

Risk-Return Dynamics of Private Credit Funds Vs Traditional Fixed

Income Investments

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Sample

Abstract

This dissertation explores the risk–return relationship of private credit funds and classical fixed income securities from 2021 to 2025. This study seeks to answer the following questions: Can private credit outperform public credit in terms of risk-adjusted returns and/or benchmark-adjusted returns, and how much does it outperform public credit, and to what extent is the performance of private credit driven by macroeconomic and financial market conditions?

The research design used is quantitative and secondary data research design. An analysis of the effects of a range of macroeconomic variables such as bond market returns, interest rates, market volatility (VIX) and credit spreads on the performance of private credit funds measured by Internal Rate of Return (IRR) and fund size. The following statistical techniques are used, such as descriptive analysis, correlation analysis and multiple regression models, to examine the relationship between variables.

The results show that macroeconomic factors have a significant impact on private credit returns, with interest rates and credit spreads standing out as particularly influential factors. The regression results show that these variables account for significant amounts of returns variation of funds, indicating the close relationship between private credit and the overall financial market phenomenon. Private credit has the promise of greater returns from illiquidity premiums and floating rates, but it is not always better in all situations.

The study finds that private credit is not necessarily a steady asset class but is sensitive to the business cycle and to macroeconomic developments. This discovery has significant implications for investors when it comes to asset allocation, risk management, and portfolio diversification strategies.

Chapter 1: Introduction

1.1. Background of the study:

Private credit, also known as private debt, includes lending of money to companies outside the traditional banking system, usually in the middle-market by means of direct lending, mezzanine debt, or distressed debt investment structures (Christensen, 2024). In the past decade, the private credit market has experienced massive growth, due to the restrictive conditions imposed on traditional banks in the wake of the 2008 crisis and the investor appetite for higher returns. Based on recent reports by such institutions as International Monetary Fund and research bank of Australia, global private credit assets under management have soared from \$500 billion in 2010 to \$1.5 trillion by 2024, demonstrating a structural change in the mechanisms of credit intermediation (Josh, 2024).

In contrast, the traditional fixed income investments, especially the investment-grade bonds, have been experiencing a decreasing yield in the same period owing to the accommodative monetary policies that have been adopted by the central banks like the Federal Reserve (Corporate Bond Market Trends, 2022). Although high-yield bonds have a relatively better payoff, it is also connected with a greater default risk and susceptibility to the market. This has caused the gap between the expectations of the investors in terms of returns and the yield provided by the public debt markets. Bond yields were greatly flattened by ultra-low interest rates after the crisis, and during the COVID-19 period (Corporate Bond Market Trends, Emerging Risks and Monetary Policy, n.d.).

For example, investment-grade corporate bonds yielded in large markets are below 3% in long periods, and real yields usually are negative. Yet, in spite of the fact that, after the year 2022, the yields have started to normalize because of the tightening of the monetary policy by the

central banks, such as the Federal Reserve, the volatility also grew, thus making fixed income less predictable as a stable income source (Federal reserve.gov, 2022).

As per the recent study, private credit funds are regarded as a potential solution to this problem by providing higher yields, often through illiquidity premiums and direct negotiation of loan terms. But in contrast to the publicly traded bonds, the private credit investments are typified by low levels of transparency, low levels of valuation and low levels of liquidity (Cai and Haque, 2024). Internal rate of return (IRR) is often used to report returns in a manner that is not necessarily comparable with the time-weighted returns commonly used in the public markets.

Comparatively, however, the illiquidity premiums, floating-rate structures, and direct negotiation with borrowers cause the yield on private credit funds to be around 6% to 12%. However, there are trade-offs to these higher returns for example, reduced liquidity, decreased transparency, and concentration of credit risk in fewer and less diversified companies (Endowus.com, 2026; Roth, 2026).

Private Credit Annual Returns versus Global Bonds (USD, 2016-2023)									
	2016	2017	2018	2019	2020	2021	2022	2023	Annualised returns
PRIVATE CREDIT*	11,2%	8,6%	8,1%	9,0%	5,5%	12,8%	6,3%	12,1%	9,2%
GLOBAL INVESTMENT GRADE BONDS**	6,1%	6,4%	-2,5%	14,5%	9,9%	-1,0%	-15,8%	8,5%	2,9%
GLOBAL HIGH YIELD BONDS***	17,1%	7,5%	-2,1%	14,3%	7,1%	5,3%	-11,2%	13,4%	6,1%

* Cliffwater Direct Lending Index, aims to measure performance US middle market corporate loans.
 **The Bloomberg US Corporate Bond Index measures USD investment grade, fixed-rate, taxable corporate bond market.
 ***The Bloomberg US Corporate High Yield Bond Index measures USD high yield, fixed-rate corporate bond market.
 Source: BNP Paribas Wealth Management, Bloomberg data

Figure 1: Private Credit: A Growing Asset Class Gaining Traction, 2024)

In addition, the valuation of the assets of the private credit is usually appraisal-based as opposed to market-based, which raises concerns of smoothing of the returns and the risk of understating the risk. In assessing the private market investments, studies like those by Steven N. Kaplan and Antoinette Schoar, and those by Robert S. Harris and others, all emphasize the need to take into account performance dispersion, persistence, and benchmark-adjusted returns (Harris, Jenkinson and Kaplan, 2012; Kaplan and Schoar, 2003).

With these complexities, it is not simple to directly compare the concept of private credit and the concept of traditional fixed income. Differences in liquidity, valuation techniques, risk exposure and macroeconomic sensitivity need to be considered by the investors. Thus, the study is placed within a growing literature that attempts to assess whether indeed private credit offers better risk-adjusted returns or that its apparent returns are actually driven by some hidden risks and structural differences (Reyes, 2026).

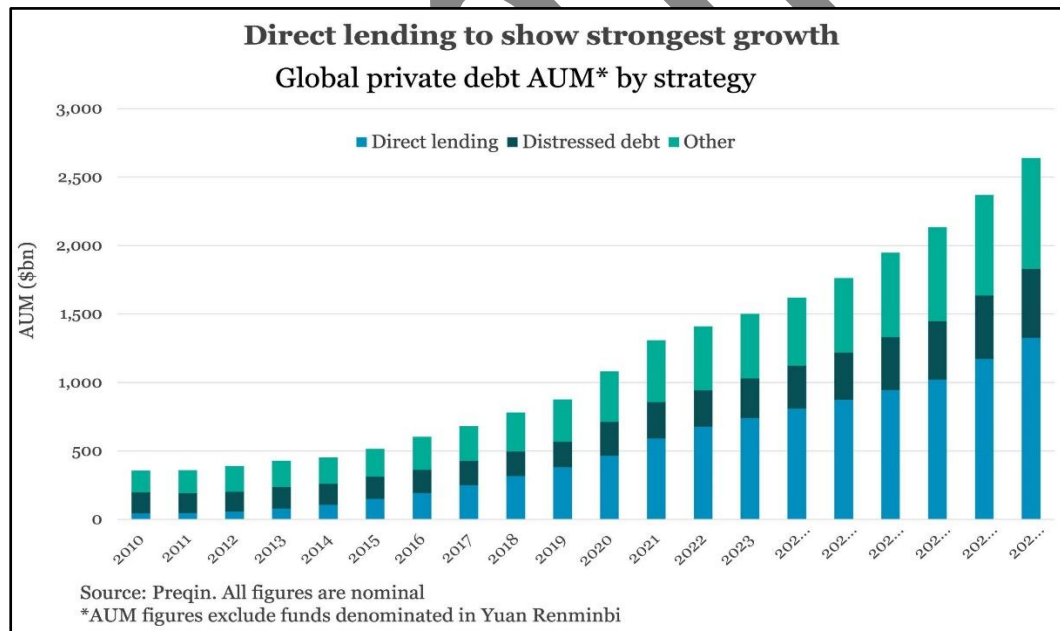


Figure 2: (The Lead Left, 2024)

The visual evidence generally depicts sharp upward trend in the range of 2010 to 2025 in the amount of private credit AUM as compared to a relatively flat or decreasing traditional bond yield in the same period. This divergence points to a fundamental change in investor behavior: as traditional fixed income stopped delivering returns according to expectations, money moved out of traditional fixed income into other credit markets.

