so-called cashflow based lending where the loans are collateralized by the equity of the operating corporate entities. Asset-based lending, where the lender takes collateral in the form of real estate, equipment, inventories, or accounts receivable is also popular. Investors are attracted to direct lending, as this strategy has historically produced higher yields than bank loans or high yield bonds with, what appears to be, lower downside risk. It is difficult to directly compare the volatility risk of direct lending to high yield bonds, as direct loans are typically held at par as long as the borrower has stable credit quality and continues to service the principal and interest on the loan. Contrast that to the publicly-traded high yield market, where changes in interest rates and liquidity move the market on a daily or hourly basis. Another measure of risk is default rates and recovery rates, where the direct lending market has had an advantage over high yield bonds in recent years. Given the less liquid nature of the private credit market, we must note that the volatility of returns is not directly comparable to public markets or more liquid broadly syndicated markets. Although loans are regularly marked-to-market, it is not necessarily done on a daily basis.

Because mezzanine debt is typically the most subordinated debt in the capital structure, many investors consider mezzanine debt to be similar in many ways to private equity investments. Mezzanine investments tend to be more popular when the economic or credit cycles are in their early stages. Investors tend to benefit from credit retrenchment following a downturn and are thus able to capture higher spreads at lower levels of leverage.

Investors in distressed companies purchase debt (usually with a significant discount) of a company after a default on the debt has occurred or after the risk of the debt has substantially increased. A key advantage of distressed investors is to benefit from forced selling, usually by institutional investors that are required to liquidate positions once they have defaulted or moved below a stated credit rating. The main goal of distressed investors is to purchase the debt at a price lower than the realized recovery rate earned after the issues of distress have worked through a private restructuring or the bankruptcy court. Many managers of distressed funds have strong in-house legal teams who understand the legal issues of bankruptcy court, recovery rates, and the ability to control collateral.

While indices of direct lending, mezzanine, and distressed funds exist, we believe that the standard deviation of these funds do not reveal the true risks of these funds. In many cases, the loan is held at par value as long

as the loan is performing, which is paying principal and interest as scheduled. Changes in the market level of interest rates and credit spreads or deteriorating prospects for firms that continue to service their debt are not always reflected in the reported volatility or NAV of private funds. Given that much of the private credit universe is below investment grade, we believe that the best comparison is to the returns of publicly-traded high yield bond or leveraged loan indices. While most borrowers in the private debt market are not rated by agencies such as S&P or Moody's, Preqin (2018)[2] notes that borrowers in the private debt market often have a credit quality that would average a B rating if rated.

In a study on the performance of private credit funds in the Journal of Alternative Investments (2018)[3], Munday, Hu, True, and Zhang note that distressed debt is more risky than publicly-traded high yield, while private credit strategies are better benchmarked to leveraged loan indices than to publicly-traded high yield. The same study notes that there is significant smoothing in direct lending indices that artificially reduces the stated standard deviation.

**Table 7 – Historical risks of fixed income investment indices**

| | Historical Standard Deviation, 2006-2020 | Maximum Drawdown, 2008-2009 |
|---|---|---|
| **S&P Canada High Yield Corporate Bond** | 11.8% | -12.6% |
| **S&P US High Yield Corporate Bond** | 8.9% | -30.6% |
| **S&P LSTA Leveraged Loan CAD** | 7.7% | -25.0% |
| **S&P Canada B High Yield Corporate Bond** | 12.6% | -42.5% |
| **S&P CCC & Lower** | 18.6% | -50.4% |
| **Cliffwater Direct Lending Index** | 3.9% | -7.7% |

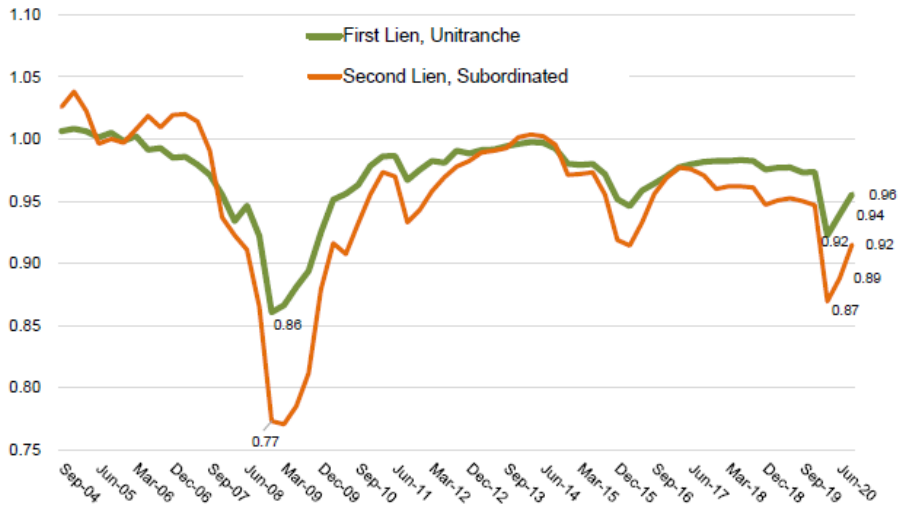
Source: CAIA Association, Bloomberg. Note: Cliffwater data is through 9/30/2020, all other data is through 12/31/2020.

