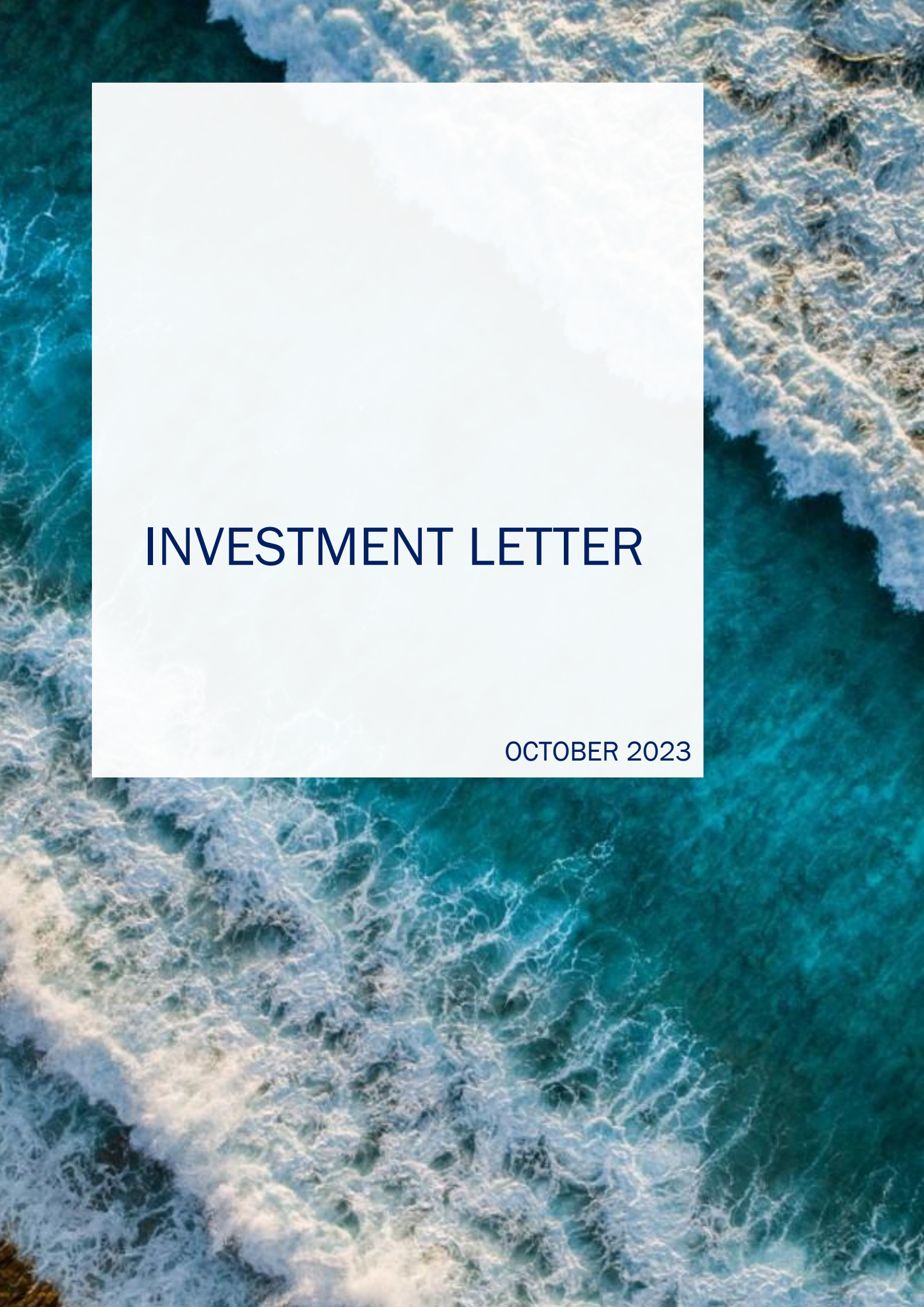

INVESTMENT LETTER

OCTOBER 2023

Risk is one of the most misunderstood concepts in Finance. Even within savvy financial professionals, most tend to confuse its meaning. In discussions about Risk vs. Return, there's a tendency to focus on an asset's idiosyncratic risk rather than its systemic risk, aka beta. We believe this ill perception of risk leads to a misallocation of portfolios.