However, this expansion cannot be viewed as one that is entirely performance-motivated. Critical viewpoint indicates that some of the appeal of private credit may be due to valuation smoothing and illiquidity, which can help obscure short term volatility. A private credit asset is not marked-to-market on a daily basis as opposed to a publicly traded bond, resulting in artificially smooth back-off curves.

Thus, even though the graph supports the argument that private credit has become more prominent because of its greater yield potential, it also supports the necessity to make careful risk-adjusted and benchmark-relative consideration, which is addressed in this dissertation.

1.2. Research Problem:

Although the growth rate and institutional adoption of the private credit are accelerating, much remains unknown about the actual performance of the investment in comparison to traditional fixed income investments (Trade Treasury Payments, 2026). The absence of transparency and comparability between the returns of the private and public market is one of the main issues. Although the returns of private credit funds may be higher, these returns may be affected by the appraisal-based valuation methods, illiquidity and the timing of the cash flows (IMF Department, 2024).

Further, the lack of standardized benchmarks of private credit only makes the issue of evaluating performance even more difficult. As opposed to trading bonds which can be easily

compared to indices, investments in private credit must take other methods like Public Market Equivalent (PME) analysis or excess returns evaluation against comparable benchmarks (Cambridge Associates, 2014). Even at that time, the results may be skewed by the differences in exposure to risk, leverage, and the profile of the borrowers.

The other important question is how much the returns on private credit are indicative of true alpha as opposed to a compensation of a previously hidden systematic risk, such as exposure to leveraged loans, small-cap risk, or economic downturns (Arxiv, 2026). Also, the importance of the skill and persistence of manager performance is not clear as previous studies indicate that the returns across funds and vintages are highly dispersed.

Thus, the main research problem that will be discussed in this dissertation is:

Whether private credit funds significantly deliver superior benchmark-adjusted and risk-adjusted returns as compared to traditional fixed income investments, or whether their apparent outperformance is driven by structural characteristics and hidden risks.

1.3. Research Aim and Objectives.

1.3.1. Aim:

The primary aim of this research is to critically examine the risk-return characteristics of private credit funds relative to traditional fixed income, determining whether private credit provides superior performance on a risk-adjusted, as well as, a benchmark-adjusted basis.

1.3.2. Objectives:

To achieve the aim of the study, this research had developed some targeted objectives.

- To compare the performance of private credit funds against investment-grade and high-yield bond benchmarks.
- To estimate the excess performance by opting Public Market Equivalent (PME) or benchmark-adjusted performance measurements.
- To evaluate the presence of persistence in private credit fund manager performance across vintages.
- To analyze the impact of various macroeconomic and market conditions such as credit spreads, volatility (VIX) and interest rates on private credit fund returns.

1.4. Research Question:

Do private credit funds provide superior risk-adjusted and benchmark-adjusted returns to traditional fixed income investments over the 2021-2025 period?

1.5. Significance of the study:

This research is significant in both academic and practical investment decision-making. In terms of academic contribution, this research contributes to the academic literature on private markets by analyzing private credit returns in relation to traditional fixed income investments comprehensively (Novelli and Pignataro, 2026). Whereas, many reports and studies have looked at private equity returns over a period of time, it is imperative to provide an empirical examination of the performance of private credit funds, an asset class which is fast gaining momentum in financial markets, in relation to fixed income benchmarks (Ares Management, 2026; Performance of Private Credit Funds: A First Look, 2018). The study also attempts to refine estimation methodologies by exploring the role of benchmark-adjusted performance such as PME and regression-based estimation of the relationship between returns and macroeconomic variables in providing insights into the risk-return characteristics of private credit.

For investment practitioners' perspective, such research holds importance in investment decision making. Since, increasingly private credit is replacing traditional bonds in institutional portfolio, it becomes essential to know the true risk-return characteristics under various circumstances. The study will reveal information related to:

- The efficiency of private credit as a diversification instrument.
- The importance of manager selection and performance persistence in private credit.
- The risks related to liquidity and opacity of valuation in private credit markets.
- The relationship between the returns and various macroeconomic factors.

Also, policymakers and bodies such as the Bank for International Settlements may find the research results useful since the emergence of private credit has potential implications on financial stability and system risk.

Chapter 2: Literature Review

2.1. Chapter Introduction:

This chapter aims at critically reviewing the existing academic and professional literature on private credit funds and traditional fixed income investments, to provide a theoretical and empirical basis for the present study. In recent years, private credit has become one of the fastest-growing areas of alternative investments due to a growing institutional demand for higher yields, diversification, and protection from low interest rates. Meanwhile, traditional fixed income investments have remained vital to portfolio management due to their liquidity, transparency and relatively consistent income generation properties, especially investment grade and high-yield bonds. Comparisons between private credit and public fixed income investments have become more complicated, however, due to variations in valuation methods, liquidity, transparency and risk exposure.

Major theoretical perspective on what drives investment behavior and the risk-return relationship, such as Modern Portfolio Theory, Efficient Market Hypothesis, Risk-Return Tradeoff Theory, and Illiquidity Premium Theory, is introduced at the beginning of the chapter. Next, the concept and history of private credit funds are discussed and then the traditional investment in fixed-income securities and its important characteristics are examined. The chapter also analyzes the risk-return characteristics of private credit, including the valuation smoothing, the illiquidity premium, default risks and Internal Rate of Return (IRR). In addition, the literature on the influence of macroeconomic and market conditions, such as credit spreads, volatility and interest rates is examined critically. Lastly, the chapter outlines the research gaps in the existing literature and sets out the conceptual underpinnings for the current dissertation.

2.2. Theoretical Foundations

Theories of this study are that of several important financial theories explaining the relationship amongst risk, return, diversification, liquidity, and market efficiency in the context of investment decision-making. These theories give a conceptual framework to explain the relative performance of private credit funds and conventional fixed income securities.

2.2.1. Modern Portfolio Theory (MPT):

One of the most significant theories in finance and investment management is the Modern Portfolio Theory (MPT), devised in 1952 by Harry Markowitz. The idea behind portfolio diversification is that, according to the theory, an investor can achieve the highest possible expected return for a specific amount of risk. Risk should not be considered at the asset level only, but at the overall portfolio level, MPT says. Investors thus look for portfolios with assets that are less correlated to each other to minimize portfolio volatility while keeping the level of return constant.

The connection of MPT to private credit is that alternative credit assets provide diversification benefits. The short-term correlations of private credit funds tend to be lower than those of public bonds and stocks, since the short-term valuation of 'private' funds is not affected by daily price changes. Consequently, institutional investors are increasingly investing in private credit as a strategy to gain better portfolio efficiency and to ensure a steady yield. But critics say that this seeming stability of private credit returns could be due to appraisal-based valuation smoothing, not a reduced risk exposure. This raises an important discussion about the benefits of private credit on portfolio diversification, or whether private credit simply serves as a way of hiding volatility.

2.2.2. The Efficient Market Hypothesis (EMH):

Eugene Fama's Efficient Market Hypothesis (EMH) states that all relevant information in the financial market is reflected in the price of assets. In this view, securities are supposed to be traded at their fair market value, so that investors can only make abnormal returns at a higher risk level.

The theory is especially important when one considers private credit in comparison to traditional fixed income investments. The public bond markets are relatively efficient with information available on a continuous basis and market participants responding readily to economic changes. In contrast, private credit markets are marked by transparency, infrequent trading and non-public pricing mechanisms. This information asymmetry leads to inefficiencies that can be offset by the superior borrower selection, negotiation and structuring skills of skilled fund managers that may be able to secure excess returns. It also adds to the uncertainty about the actual value and risk level of private credit investments.

2.2.3. Risk-Return Tradeoff Theory:

Another very important theory that has helped in the design of this study is the Risk-Return Tradeoff Theory. Based on the theory, the higher the expected return, the higher the expected risk of the investment. The riskier the asset, the more compensation that investors require for their investments, due to the greater uncertainty about cash flows and potential losses that might occur.

Private credit funds are generally likely to be higher yielding than traditional investment grade bonds. It is often cited that these gains are due to illiquidity risk, borrower credit risk, leverage and limited transparency. Private credit investments often include lending to middle-market businesses having less favorable credit and less access to the capital markets, whereas publicly

traded bonds tend to be issued by businesses with more favorable credit and access to capital markets. Thus, the lower the liquidity, the greater the illiquidity premium and the higher the interest rate. The theory thus lends itself to the point that outperformance in private credit may not be true alpha, but a reward for bearing higher undisclosed risk.