A low to medium rating can be applied to unlevered private credit funds that focus solely on senior secured lending to borrowers not currently experiencing financial stress or distress. As Figure 2 below shows, first lien and unitranche senior loans exhibit significantly lower volatility in fair value than subordinated debt. The historical standard deviation of the senior loans complex is around 3% while that of the subordinated or mezzanine loans is in the region of 5.4%. Furthermore, the CDLI-S index comprising solely of senior loans (without unitranche) exhibits even lower annualized standard deviation of 2.55%.

[2] 2018 Preqin Global Private Debt Report

[3] Munday, Hu, True, and Zhang, "Performance of Private Credit Funds: A First Look," Journal of Alternative Investments, Fall 2018.

**Figure 2 - Comparison of fair value for Senior and Subordinated loans within CDLI[4]**




Source: Cliffwater Direct Lending Report Q3 2020

A medium risk rating is appropriate for Unitranche or mixed private debt strategies that may combine senior and subordinated loans in their portfolios in a similar way that is measured by the CDLI index.

**Table 8 – Proposed risk rating for private credit funds based on S&P & Cliffwater indices**

| Low | Low to Medium | Medium | Medium to High | High |
|---|---|---|---|---|
| | 0% to 6% | 6% to 11% | 11% to 16% | Over 16% |
| Not applicable | Senior/Secured | Unitranche | Leveraged | |
| | | | Mezzanine | |
| | | | Distressed (private credit) | |
| | | | Subordinated | |

**Source:** CAIA Association, AIMA/ACC.

Again, such a rating should be ascribed to private credit funds that are unlevered, diversified by industry, and invested primarily in performing loans with financial ratios and risks equivalent to firms rated B to BB on the S&P scale or B to Ba on the Moody's scale. While most small borrowers in the private debt space are unrated, analysts can estimate a shadow rating, or the rating that might be awarded by a ratings agency by considering the financial ratios of the borrowers relative to the average ratios for each credit rating according to Moody's Financial Metrics.

Moody's notes that 4.2% of all speculative-grade issuers defaulted from 1983-2017, with higher default rates for cyclical sectors such as commodities[5]. Default rates increase as credit ratings decline. From 1981-2018,

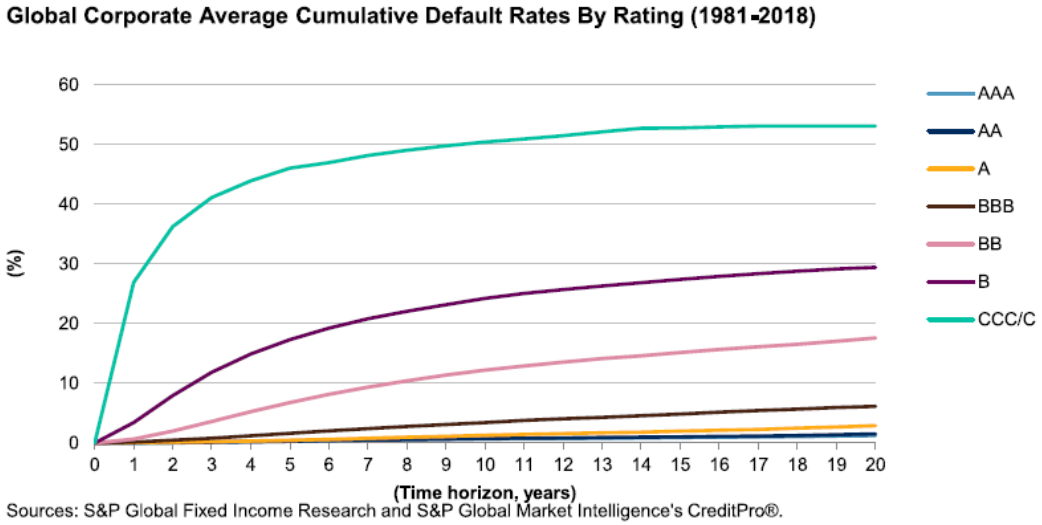
[4] Cliffwater Direct Lending Report Q3 2020

[5] Moody's, "Annual Default Study, Corporate Default and Recovery Rates, 1920-2017," 15 February 2018.