When Harry Markowitz crafted the seminal paper *Portfolio Selection* that led into the modern portfolio theory, his assumption was that an institutional investor will have an extremely diversified portfolio. Consequently, idiosyncratic risks are diversified away and the impact of a loss from any single asset would be insignificant to the overall portfolio return. Thus, handling idiosyncratic risks involves using a scenario analysis and assessing the probability of each potential outcome. An asset that, based on a coin flip, has an equal chance of being worth $10 or $0 should hold the same value as an asset guaranteed to be worth $5. Even today, this example raises eyebrows in most of us. To clarify this, imagine holding a diversified portfolio of uncorrelated coin flips. One head will be offset by a tail, and in a diversified portfolio, the value of each coin should be relatively close to the asset guaranteed to be worth $5. The systematic risk, however, that cannot be avoided through diversification in this case can be attributed to the possibility of the coins being biased.

As alluded above, there are some types of risks that are not diversified away. In the investment world, market risk stands out among these. When the market thrives, numerous assets often perform well. The extent to which an asset's performance aligns with the market is called beta. A higher beta indicates that the asset's price/return will fluctuate relative to the market. Essentially, an asset's beta is also a synonym for its risk: the higher its beta, the higher its risk and the required return.

Now let’s go back to the practical world of asset management. The vast majority of managers we talk to tend to have a similar saying that goes sort of like this: “first we make sure we will not have a loss on capital and then, we search for returns”.

This worldview is consistent with minimizing idiosyncratic risk and not necessarily market risk. An LP will have no more than 3% of its net worth invested in one fund. A highly concentrated fund might hold 20% of its assets in one deal. Therefore, an LP will have a maximum exposure (and often significantly less) of 0.6% of its net worth to a single deal. A potential capital loss on this deal doesn't drastically impact the LP's overall financial standing.

However, when structuring a deal to mitigate its expected idiosyncratic risk, a manager may often have to negotiate away some expected upside optionality, reducing expected returns.

If the idiosyncratic risk of a specific asset is negligible for the institutional investor, then why are managers diminishing a portfolio's anticipated returns?

In our view, this can be attributed to two primary reasons: the principal-agent conflict and behavioral biases.

While a loss might not significantly affect the LP, it could be devastating for the GP. A financial setback in an asset that represents 25% of the fund makes it very hard for the fund to generate great returns. Poor returns can make subsequent fundraising more difficult, and the asset management business of the GP at risk. As a result, to minimize the risk of the GP getting out of business, they adopt investment strategies that inadvertently reduce the LP's expected return. This conclusion leads to two main ramifications in our investment process. The first is to realize that some opportunities that present a large idiosyncratic risk may offer excess return. This view is aligned with the study of Professor Robert Vishny in what he describes as Performance Based Arbitrage. In one of his papers, he details that since the investment world is becoming more and more institutionalized, and GPs take the risk to the firm into account, more arbitrage opportunities exist. The second ramification is for us not to fall into this trap of giving too much emphasis on idiosyncratic risk and focus on the process and less on the outcome of the GPs we invest in.

When it comes to behavioral biases, much can be attributed to the seminal work of Kahneman and Tversky regarding Prospect Theory. Humans are loss averse. We hate losing money. In fact, we hate losing even more than we cherish winning. This leads us to gravitate towards less optimal investments to mitigate the emotional pain associated with financial setbacks.

Another concept we'd like to touch on is Reflexivity. The term was introduced by George Soros in 2009 detailing the self-reinforcing effect of market sentiment. The best definition we've come across is as follows:

"Reflexivity theory states that investors don't base their decisions on reality, but rather on their perceptions of reality. The actions that result from these perceptions have an impact on reality, or fundamentals, which then affects investors' perceptions and thus prices. The process is self-reinforcing and tends toward disequilibrium, causing prices to become increasingly detached from reality."

We observed a pattern in the Latin American alternatives markets that mirrors this concept: there was a significant influx of international investors in the region from 2009 to 2012. This influx resulted in an abundance of capital, driving up prices and consequently past returns, which led to greater influx. This process culminated in suboptimal investments and lower expected returns. However, a massive exodus of these investors ensued, causing the reverse effect. Over the past 7-8 years, returns in the region have been robust.[1]

Oddly enough, the VC ecosystem has been experiencing the reverse trend. Among international endowments and sophisticated family offices, there is a prevailing sentiment that, due to the inherent risks associated with investing in emerging markets, there is a need to target exceptionally high returns. These high returns are primarily perceived to be achievable through venture capital investments. Hence, their allocation towards Alternatives in Latam is purely in VC.

When we integrate the principles of Reflexivity into this scenario, it's evident that a somewhat skewed perception of reality results in a surge of investments in VC and a corresponding decline in other asset classes. This capital movement artificially boosts VC asset prices while depressing the values of other assets. Consequently, this culminates in reduced expected returns in VC and higher expected returns in other alternative asset classes.