2.2.4. Illiquidity Premium Theory:

The Illiquidity Premium Theory is of critical importance when it comes to the functioning of the private credit markets. The theory suggests that investors demand greater expected returns for purchasing assets that are hard to sell or turn into cash without giving up a lot of money. Investments that are not liquid restrict investor options and raise risk in turbulent times of financial distress.

Private credit funds are also illiquid investments due to the lack of active secondary markets for investments and the fact that they are negotiated individually. Investors typically invest their money over the long-term, and may be limited in transfers or withdrawals. Private credit funds will in exchange for these liquidity constraints usually provide higher yields than traditional fixed income securities. There are those who believe that illiquidity premiums are a valid source of excess return. But critics argue that the lack of liquidity can also mask other problems and help to postpone the recognition of losses in the market during a recession. Thus, the Illiquidity Premium Theory (IPT) is a valuable tool for assessing whether private credit returns adequately compensate investors for lower liquidity and transparency.

2.3. Concept and Evolution of Private Credit Funds:

Private credit also known as private debt, includes all non-bank lending activities in which capital is directly supplied to businesses through privately negotiated transactions, but not through the public debt markets (Bailey, 2015). Since the global financial crisis of 2008, the

asset class has emerged as one of the fastest growing areas in the alternative investments industry. Private credit investments typically come from specialized investment funds, institutional investors or asset management firms, as opposed to commercial banks or publicly traded corporate bonds. These investments typically are offered to middle-market firms which might have trouble securing financing from conventional bank or public capital markets (Jegadeesh, Kräussl and Pollet, 2009).

Private credit is a term for a number of credit lending methods, some riskier than others and some more rewarding. The most prevalent one is direct lending, in which private credit funds make senior secured loans to corporate borrowers without the involvement of intermediaries (Cai and Haque, 2024). The popularity of direct lending is driven by the fact that borrowers can get flexible financing solutions and the investors can receive floating-rate returns and premiums for illiquidity. An interesting hybrid segment is mezzanine debt that blends debt and equity attributes. Senior debt is usually issued first, with seniority, and fails to provide the investor with equity participation rights, resulting in lower risks but lower returns in the form of interest rates (Persaud, 2024). Other private credit strategy is distressed debt that involves investment in defaulted debt securities and financially troubled organizations at discounted prices. While distressed debts can have significant returns if they are restructured, they come with high default and recovery risks (Cai and Haque, (2024).

A close relationship between the rapid growth of private credit markets and structural changes in the global financial system after the 2008 financial crisis. To address the crisis, the regulators tightened banking regulations, including such measures as Basel III and the increase in capital requirement and liquidity requirements for commercial banks (Reyes, 2026). These regulatory changes slowed the appetite and ability of banks to finance more high-risk middle market companies, so private credit funds stepped in to fill the gap. As a result, private debt markets

grew considerably as institutional investors looked for better returns in a long period of low interest rates (Lehtipuu, 2025).

The industry is seeing robust investor demand and market growth with global private credit assets under management rising from around \$500 billion in 2010 to over \$1.5 trillion by 2024, according to industry reports (OECD, 2026). Over the past few years, private credit markets have seen an influx of institutional investors, including pension funds, insurance companies, sovereign wealth funds and endowments, whose attraction lies in the asset class's perceived stability of income and diversification benefits, as well as its ability to protect against rising interest rates using floating-rate loan structures (Department, 2024).

Despite its popularity and growth, private credit is subject to rather a lot of criticism and debate. Private credit funds are traded in relatively opaque markets, lacking transparency, and providing infrequent valuations, whereas publicly traded bonds are traded in more transparent markets (Robeco Global Report, 2026). Appraisal-based returns are more common than market-based returns, which could introduce valuation smoothing and a misrepresentation of investment risk. In addition, private credit investments are less liquid, putting investors at significant risk of losses in times of financial market disruption or economic strain (Sabu, 2024). However, while private credit has become an important source of funding other than traditional credit and fixed income markets, its sustainability and actual risk-adjusted returns are still not fully understood.

2.4. Traditional Fixed Income Investments:

Traditional Fixed Income Investments are financial instruments that pay an investor a fixed amount of interest on a regular basis and return his/her principal to him/her at the end of the term. The advantage of these investments is that they are typically not as volatile as equity investments and provide a relatively stable income stream, making them an important part of

diversified portfolios (Fidelity, 2026). Fixed income securities consist of any debt security with a fixed interest rate, such as those issued by the government, corporations, treasury bills, municipal bonds, and other debt securities to obtain capital. The return to investors is delivered by regular interest payments and largely determined by the creditworthiness of the issuer, the interest rate and the market conditions (Murphy, 2023).

Fixed income securities include a wide range of products, some of which are relevant to comparisons with private credit funds, such as investment-grade bonds and high-yield bonds. Investment grade bonds are bonds that are issued by a corporation or government with a high credit rating and a low risk of default. These securities are considered to be relatively safe investments since issuers have stable financial conditions and ability to repay the loans. This means that the yield that investment-grade bonds offer is typically lower because there is less risk.

High-yield bonds, also known as junk bonds, are bonds issued by companies that are less creditworthy and have higher default risk, as opposed to high-quality bonds. High-yield bonds are bonds that are more creditworthy, but pay a higher coupon rate due to investor uncertainty. These securities are more prone to economic cycles, volatility in corporate earnings and fluctuation in investor sentiment. Bonds that pay high yields can offer favorable returns when the economy is booming, but can plummet in value during an economic slowdown or financial crisis.

The key feature of 'old-fashioned' fixed income investments is their interest rate volatility. As a rule, when interest rates go up, bond prices generally go down, and when interest rates go down, bond prices generally go up. This relationship puts fixed income investors at risk from two angles: duration risk and yield volatility, especially during active monetary policy

tightening. Additionally, fixed-income yield is extremely sensitive to inflation forecasts, credit spreads, and other macroeconomics factors.

There is a lot more transparency and liquidity in traditional fixed income markets than in private markets. The bonds that are public traded are continuously priced, and they are traded in the secondary market, where buyers can see the prices being set in real time, making it easier to buy and sell bonds. Market transparency and investor protection are also enhanced by financial disclosures, credit ratings and regulatory oversight. By contrast, the private credit investments are based on negotiated transactions and are valued infrequently, which makes their performance assessment more complicated.

However, conventional fixed income investments have experienced many difficulties in the post - 2008 era. The income-generating performance of many fixed income products was squeezed by extended periods of low interest rates by central banks. Institutional investors thus turned to alternative avenues for income, one of which was investing in private credit funds. Despite these developments, traditional fixed income assets are still considered as a key asset class for portfolio management due to their liquidity, transparency and relatively predictable cash flow.

2.5. Risk-Return Characteristics of Private Credit Funds

Private credit funds have become a more appealing opportunity for institutional investors due to the potential for higher returns than fixed-income investments. Higher returns, however, come with a number of distinct risk traits of private credit: illiquidity, credit risk of the borrower, valuation risk, and sensitivity to economic conditions. Private credit differs from publicly traded bonds in that its risk/return profile is distinct and the investment is held until maturity, as it is privately negotiated.

2.5.1. Internal Rate of Return (IRR)

One of the most commonly used performance measures in private credit is the Internal Rate of Return (IRR). The IRR is the discount rate that makes the net present value of the cash flows from an investment equal to zero. IRR is well adopted in private markets as cash flows are distributed in an irregular manner and investments are held for a long time. IRR is often used instead of time-weighted returns in private credit funds.

While IRR is a very helpful tool to determine the profitability of an investment, it does come with a number of caveats when it comes to comparing private credit against traditional fixed income investments. IRR calculations can be sensitive to when cash flows occur and the reinvestment rates used can lead to a misrepresentation of actual investment performance. Some of the early cash distributions may be able to artificially boost IRR metrics, even if the value creation is not that significant in the long-term. For this reason, many scholars have suggested that it is essential to use measures such as Public Market Equivalent (PME) analysis to facilitate more accurate comparisons between investments in the private and public markets.