S&P notes that 10% of BB-rated issuers defaulted within 7 years, 20% of B-rated issuers defaulted within 6 years, and 40% of CCC/C-rated issuers defaulted within three years[6].

Finally, a Medium to High rating should be applied to loans and strategies concentrating on mezzanine/subordinated lending and/or distressed opportunities. Strategies that may apply higher levels of leverage at the fund level to senior assets may also involve a higher overall level of risk.

**Figure 4 - Global Corporate Average Cumulative Default Rates by Rating (1981-2018)**




Sources: S&P Global Fixed Income Research and S&P Global Market Intelligence's CreditPro®.



## 2. Fund and strategy specific considerations for risk ratings

We would encourage issuers to consider using medium to high or high ratings for funds that use leverage and/or hold lower quality debt. Each issuer should estimate how their anticipated use of leverage and likely default rates of their loans will impact the standard deviation of their fund. Starting with high yield bond index returns, the application of leverage increases standard deviation of the fund, with higher levels of leverage typically leading to higher levels of standard deviation risk. Issuers should also note the cost and term of leverage and avoid funding long-term loans with short-term debt which has historically led to forced liquidations in times of credit crises.

Before making any investment, advisers are encouraged to perform extensive due diligence on the fund structure, fees, and the asset management company. Investors should make sure to fully understand the fee structure, including whether the fees are charged on gross assets (including leverage) or the net assets invested in the fund.

Due diligence on the fund manager should focus on the experience of the management team including their track record of prior success in this space. Investors should always understand the risk of the strategy and the wide variety of risk structures in the private credit space. To what degree do the loans have strong covenants, strong collateral, and a high standing in the capital structure or are the loans primarily covenant-lite, uncollateralized, or subordinated? If the manager is investing in distressed or lower quality loans, what

[6] S&P Global Ratings, "Default, Transition, and Recovery: 2018 Annual Global Corporate Default and Rating Transition Study." April 9, 2019.

is their experience in working through the bankruptcy process and successfully recovering a high portion of the loan values? If the strategy is levered, investors should understand the multiple of leverage as well as the cost and structure of the leverage. To avoid a liquidity crisis, the term of the borrowings or investor redemption windows should be similar to the maturity of the loans extended.

## IX. Alternative fund categories

Alternative strategies are diverse. The Canadian Investment Funds Standards Committee (CIFSC), of which AIMA is a non-voting member, expanded the alternative fund categories to five noted in Table 9 below, which allows for risk-adjusted performance to be better judged relative to a fund's peers. As alternative investment fund products expand in Canada, we recommend expanding this to include the further advanced categories:

**Table 9 – Categories of alternative funds**

| CIFSC Categories | AIMA/CAIA Advanced Categories* |
|---|---|
| Equity-focused | Equity long-only |
| Credit-focused | Equity long/short |
| Market neutral | Global macro |
| Multi-strategy | Relative value arbitrage |
| Alternative – Other | CTA/Managed Futures |
| Private Credit | Event-driven |
| Private Equity | Multi-strategy |
| | Market neutral equity |
| | Long/short credit |
| | Emerging markets |
| | Private Credit |
| | Private Equity |
| | Digital Assets |
| | **should product supply necessitate* |

Source: CIFSC, AIMA, CAIA

## X. Due diligence of alternative funds: Investment manager and strategy

Of course, every alternative investment fund is different and must be looked at individually. In the initial phase of risk rating, qualitative due diligence on the fund manager and their proposed product is essential. Before using the proposed risk framework, one should determine whether the new fund is likely to track closely one or more of the benchmark indices.

For example, the average equity long-short fund may have a beta to underlying equity markets between 0.4 and 0.7 resulting from 100% long and 50% short positions. Alternative mutual funds with similar beta as well as gross and net long-short exposures can be appropriately benchmarked to a long-short equity index. However, products such as a 150-50 fund with a beta of 1.0 and 150% long and 50% short exposures are more similar to the risk of a long-only equity index than to a long-short equity hedge fund or liquid alternatives index. Benchmarking 150-50 funds to a long-short equity index is inappropriate, as the long-short equity index would underestimate the risk of the 150-50 funds.