Now with the two concepts (idiosyncratic risk x beta and Reflexivity) in mind, let's get into a trend we are observing in Brazil: a surge in local Special Situations managers.

Special Situations Asset Class

The term "Special Sits" is somewhat ambiguous, as it doesn't precisely indicate the investment approach. Engaging in a special situation can encompass a broad range of strategies.

We've broken down the sub-asset classes these managers are investing in, and they roughly consist of the following: 1. Structured debt, 2. Distressed equity, 3. Loan-to-own, 4. DIP financing, 5. NPL (either single name or portfolios) and 6. Legal Claims.

In this paper, we focus on Structured Debt, which represents the majority of investments that Special Situations managers target in Brazil, and where we perceive a negative return asymmetry.

Active managers argue that Structured Debt offers the optimal risk-return profile in the market. They assert that their investments carry substantially less risk per unit of return compared to other alternative investments in the country (a better Sharpe ratio). Obviously, when one invests in a debt-like structure, the return is less volatile than in equity. Therefore,

[1] Spectra Investment Letter – 2nd Semester 2022.
Spectra, Insper & ABVCAP. Performance of Brazilian Private Equity and Venture Capital Funds 1994-2022

Special Sits indeed exhibit a lower beta risk compared to equity investments. Our claim here is on the return hurdle that is necessary to justify one or the other.

We pose that when these managers consider risk, it's mostly the idiosyncratic risk they have in mind (idiosyncratic vs beta). Furthermore, they seem to be evaluating the expected returns of buyouts and other alternative asset classes based on past return benchmarks that reflect investments made when prices were at their peak, rather than today's expected returns (reflexivity).

To evaluate the claim that Structured Credit offers a superior beta risk-to-return compared to other asset classes, we incorporated structured credit into Spectra's portfolio. Our aim was to see if this inclusion would enhance the portfolio's efficiency frontier.

In order to do so, we made a few assumptions:

- For expected returns, we relied on the deal flow presented to us across various asset classes. Important to note that our definition of expected returns is the weighted average of returns across different scenarios for each particular asset and not the headline return.

- The fact that Spectra stands as one of the largest LPs in the region and has investments with over 50 GPs, we are confident that our portfolio serves as a reliable benchmark for potential returns across each specific asset class.

- Given the lack of comprehensive data on the beta/volatility of alternative investments in Brazil, we resorted to using U.S. data as a proxy. While we recognize this isn't a perfect match, it's the best available approximation. At the very least they should be directionally right.[2]

- Structured Credit has an expected return of 15-25% in nominal terms after fees. That's the average expected return we've seen on multiple deals presented to us.

- Other Alternatives is the expected return of Spectra's current dealflow. Currently, the threshold for a deal to be eligible to be invested in is at, approximately, 40% nominal after fees. We modeled returns ranging from 25% to 40% to test the elasticity of the portfolio allocation.

The result is in the table below[3]:

Special Sits (SS) expected return	Other Alternatives (OA) expected return					
	20%	25%	30%	35%	40%	45%
	Efficient Portfolios Composition					
15%	20% SS – 57% OA	2% - 80%	1% - 89%	1% - 94%	1% - 94%	1% - 94%
20%	88% - 10%	57% - 41%	27% - 70%	4% - 94%	1% - 94%	1% - 94%
25%	93% - 4%	88% - 10%	66% - 32%	46% - 53%	28% - 70%	1% - 94%

Our conclusion indicates that, for Structured Credit to be a compelling addition to Spectra's portfolio, either we need to see a decline in expected returns of our pipeline or the expected return of Structured Credit should increase. Since we hope our dealflow continues strong, our ideal scenario is for the expected returns of those deals to increase.

[2] We use the covariance matrix and standard deviation from Marielle de Jong (2022). The Covariance Structure between Liquid and Illiquid Assets. *The Journal of Portfolio Management*, vol. 48, n.4. Special Sits risk is 8.6%, Other Alternatives is 10.8%

[3] Efficient portfolios results don't sum 100% as the remaining percentage is composed by equities, bonds and risk-free rate.

Also, it becomes obvious that for LPs that do not have a great dealflow and, thus, have a lower expected return in the other deals they are doing, Structured Credit indeed becomes a quite compelling addition to their portfolios. Therefore, what Special Sits managers propose is not too far from reality.

However, other LP returns is not that much of our business. Which leave us into the main objective of this paper: Managers, please raise your return threshold when looking at structured credit! We'd love to talk to you if you do so.

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