2.5.2. Floating-Rate Loan Structures

One factor that is notable about private credit investments is that they are generally done through a floating-rate loan. Unlike traditional fixed-rate bonds, many private credit loans are tied to a benchmark interest rate, like SOFR or LIBOR, and the rate of the bond changes depending on the market interest rate. This feature became especially compelling when interest rates were on the rise after 2022, when fixed-income securities saw significant declines in value.

The floating rate is a type of structure that protects the interest rate risk of private credit investors by rising in proportion to benchmark rates. On the other hand, regular fixed rate bonds

usually decline in value during times of higher interest rates. Hence, private credit funds can be more successful than traditional fixed income in these tight money periods. Floating-rate exposure can, however, also raise the burden on borrowers during periods of rapid rate increases, and thus risk default in private credit portfolios.

2.5.3. Illiquidity Premium:

Illiquidity premium is the key to understanding the returns on private credit. Private credit investments cannot be readily traded in a secondary market, so they have to be compensated for the lack of liquidity. One of the key factors that private credit funds can provide such premium is that they are created with the specific intent of securing higher yields. This is one of the main reasons why private credit funds can provide higher yields than publicly traded funds.

Proponents of private credit contend that the illiquidity premium is a proper reward for providing such credit, especially in the case of long-term institutional investors, like pension funds and insurance companies, with less urgent short-term liquidity needs. But critics argue that the enhanced yields that private credit funds achieve could just be a reward for giving up ease of liquidity and certainty on the upside of investment returns in exchange for more upside on the downside.

There are also valuation issues, as there are no active secondary markets with which to identify the actual market value of private credit assets. Illiquidity can also lead to a more vulnerable portfolio and higher downside risk should there be a financial downturn and investors need to exit positions rapidly.

2.5.4. Default and Credit Risks:

Private credit funds are very leveraged against borrower credit risk because they tend to be lending to middle market companies that have less access to traditional capital markets. Private credit borrowers are more likely than investment grade borrowers to have higher leverage ratios, lower liquidity cushions, and to be more sensitive to economic fluctuations.

When cash flows of borrowers weaken due to a recession or economic turmoil, default risk becomes especially important. The presence of private credit funds often results in better covenant protection or collateral requirements than those that public bond investors have, but in times of distress, recovery rates can also be very different between the different sectors and strategies. The subordinated position on the capital structure makes distressed debt and mezzanine financing strategies particularly difficult to deal with in terms of default losses.

In addition, there may be an increased risk of exposures due to the distribution of exposures in relatively small borrower groups. Private credit funds can also have concentrated exposures to certain industries, borrowers or geographic regions, which can increase downside risk during certain market conditions compared to broadly diversified public bond indices.

2.6. Impact of Macroeconomic and Market Conditions:

Traditional fixed income investments and performance of private credit funds are crucially affected by macroeconomic and financial market developments. Credit spreads, market volatility, economic cycles and interest rates have a direct impact on borrower creditworthiness, investor sentiment and asset pricing dynamics. It is important, therefore, to grasp the correlation between these macroeconomic indicators and investment outcomes when making comparisons between the attractiveness of private credit and traditional fixed-income markets.

2.6.1. Credit Spreads and Lending Conditions:

A credit spread is the extra yield that an investor requires over government bonds for purchasing risky debt securities. The spreads are a key measure of the credit risk perceived by investors and market conditions. In times of economic prosperity and high investor confidence, spreads tend to tighten up because investors are more willing to take a lesser return for bearing risk. Spreads, on the other hand, tighten during a downturn or a financial crisis because of greater worries over borrower default risk.

Private credit funds could have opportunities to negotiate better credit spreads with the lender, which could lead to higher rates and better covenant for future returns. But also, wider spreads are indicative of poor borrower quality and high default risk. Thus, while private credit funds can gain pricing advantage in stressed times, their performance can deteriorate over time as borrower stress grows.

The changes in credit spreads also impact traditional fixed income investments. High-yield bonds are especially vulnerable because investors re-evaluate their default risks during times of market uncertainty. The spread of investment grade bonds tends to change less due to the higher credit quality of the bond issuer, but spread increases can adversely impact bond values.

2.6.2. VIX (Volatility) and Investor Risk Appetite:

The CBOE Volatility Index (VIX), or the “fear index”, is a gauge of market volatility and investor uncertainty. When the VIX is high, it's a sign of increased market stress and uncertainty, whereas a low VIX level means that investors have more confidence in the markets, and financial risk appetite is high.

The impact of market volatility on private credit funds is indirect as volatility may lead to an increase in uncertainty, which may decrease the ability of borrowers to repay and will make

refinancing more difficult. Illiquid assets could pose a greater risk to investors during volatile periods, which could dampen demand for private credit. But volatility can be a friend for some private credit strategies, as they may achieve better borrowing rates and less competition from conventional lenders.

In addition to changes in investor sentiment and volatility expectations, traditional fixed income markets are also impacted. High-yield bonds tend to see greater declines in prices when VIX is high, because investors seek safer investments like government bonds. On the other hand, investment grade bonds tend to do slightly better in times of risk aversion due to their reputation of safety and higher credit quality.

2.6.3. Interest Rates and Monetary Policy:

The impact of interest rates and central bank monetary policies on the performance of private credit and traditional fixed income investments is important. Adjustments to benchmark interest rates have direct impact on financial market borrowing costs, bond prices and the profitability of lending in the financial markets.

The rise in interest rates may also be advantageous for private credit funds, as many loans are based on floating-rate structures. Coupons on floating-rate loans adjust to higher payments as benchmark rates go up, generating higher income for investors. This is one of the key benefits that private credit has over standard fixed-rate bonds, which tend to devalue during a rate hike.

But the downside of aggressive monetary tightening could be difficulty in accessing private credit for borrowers, due to higher debt servicing costs and diminished refinancing options. This, in turn, can be a positive thing for investors as well as a negative for those seeking to borrow, given that they could be more vulnerable to default when interest rates climb.

Fixed income investments are very interest rate sensitive. When rates are increasing, investment-grade and government bonds typically fall in value since new bonds are being issued with higher rates, and existing bonds with lower rates have less value. This interest rate risk is especially revealed in the world-wide monetary contraction period after the outbreak of the COVID-19.

2.6.4. Economic Cycles and COVID-19 Impact:

Private credit and fixed income markets are closely tied to economic cycles, as credit performance of borrowers and investor confidence in the economy vary with economic activity. In times of economic growth, less defaults and better corporate profits aid credit markets and lenders. Conversely, recessions lead to higher financial distress, lower liquidity, and higher credit risk in all debt markets.

COVID-19 was a major stress factor for global financial markets and exposed the shortcomings of private credit and conventional fixed income assets. The amount of volatility rose markedly, credit spread widened significantly, and the degree of economic uncertainty caused disruptions in lending activities around the world. Central banks reacted with aggressive monetary easing and provision of liquidity support measures, that temporarily abated the credit market turmoil and pulled down bond yields.

Overall private credit funds exhibited varied performance in the pandemic. Some funds enjoyed floating rates and direct borrower relationships, while others saw a growing risk of defaults, and valuation uncertainty. There was also a lot of turmoil in traditional fixed income markets, especially in the high yield bond space. As a result, the pandemic underscored the significance of macroeconomic conditions on risk-return performance of both private credit and traditional fixed income investments.

2.7. Research Gap:

While the study of private markets and fixed income investments has grown tremendously in recent years, there are still some significant gaps within the existing literature. Although private credit funds have been growing quickly and become more institutional relevant, the majority of previous research has concentrated on private equity fund performance and much less academic research has been devoted to private credit funds (Cai and Haque, 2024). Consequently, the comparative risk and return characteristics of private credit and traditional fixed income investments are less developed.

One major limitation in the current literature is the lack of direct and in-depth comparisons between private credit funds and conventional fixed income securities, like investment-grade and high-yield bonds. Numerous studies compare private credit to private credit, but not to publicly traded fixed income securities (Khalid and Nadeem, 2017). This makes it hard for investors and researchers to know if private credit really provides better risk-adjusted returns, or if it is just for illiquidity and for taking on extra credit risk. Previous research tends to either compare private market returns with public bond returns or compare private market returns with public bond performance without integrating the two to the same framework (Harris, Jenkinson, and Kaplan, 2014).