For private credit mandates, it is important to consider the degree of leverage at the level of the borrower as well as at fund level when external financing is obtained to purchase or originate higher levels of loans. Another important aspect concerns the position of the lender in the capital structure of the borrower. The level of seniority has a significant impact on the level of risk. Whether or not a loan is secured and what type of collateral the lender has access to in the instance of default will determine recovery levels and therefore potential future losses in case borrowers get into difficulties. This is why proper loan documentation as well as the quality of financial and non-financial covenants will be among the top areas of focus of any investor due diligence.

The due diligence process should also consider manager specific factors before investors make an investment or risk rating decision. Investors should consider the experience of the manager, including how long the team has been managing investments and how closely their historical experience matches that of the proposed strategy. For example, managers with a track record of managing long-only funds may not necessarily have experience transferrable to the management of long-short funds. Retail advisors and investors should also perform operational due diligence to evaluate the quality of the fund's trading and risk management systems, internal controls, and the quality of service providers such as accounting, legal, custody and prime brokerage.

For private credit funds, it is important to evaluate the liquidity of the assets relative to the liabilities of the fund. If the assets of the fund are loans with three-to-five-year terms and limited liquidity, an asset-liability mismatch may be created if the liabilities of the fund are that investors can withdraw assets on a quarterly basis or a leverage facility is established with a one year maturity. Due to amortization and self-liquidating structures, some funds may have effective durations that are shorter than the average loan maturity, requiring investors to carefully analyze loan terms. If the lenders or the investors require liquidity at a time that the loans have not matured, the fund may be unable to easily fulfill those liquidity requests on a timely basis.

See this publicly-available AIMA Due Diligence Considerations for Retail Advisors for initial considerations when evaluating hedge funds, liquid alternative funds and private credit. AIMA members can provide investors with detailed DDQs, including a shortened AIMA Illustrative Questionnaire for the Due Diligence of Liquid Alternative Funds, through www.aima.org.

# XI. Summary: Industry innovation and importance of fair rating of alternative investments

Alternative investment funds are diverse, and play a key role in a balanced portfolio, offering diversification, risk reduction and non-correlated returns to the investor. It is counter-intuitive, then, that these products be rated automatically high risk. This does a disservice to the investors who should be able to access these benefits. It is important that Canadian investors can fairly and adequately access hedge funds, alternative mutual funds, alternative ETFs and private credit investment funds as part of this balanced portfolio. The high-risk rating assigned to many alternative investment funds is antiquated, inaccurate and inconsistent with historical risk-adjusted returns and overall, serves as a detriment to Canadian investor. This risk rating system must be disrupted and replaced by a modern, fair and accurate approach.

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# Appendix A – History on Risk Ratings in Canada

## CSA guidelines

In December 2016, the CSA made amendments to mandate a CSA risk classification methodology for use by fund managers to determine the investment risk level of conventional mutual funds and ETFs for use in the Fund Facts and in the ETF Facts, respectively. A mandated standardized risk classification methodology could provide greater transparency and consistency than was available, which allowed investors to more readily compare the investment risk levels of different mutual funds. The amendments outlined the use of standard deviation as the sole risk indicator to determine a mutual fund's investment risk level on the risk scale in the Fund Facts and the ETF Facts, and applies to all funds covered by NI 81-102, including alternative mutual funds and commodity pools.

It also requires a mutual fund that does not have the sufficient 10-year performance history to use the past performance of another mutual fund as proxy for the missing performance history: (i) when the mutual fund is a clone fund as defined under NI 81-102 and the underlying fund has 10 years of performance history; or (ii) when there is another mutual fund with 10 years of performance history, that is subject to NI 81-102 and that has the same fund manager, portfolio manager, investment objectives and investment strategies as the mutual fund.

In selecting an appropriate reference index, a mutual fund must consider each of the factors listed in Instruction (2) of Item 5 of Appendix F to NI 81-102 when selecting and monitoring the reasonableness of a reference index. Other factors may also be considered in selecting and monitoring the reasonableness of a reference index if such factors are relevant to the specific characteristics of the mutual fund.

Funds offered via offering memorandum are not required to include a risk rating. More information on this can be read here.