Another key area of research needs is the lack of evidence from after 2020. The world's financial landscape has undergone a major transformation following the COVID-19 pandemic, with interest rates surging, inflation rising, markets becoming more volatile, and global credit markets and demand being upset (Avalos, Doerr, and Pinter, 2025). These shifts have had an impact on the performance of private credit and on traditional fixed-income investments. However, many of the current publications are based on pre-pandemic information, and therefore not necessarily reflect the impact of recent macroeconomic conditions on the

performance of private credit. Given the lack of extended stress periods of private credit on this magnitude, it is important to conduct additional research with the more recent data to gauge the strength of private credit in the face of shifting economic circumstances (Farounbi, Okafor, and Oguntegbe, 2021; Report on Vulnerabilities in Private Credit, 2026).

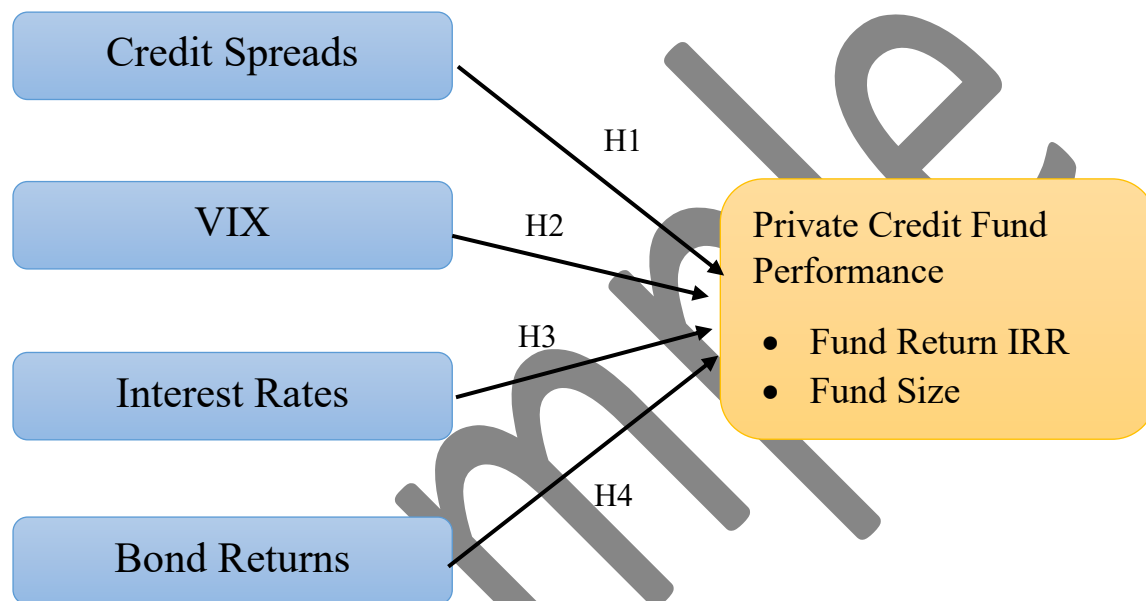
Furthermore, previous research frequently focuses on individual aspects of private credit performance, rather than combining multiple analytical perspectives in one analysis. For example, some research is focused on the manager-persistence or macroeconomic influences separately, while others are focused on benchmark-adjusted return measures like Public Market Equivalent (PME) (Judijanto, 2025). However, many of the past literature depends on pre-pandemic data and therefore may not fully capture the effects of latest macroeconomic conditions on private credit performance. Moreover, it has been observed that private credit has not historically experienced long-lasting stress span at the recent scale, further studies opting current data becomes highly important to evaluate its resilience under evolving economic factors (Report on Vulnerabilities in Private Credit, 2026).

Also, there is a lack of empirical evidence about how much of the outperformance of private credit is due to actual management quality versus the presence of hidden systematic risks. The body of literature shows significant variation in the performance of different fund managers and vintages, but it is not clear if top performers are better long-term (Davydiuk, Marchuk, and Rosen, 2024). Likewise, valuation smoothing and illiquidity remain a concern when it comes to transparency and comparability of private credit return measures (Gil, 2025).

Thus, the aim of this dissertation is to fill the identified gaps in the existing research by carrying out a detailed comparative analysis of private credit funds and traditional fixed income investments over the last 5 years (2021-2025). The study includes performance analysis adjusted for benchmarks, tests manager persistence across vintages and assesses the impact of

macroeconomic and market factors such as credit spreads, VIX and interest rates on fund performance. The dissertation seeks to combine these dimensions in a common research context, to gain a more holistic perspective on the actual risk-return profile of private credit as compared to standard fixed income products.

2.8. Conceptual Framework:



2.9. Chapter Summary:

The chapter examined the evolution of the private credit market, including after the 2008 financial crisis, and the increasing number of institutional investors looking to earn higher returns and find other sources of income. Moreover, the study also explored the features of traditional fixed-income products, investment-grade and high yield bonds, and the relative transparency, liquidity and sensitivity of traditional fixed-income products compared to private credit funds. Additionally, the chapter critically evaluated the risk-return dynamics of private credit by discussing issues related to Internal Rate of Return (IRR), floating-rate structures, illiquidity premiums, valuation smoothing, manager dispersion, and default risks. Additionally,

the impact of macroeconomic and market factors including credit spreads, VIX, interest rates and economic cycles on private credit and traditional fixed income performance was discussed.

Last but not least, the chapter outlined a number of key areas where research is yet to address, such as the limited direct comparison between the performance of private credit and traditional fixed income investments, the absence of evidence after 2020, and the scarcity of integrated studies that take into account benchmark-adjusted performance, persistence, and macroeconomic factors at the same time. The research is important because of these identified gaps. In the next chapter the research methodology used to answer the research questions and objectives of this dissertation will be explained.

Chapter 3: Methodology

3.1. Chapter Introduction:

This chapter explains the methodological design that helps to investigate the risk-return dynamics of private credit funds compared with traditional fixed income investments over the 2021–2025 period. This chapter has the function to give a rationalization to the design, data sources and methods of data collection, analytical framework and ethics adopted in the analysis. Since the study is concerned with the financial performance and the effect of macroeconomic variables on investments returns, a quantitative research design based on secondary financial data is appropriate.

Initially, the general research design, the research approach and the exploratory character of the study are depicted. Then, the sources for data collection of private credit funds, fixed income benchmarks and macroeconomic variables are illustrated. The search strategy used to collect a trustworthy secondary financial data from international databases and institutional reports. The variables of the study are defined and categorized as dependent and independent variables.

The most important analytical techniques used are also outlined, including descriptive analysis, regression analysis and market condition effect analysis. Those techniques are employed in order to test if private credit funds obtain better benchmark-adjusted and risk-adjusted performance compared to the traditional fixed income alternatives. Finally, the ethical considerations related to the use of secondary data are illustrated along with the related limitations on data availability and transparency for private credit market.

3.2. Research Design:

Research design is the overall structure and strategy employed to address the research questions and goals of a research (Asenahabi, 2019). This dissertation uses quantitative research methodology using secondary financial data from publicly available institutional databases, market reports and financial data sets. The study is quantitative because it is designed to measure, compare and statistically analyze the relationship between performance of private credit funds and traditional fixed-income investments with the use of numerical financial indicators (Slater and Hasson, 2024).

The research is focused on a comparison of the risk-return profile of private credit funds with the risk-return profile of traditional fixed income investments over the period 2021-2025. Selected time horizon is especially significant as it encapsulates significant economic events such as the post-pandemic recovery period, inflationary pressures, aggressive monetary tightening and increased financial market volatility. In this context, it is useful to discuss the behavior of private credit and fixed income investment in the case of a changing macroeconomic environment (Asenahabi, 2019).

The study is conducted exclusively based on the secondary data because primary financial information from private credit fund managers is difficult to obtain because of confidentiality and lack of transparency in the market. Secondary data is useful and valid because it gives the researcher access to the existing market information which is available from the well-known financial institutions and data bases. In addition, secondary financial data can be analyzed statistically, which is objective, and enhances the ability to finish the dissertation within the defined timeframe.

The quantitative design also facilitates the application of statistical techniques like descriptive analysis, regression analysis, and benchmarked measures of performance. These techniques

are used to determine if there are any connections between variables and to compare the performance of private credit funds when compared to conventional fixed-income investments after adjusting for market risk and macro-economic factors (Slater and Hasson, 2024).

3.3. Research Approach:

This study uses deductive research method. Deductive research starts from the theories, concepts and previous empirical studies and these are then tested with the observable data. The approach is appropriate as the research is based on established financial theories referred to in the literature review chapter which includes Modern Portfolio Theory, Efficient Market Hypothesis, Risk-Return Tradeoff Theory and Illiquidity Premium Theory (Daniel and George, 2025).

The deductive approach enables the study to investigate whether the theoretical assumptions about the relation between risk and return and the presence of illiquidity premium by actual market information on the analyzed period are confirmed. Current literature indicates that there could be higher returns in the private credit funds due to the several factors of illiquidity compensation, floating rate benefits, and market inefficiencies. Previous research, however, suggests that some of this return might be due to hidden risk and other factors, such as valuation smoothing and economic cycles. The deductive approach, therefore, can be used to test these assumptions empirically using quantitative analysis (Daniel and George, 2025).

Based on theoretical expectations and previous studies, the study develops hypotheses. One assumption is, for instance, that private credit funds could outperform conventional fixed income investments when interest rates are going up, due to floating rate loan structures. Another assumption is that macroeconomic factors, which have an impact on private credit performance, have marked volatility, credit spreads, and interest rates (Narine Lalafaryan,

2024). These relationships are then tested with statistical analysis to determine if they are present in the data collected.

The deductive method is found to be appropriate since it gives a systematic and structured framework to test the relations between the variables and to produce objective findings. Furthermore, deductive research makes financial research reliable and repeatable as the findings are based on observable evidence and not on personal opinion.

3.4. Research Method:

The study has used exploratory research. Exploratory research is conducted when there is not enough information available about a topic or it is a new one that is being investigated because of changing circumstances in the market (George, 2021). While the importance of private credit has been a growing focus in academic and professional literature, there is relatively little comparative research directly comparing private credit funds and traditional fixed-income investments in the current context of the economy, since the turn of the century in 2020.

It is appropriate for the exploratory nature of the research because the private credit markets are still evolving, and the scale of the institutions and their institutions' stress is unprecedented (George, 2021). Furthermore, the literature that covers analysis of performance adjusted to the benchmark with macroeconomic variables and market conditions is limited. Thus the exploratory approach enables the study to explore relationships and patterns not sufficiently developed in the literature.

The exploratory method also enables flexibility in the study of financial behavior in financial markets in different economic environments. The study spans 2021-25 and thus reflects very dynamic economic circumstances such as inflation, rising interest rates, geopolitical risks, and market recovery after the pandemic. These factors make exploratory analysis appropriate as it

may be the case during such periods that the behavior of investors in investments differs from the historical expectation.

Moreover, the exploratory approach yields insights into key issues on the sustainability of private credit returns, the importance of illiquidity premiums, and the effect of macro factors on private credit and fixed income returns.

3.5. Data Sources:

The study is based on secondary financial data obtained from various institutional and publicly available databases. The data is collected from 9 different economies, US, UK, France, Germany, Italy, the Netherlands, Belgium, Spain and Sweden. The multiple sources of data provide a more reliable, valid and comprehensive research finding.

3.5.1. Private Credit Fund Data:

The major sources for private credit fund data are:

- EDGAR database
- S&P Global reports
- Annual reports of private credit firms.
- ECB Data Bank

Private credit funds include the following variables:

- Fund returns (IRR)
- Fund size
- Performance information

While there are specialized databases that offer more extensive data on the private market, their limitations in access and cost restrict their use in this research. Thus, publicly-available institutional reports and financial disclosures are used for alternative data sources.

3.5.2. Fixed Income Benchmark Data:

Traditional fixed income benchmark data is collected from:

- BIS Database
- ICE BofA Bond Indices
- Federal Reserve Economic Data (FRED)

These databases contain data on:

- Investment-grade bond returns
- High-yield bond returns
- Corporate bond spreads

The chosen benchmarks are suitable as they are well-known in the academic and professional field of financial research.

3.5.3. Macroeconomic Data:

Macroeconomic indicators are collected from:

- United Nations Data
- International Monetary Fund (IMF)
- World Bank Data
- Annual reports of central banks
- FRED database

The macroeconomic variables chosen are:

- Credit spreads
- VIX volatility index
- Interest rates
- Economic growth trends

Those variables are added due to literature findings that showed that macroeconomic variables have a significant influence on the performance of the private credit and the fixed income markets.

3.6. Search Strategy:

The research employs a structured and systematic search approach to ensure that the academic and financial research material collected is reliable, relevant and up to date, in relation to private credit funds and traditional fixed-income investments. The search strategy will enable the research goals by finding authoritative, scholarly resources, institutional reports, and financial data that will help inform the understanding of risk-return relationships, benchmark performance, and the impact of macroeconomic conditions on investment markets. Private credit is a relatively new field in financial research and a wide but targeted search strategy is needed to assemble a complete picture of academic and industry research.

Various well-known digital libraries and databases are used in the search of academic literature to ensure the incorporation of peer-reviewed and credible studies. The main academic search engines utilized in this research are:

- Google Scholar
- ScienceDirect
- JSTOR

- ResearchGate

These databases offer access to articles in the journals, working papers, conference papers, financial studies and institutional research publications relating to the private credit markets and fixed income investments.

Specific keywords and combinations of keywords are used throughout the search process, to identify the most relevant literature. These keywords include:

- “Private credit funds”
- “Risk-return dynamics”
- “Private debt performance”
- “Fixed income investments”
- “Investment-grade bonds”
- “High-yield bonds”
- Macroeconomic effects on credit markets
- “Public Market Equivalent”
- “Private credit returns”

The study gathers financial and macroeconomic data from institutional databases like FRED, BIS Database, IMF Data, World Bank Open Data and publicly posted annual reports of corporations. These data sources include information about bond returns, credit spreads, volatility indices, interests, and conditions of the private credit market. The datasets are selected for their consistency, availability, reliability, and suitability for the study period of 2021-2025.

In addition, preference will be given to peer-reviewed journal articles, official financial reports, and databases, recognized internationally, for academic credibility and reliability of the data.

Any studies published between 2015 and 2025 are given greater weight, to ensure that the literature covers current developments of the financial markets, recent macroeconomic trends and the changes of the organization of private credit markets.

3.7. Variables of the Study:

The study employs a combination of dependent and independent variables to analyze the relationship between the performance of the private credit funds and the different macroeconomic and financial market conditions. The variables that are opted are based on the research objectives, exiting literature and the theoretical framework mentioned in the present study. The variables are used to analyze the difference between the returns achieved by private credit funds and those of traditional fixed income investments and the impact of external market conditions on the performance of the investments during the period considered from 2021 to 2025.

3.7.1. *Dependent Variables:*

The variables in this study that serve to measure the performance and characteristics of private credit funds are called dependent variables. The dependent variable chosen are:

- Private Credit Fund Performance
 - ✓ Fund returns (IRR)
 - ✓ Fund size

Internal Rate of Return (IRR) is chosen as the key measure as it is one of the most widely used return measures in private market and alternative investment research. IRR is a profitability index of an investment where they discount the cash flows that are expected in the future to zero (Fernando, 2025)). IRR is a better measurement of traditional time-weighted returns in private credit markets, where the cash flows are not regular and the holding period is long. The

study assesses whether private credit funds can achieve superior benchmark adjusted and risk adjusted returns than traditional fixed income investments using the use of IRR (Fernando, 2025).

The size of the private credit fund is also included as a dependent variable as it can have a significant impact on the fund's performance and diversification capabilities and access to the market. Larger funds tend to have more financial resources, better borrower networks and diversified borrower and sector portfolios. They also can enjoy economies of scale and improved risk management skills (Vipond, 2025). Smaller funds may have greater operational risk and fewer market opportunities, however. Hence, the size of the funds can be used to understand if there is a scale effect on the performance differences within private credit markets.