## IFIC Guidelines

In June 2017 IFIC published its "Voluntary Guidelines for Fund Managers Regarding Fund Volatility Risk Classification" ('IFIC Classification Guidelines'). In this document, IFIC sorts long-only investment funds into categories of risk based on the three- and five-year trailing standard deviation of historical returns. The IFIC guidelines classify the volatility of funds in the following categories, though IFIC guidelines did not have fixed ranges - ranges were determined annually by reference index returns. While IFIC maintained guidelines for many years, IFIC guidelines have no current effect now that there is mandatory risk rating methodology that does have fixed ranges.

**Table 10 – IFIC risk ratings for long-only funds based on standard deviation**

| Low | Low to Medium | Medium | Medium to High | High |
|---|---|---|---|---|
| 0% to 6% | 6% to 11% | 11% to 16% | 16% to 20% | Over 20% |

**Source**: IFIC Classification Guidelines

As a result of the update of NI 81-102, alternative mutual funds and commodity pools will need to be assigned risk classifications. These funds may hold up to 15% of capital in illiquid securities, as well as have borrowings and short selling up to 50% of the fund's net asset value. Up to 20% of the net asset value of the fund can be concentrated in a single security. Given these expanded investment guidelines, alternative mutual funds have a more complex risk profile than long-only, unlevered funds.

# Appendix B - Benchmark Considerations for Hedge Funds and Alternative Mutual Funds

Under the CSA mutual fund risk classification methodology, alternative mutual funds with less than 10 years of performance history are required to use a reference index to complete the remainder of the 10-year period used to determine performance history (standard deviation), which informs their risk rating. Such a reference index can be a composite of several indices. If a reference index is used, its appropriateness must be monitored on an annual basis.

During the comment period following the 2016 release of the CSA's proposed alternative funds framework, many investment fund managers commented that traditional reference indices do not align with alternative mutual funds as they do with traditional mutual funds under NI 81-102. As such, we consider three sample options for the reference index of an alternative mutual fund: (i) traditional indices, (ii) Hedge Fund Research Indices ('HFRI'), and (iii) Hedge Fund Research Indices Performance Tables ('HFRX'), describing the pros and cons of each option. Brief notes on other popular benchmark options (BarclayHedge and Scotiabank) are also included below, as the reasons for selecting various benchmarks can be diverse and should be primarily for reasons to best align with the investment strategy.

## Traditional indices

To use a traditional index as a reference, it should reasonably approximate, or be expected to reasonably approximate, the standard deviation of the mutual fund. Traditional reference indices have limited applicability to alternative mutual funds because they do not include performance history (standard deviation) of alternative strategies such as leverage and shorting securities, which are typically used by alternative mutual funds. As such, traditional indices do not accurately represent alternative mutual funds' risk and returns.

## HFRI and HFRX

The HRFI and HFRX indices are maintained by Hedge Fund Research (HFR), the established global leader in the indexation, analysis and research within the hedge fund industry. Its indices are considered the industry standard benchmarks for hedge fund performance.

### (a) HFRI:

According to HFR, HFRI® Indices are designed to capture the breadth of hedge fund industry performance trends across all strategies and regions. The constituent universe of each HFRI index is submitted to HFR by hedge fund managers on a voluntary basis. Most HFRI Indices are equally-weighted (annual rebalance) while the constituent funds of the HFRI Asset Weighted indices are weighted according to the assets under management reported by each fund for the prior month.

### (b) HFRX:

HFR utilizes a UCITS-compliant methodology to construct the HFRX® Hedge Fund Indices. This methodology includes robust classification, cluster analysis, correlation analysis, advanced optimization and Monte Carlo simulations.

Production of the HFRX methodology results in a model output which selects funds that, when aggregated and weighted, have the highest statistical likelihood of producing a return series that is most

representative of the reference universe of strategies. In addition, the HFRX methodology defines certain qualitative characteristics, such as: whether the fund is open to transparent fund investment and the satisfaction of the index manager's due diligence requirements.

The main difference between HFRI and HFRX is that most HFRI indices are equally-weighted, while HFRX is asset-weighted. This varies by index.