3.7.2. Independent Variables:

The independent variables include traditional fixed income benchmarks and macroeconomic variables that could impact private credit fund performance. These variables include:

- Credit Spread
- High-yield bond returns
- VIX index
- Interest rates

The returns of investment grade and high yield bonds are chosen as they are considered to be the benchmark of the traditional fixed income market against which the performance of private credit is measured. The benchmarks serve to assess whether private credit funds deliver excess returns over publicly traded debt securities.

Credit spreads are included since they can capture market views on default risk and the current lending environment. As per the research, wider spreads usually indicate increased economic uncertainty and risk premium that directly affects the private credit returns (Peri and Rachedi, 2019). The VIX is a proxy for market volatility and investor sentiment. Interest rates are included as it is evident that they impact borrowing costs, bond values and floating-rate loans. However, the inclusion of these independent variables helps us to construct a comprehensive model to explain how macroeconomic and market factors affect the performance of private credit funds (Bekaert and Hoerova, 2013).

3.8. Data Analysis Technique:

This study uses several statistical and analytical methods to assess the research aims and to analyze the relationship between the performance of private credit funds and conventional fixed income investments. The techniques selected are suitable for quantitative financial research for the following reasons: they allow systematic analysis of numerical data, identification of trends and evaluation of relationships between variables. The analysis aims to gain insights into the risk-return profile of private credit funds and how the macroeconomic and market environment affects investment performance in the 2021-2025 period.

- ***Descriptive Analysis:***

Descriptive statistics are employed in the initial phase of data analysis and presented to provide a summary and main features of the gathered financial information. For all variables measured in a study, the mean, median, maximum values and minimum values are determined. This analysis is intended to give an overview of the average performance and volatility of private credit funds and of fixed income benchmarks for the selected time horizon.

- Descriptive analysis can be used to help identify:
- Average rate of return for private credit.

- Recent performance of the bond market
- Volatility patterns
- Macroeconomic fluctuations

Descriptive statistics enable the researcher to compare trends for variables and to see variations in trends over different market conditions. The findings are also presented in tables, charts and graphs to enhance interpretation, visualization and comparison of financial data.

- ***Regression Analysis***

Then the regression analysis is used to analyze the relationship between private credit returns and selected macro-economic variables. The regression model assesses the impact of interest rates, credit spreads and market volatility on the performance of private credit funds.

The regression equation is:

$$IRR = \beta_0 + \beta_1(\text{Credit Spread}) + \beta_2(\text{VIX}) + \beta_3(\text{Interest Rate}) + e$$

The regression results can be used to identify:

- Significance of variables by using statistics
- Direction of relationships
- The extent to which macroeconomic shocks affect returns.

Through this technique, researchers can find out whether macroeconomic conditions have a significant influence on private credit performance and if the relationship is positive or negative.

- ***Market Condition Impact Analysis***

The study also examines the impact of market conditions on private credit and traditional fixed-income investments in the economic stress and recovery environment. Special focus is placed on key economic events such as:

- COVID-19 recovery period
- Increasing interest rates.
- Inflationary pressures
- Credit market volatility

This analysis is used to check if private credit funds are more resilient and have more stable returns in various macroeconomic conditions as compared to the returns generated by traditional fixed-income investments.

3.9. Ethical Considerations:

Ethical considerations play a significantly role in sustaining the credibility, reliability, and academic integrity of any research study. This dissertation is mostly based on secondary financial information that was derived from sources publicly available institutional databases, financial reports and academic publications. Because the research is conducted in the absence of human participants, ethical risks to participant consent, confidentiality and privacy are minimal. Regardless, the following is important to note that the study is conducted in accordance with important ethical principles throughout the research process to guarantee responsible and transparent academic conduct.

Numerous ethical considerations are emphasized within this research, including:

- Accurate data reporting
- Correctly citing sources
- Avoidance of plagiarism

- Objective interpretation of findings.

Accurately and authentically collecting financial data is one of the main ethical obligations of the researcher. Any numerical data, market statistics and financial indicators utilized on the study are derived from reliable, well-known and international data bases such as FRED, BIS, IMF Data, World Bank Open Data, EDGAR and institutional annual reports. The researcher keeps the data accurate and does not alter, manipulate or selectively omit data that could affect the end results of the research.

The referencing and citing of all academic and institutional sources are also carried out correctly all throughout the dissertation. All journal articles, reports, datasets, graphs and theory concepts employed in the study are correctly referenced, in accordance with the referencing style. This practice helps prevent plagiarism and respects intellectual property rights and academic integrity.

In addition, the results are interpreted objectively and without bias. The researcher does not draw inaccurate conclusions or favor results that would be aligned with a researcher's assumptions. Data collected is analyzed by statistical methods and financial analysis and findings are interpreted based on these statistics.

Moreover, only sources of information which are publicly accessible and morally legitimate are used in the research. During the study, no information about the company's activities, financial information (restricted) or personal information will be gathered. Hence, the research does not demand significant ethical clearance protocols, normally connected with primary information collection with human subjects. As a whole, the compliance of these ethical principles improves the validity, transparency and academic value of the dissertation.

3.10. Chapter Summary:

This chapter describes methodological design that is used to assess the risk-return relationship between private credit funds and traditional fixed-income products. This research uses a quantitative and exploratory approach using historical financial secondary data acquired through the institutional financial data providers and public available financial databases. Based on this context, a deductive research design has been used to test theoretical hypotheses about private credit performance and its relation to macroeconomics factors. In this chapter, description of data sources, search strategy, variables considered and the analysis methods were also specified and discussed; which comprise of descriptive analysis, PME comparisons, regression analysis and the impact of market conditions. Lastly, ethical considerations were addressed with regards to use of historical data and next chapter discusses about the outcomes from the collected financial data.

Chapter 4: Results and Analysis

4.1. Chapter Introduction:

This chapter provides the empirical results and statistical analysis conducted to analyze the risk-return relationship of private credit funds against traditional fixed income instruments. This chapter aims to analyze the gathered financial and macroeconomic data and draw conclusions based on the results to answer research objectives. More specifically, this chapter aims to identify the relationship between the performance of the private credit fund and key macroeconomic factors such as credit spreads, market volatility (VIX), interest rates and traditional bond market returns between 2021 and 2025.

The chapter initially discusses the descriptive statistical analysis to describe the nature of the variables and then proceed to correlation analysis to find out how correlated and in which way the variables are. Regression analysis is then conducted to find the effect of the macroeconomic and financial market variables on the size and returns of the private credit fund (measured by IRR). The results are presented with the aid of graphs, tables and clear explanations. This chapter discusses if private credit funds outperform traditional fixed income investments in difficult conditions and show higher robustness in such conditions.

4.2. Descriptive Statistics:

Table 1: Descriptive Analysis

Descriptive Statistics										
	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
IV1: Credit Spread	540	-1.20	3.14	.6445	.78945	.623	1.199	.105	1.734	.210
IV2: VIX	540	12.15	37.20	20.5515	4.98382	24.838	.855	.105	.356	.210
IV3: Interest Rates	540	-.55	5.35	2.1113	1.92388	3.701	-.137	.105	-1.385	.210
IV4: Bond Returns	540	-2.85	4.48	1.088	1.01567	1.032	.805	.105	4.485	.210
DV1: Fund Size	540	14.04	2465.35	222.1726	482.97439	233264.260	2.913	.105	7.600	.210
DV2: Fund Returns (IRR)	540	7.44	15.13	10.5929	1.27523	1.626	.124	.105	.013	.210
Valid N (listwise)	540									

This descriptive analysis gives a basic overview of the data and important features of the variables used for this study. The panel data comprises (9 countries in Europe and 20 quarters for the period 2021 to 2025). This summary statistics table shows several key trends around how macroeconomic conditions, traditional fixed income performance, and private credit fund metrics behaved during a crucial period of monetary policy changes.

The average Internal Rate of Return (IRR) for private credit funds was 10.59% for the period. This mean return is well above the average returns of public fixed-income securities for the same period. The standard deviation of (1.28) shows relatively low variation in reported returns, which was a sign of relative stability in the private credit market even amid evolving market conditions. The skewness of the distribution of IRR is also very small (0.124), indicating that the distribution is almost symmetrical.

By comparison, traditional fixed income investments, whose average return is shown as Bond Returns, had a slightly lower average return of (1.088) and a standard deviation of (1.02). This

is in fact, in accordance with the difficulties that public bonds have been facing, especially during the interest rate hike cycle of 2022, when the bonds dropped in price.