**Table 11 – HFRI and HFRX Indices pros and cons**

| | Pros | Cons |
|---|---|---|
| **Traditional Reference Indices** | • Well-established and understood<br>• Reported by third party | • Misaligned with most alternative strategies |
| **HFRI** | • Applicability to alternative investments<br>• Actual performance history | • Returns are "self-reported"<br>• Constituents are funds that may not comply with NI 81-102 |
| **HFRX** | • Applicability to alternative investments<br>• Simulated performance history | • Returns are "self-reported"<br>• Constituents are funds that may not comply with NI 81-102 |

**Source**: Mackenzie

## Other indices

While HFR focuses on hedge funds without limits on investment strategy, the liquid alternative indices follow funds compliant with the UCITS Directive or the U.S. Investment Company Act of 1940, as amended, that are closer in spirit to the proposed rules for alternative mutual funds.

Other common industry indices include BarclayHedge and Scotiabank.

**BarclayHedge Fund Indices**: BarclayHedge produces industry leading benchmarks covering more than 30 indices on hedge funds, managed futures/CTAs, UCITS, foreign exchange and commodities funds sourcing data directly from managers. The Barclay Hedge Fund indices are recalculated and updated real-time as monthly returns for the underlying funds.

**Scotiabank Canadian Hedge Fund Index**: The aim is to provide a comprehensive overview of the Canadian hedge fund universe. To achieve this, index returns are calculated using both an equal weighting and an asset-based weighting of the funds. The index includes both open-end and closed-end funds with a minimum asset under management of C$15 million and at least a 12-month track record of returns, managed by Canadian-domiciled hedge fund managers.

## Appendix C - Benchmark Considerations for Private Credit

There are very few reliable indices for private credit markets. This is because the private credit markets are still relatively young and continue to be private and illiquid. Only a few loans trade on the secondary markets, in contrast to the broadly syndicated loan space.

The range of indices used in this paper that are published by Cliffwater LLC rely on the publicly available information released by U.S. Business Development Companies (BDCs) on a quarterly basis. This information provides good level of detail related to all individual loans held by the BDCs. BDCs are obliged to provide a fair value of the loans in their portfolios.

The CDLI index published by Cliffwater index seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements. The CDLI Total Return Index includes three components: Income Return, Realized Gain/Loss, and Unrealized Gain/Loss.

We believe the index is a good proxy for the larger US private credit universe as many of the largest U.S. BDCs are among the largest private credit providers overall. These providers will have BDCs as one among many of their investment vehicles and so it is not uncommon that loans that are present in BDCs will be also present in other private funds and managed accounts portfolios.

It is important to note, that the CDLI index should not be confused with multiple indices that may be tracking the performance of BDCs themselves – i.e. the performance of BDC equity prices. BDCs are closed end corporations that will often be listed on exchanges. They hold loans using significant leverage and their equity prices can and often do significantly diverge from the net asset values of their loan portfolios. The CDLI index looks at the performance of the underlying loans on an unlevered basis.

Further information can be obtained at http://www.cliffwaterdirectlendingindex.com/

## Appendix D – About AIMA/ACC and the CAIA Association

The Alternative Investment Management Association (AIMA) is the global representative of the alternative investment industry, with approximately 2,100 corporate members in over 60 countries. AIMA's fund manager members collectively manage more than $2.5 trillion in hedge fund or private credit assets. AIMA draws upon the expertise and diversity of its membership to provide leadership in industry initiatives such as advocacy, policy and regulatory engagement, educational programs and sound practice guides**.** AIMA works to raise media and public awareness of the value of the industry. AIMA set up the Alternative Credit Council (ACC) to help firms focused in the private credit and direct lending space. The ACC currently represents over 250 members that manage $600 billion of private credit assets globally. AIMA is committed to developing skills and education standards and is a co-founder of the Chartered Alternative Investment Analyst designation (CAIA) – the first and only specialized educational standard for alternative investment specialists. AIMA is governed by its Council (Board of Directors). For further information, please visit our website, www.aima.org. AIMA was founded in 1990, with the AIMA Canada subsidiary formed in 2003.

The CAIA Association, a non-profit organization founded in 2002, is the world leader and authority in alternative Investment education. The CAIA Association is best known for the CAIA Charter®, an internationally recognized credential granted upon successful completion of a rigorous two-level exam series, combined with relevant work experience. Earning the CAIA Charter is the gateway to becoming a member of the CAIA Association, a global network of over 12,000 alternative investment leaders located in 100+ countries, who have demonstrated a deep and thorough understanding of alternative investing. Having grown rapidly, the CAIA Association now supports vibrant chapters located in financial centres around the world and sponsors more than 200 educational and networking events each year. The CAIA Association also offers a continuing education program, where trustees can learn the Fundamentals of Alternative Investments in a 20-hour, video-based program, UniFI by CAIA™. For more information, please visit www.caia.org.