The behavior of macroeconomic variables was as expected. The average Macro Credit Spread was (0.6445), with moderate dispersion and positive skewness (1.199), suggesting that there were occasional rises in credit risk perception. The average volatility of all the indices, Market Volatility (VIX) stood at (20.55), which is typical of a post-pandemic market with occasional volatility. The distribution was slightly left skewed, with Interest Rates averaging 2.11%, not far off where the ECB and BoE have been tightening.

The fund size showed the highest variation (SD = 482.97) with high positive skewness (2.913). This indicates that there are a handful of large funds dominating the sample and lots of small funds in the market. The mean fund size of 222.17 (in appropriate units, presumably € million) is indicative of the increasingly large size of the private credit vehicles in Europe.

Overall, the descriptive statistics validate that private credit generated appealing and relatively stable returns relative to traditional fixed income assets, and that it operated in a macroeconomic backdrop of rising rates, moderate credit spreads and dynamic volatility. These patterns were the basis for later correlation and regression analyses.

4.3. Correlation Analysis:

Table 2: Correlation Analysis

Correlations							
		Marco Credit Spread	Macro: VIX	Macro: Interest Rates	Funds' Investments (Bond Returns)	Fund Size	Fund Returns (IRR)
Credit Spread	Pearson Correlation	1	.259**	-.171**	-.016	-.262**	.175**
	Sig. (2-tailed)		.000	.000	.713	.000	.000
	N	540	540	540	540	540	540

Market Volatility VIX	Pearson Correlation	.259**	1	-.535**	-.503**	-.137**	-.068
	Sig. (2-tailed)	.000		.000	.000	.001	.112
	N	540	540	540	540	540	540
Interest Rates	Pearson Correlation	-.171**	-.535**	1	.320**	.319**	.549**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	540	540	540	540	540	540
Bond Returns	Pearson Correlation	-.016	-.503**	.320**	1	.037	.057
	Sig. (2-tailed)	.713	.000	.000		.395	.187
	N	540	540	540	540	540	540
Fund Size	Pearson Correlation	-.262**	-.137**	.319**	.037	1	.366**
	Sig. (2-tailed)	.000	.001	.000	.395		.000
	N	540	540	540	540	540	540
Fund Returns (IRR)	Pearson Correlation	.175**	-.068	.549**	.057	.366**	1
	Sig. (2-tailed)	.000	.112	.000	.187	.000	
	N	540	540	540	540	540	540

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis shown in Table 2 analyzes the correlations between macroeconomic indicators/parameters, the performance of the bond market, the size of the private credit funds, and the private credit fund returns (IRR). The strength and direction of relationships between variables are measured by Pearson correlation coefficients, and significance values determine whether or not the relationships are statistically meaningful. The sample size is 540 observations, which is adequate to make a good statement about the population. Correlations indicated by ** are significant at the 0.01 level, which means that the relationship was unlikely to have arisen by chance.

The results indicate that credit spreads exhibit a positive and statistically significant relationship with the market volatility (VIX) ($r = 0.259$), with a significant level of ($p < 0.01$). This suggests that when the market is turbulent, credit spreads tend to increase. The debt

markets will have larger spreads during volatile economic times because investors will require greater compensation for credit risk. This is in line with the financial theory that uncertainty and risk aversion increase borrowing costs and lessen the investor's confidence.

There is also a strong negative correlation between the credit spreads and interest rates ($r = -0.171$, $p < 0.01$). The implication is that as interest rates go up, credit spreads will go down to a lesser degree. This may be because higher interest rates could indicate higher economic growth and tighter monetary policy that can boost market confidence and lower the default risk. Furthermore, there is a significant negative correlation between fund size and credit spreads ($r = -0.262$, $p < 0.01$), suggesting that larger funds might have less exposure to credit spread risk from the benefits of diversification and better market positioning.

Notably, the relationship between the credit spreads and the fund returns (IRR) is positively and statistically significant ($r = 0.175$, $p < 0.01$). This implies that the private credit funds could earn more from a period of wider spreads, as investors will be rewarded for the extra risk in lending. The findings provide support for the risk-return tradeoff theory and underscore the role of credit market conditions in shaping credit market performance.

The VIX index, representing the market volatility and investor fear, illustrates some key relationships in the model. VIX shows a strong negative correlation with the interest rate ($r = -0.535$, $p < 0.01$), meaning that higher volatility is typically correlated with lower interest rates or more accommodative monetary policies. Likewise, bond returns are strongly negatively related to VIX ($r = -0.503$, $p < 0.01$), meaning that in the traditional fixed income space the market's uncertainty has a negative impact on bond performance. In times of high volatility in the bond market, investors could see lower returns on their bonds due to market volatility and a lack of confidence in the bond market.

VIX also shows a weak but significant negative relationship with fund size ($r = -0.137$, $p < 0.01$), indicating that larger private credit funds may be slightly more resilient to market volatility compared to smaller funds. The correlation between VIX and returns on funds (IRR) is, however, not statistically significant, and negative ($r = -0.068$, $p = 0.112$). This means that there is little direct evidence that market volatility affects private credit returns over the time span considered. An alternative possibility is that the returns on private credit assets are less volatile because they do not get marked to market as often as public securities do.

One of the key variables in the analysis is the interest rate. The results indicate that IRR and the level of interest rates have a significant positive correlation ($r = 0.549$, $p < 0.01$). This result shows that private credit funds fare well in an environment of rising interest rates, possibly due to the fact that a percentage of private credit loans are floating interest rate loans. When benchmark rates rise, so do the yields on loans, which is a positive impact on the performance of the funds. This finding reinforces the notion that private credit can provide a hedge against higher rate markets versus traditional fixed income investments.

Positive and significant correlations also exist between interest rate and bond return ($r = 0.320$, $p < 0.01$) and fund size ($r = 0.319$, $p < 0.01$). This suggests that the retention of a higher interest rate regime can lead to increased investment activity and increased private credit allocations.

Lastly, there is a moderate positive correlation between fund size and fund returns (IRR) ($r = 0.366$, $p < 0.01$). This discovery indicates that private credit funds with larger sizes yield better performance than smaller-sized funds. A larger fund might be able to diversify more, offer better access to borrowers, have more bargaining power, and have better risk management tools.

Moreover, the correlation analysis shows that the macroeconomic variables are significant factors affecting the performance of private credit funds, especially the interest rates and credit

spreads. Moreover, the findings show that private credit funds may not behave as badly as some have suggested when rates and spreads are rising, and that direct returns from credit funds are not as sensitive to market volatility as are those of the public funds.

4.4. Regression Analysis:

The regression analysis illustrated in Model I focuses on examining the influence of selected macroeconomic and financial market variables on the size of private credit funds. Fund size is the dependent variable in this model because the size of the fund will be an outcome variable that changes with the changing economic and market conditions. The independent variables that are part of the model are macro credit spread, market volatility (VIX), interest rates and bond returns. The variables are chosen according to the theoretical background and the literature that indicates a direct impact of financial market conditions on investment allocation, lending activity and growth of the private credit market.

The main goal of this regression model is to determine if macroeconomic conditions and the returns of traditional fixed income investments have a meaningful impact on the growth and investment philosophy of private credit funds in the period of study 2021–2025. Fund size is a crucial measure in the private credit market as it can be used to understand investor participation, allocation of capital, market confidence and the development of the private credit market. The size of private credit funds tends to be a good reflection of institutional demand and confidence in the opportunities for private credit, while smaller fund sizes can signify reduced investment activity or more cautious investor activity in an uncertain economic environment.

One key and important aspect of this dissertation is that regression analysis allows the research scientist to statistically explore the relationship between the growth of private credit markets and other macroeconomic variables. The analysis is used to deduce whether private credit

expansion depends on higher interest rates, credit market risk, more volatility, and/or the activity of traditional bond markets. The study also helps shed light on the economic drivers that facilitate or hinder the capital flows into private credit investments through these relationships.

Moreover, the analysis of the study helps to understand the role of private credit as an alternative financing mechanism compared to traditional fixed-income investments, which are becoming increasingly significant. In recent years, private credit has become a more popular source of funding for institutional investors who are attracted to it by both the higher yield and diversification benefits, and because of the relative stability of private bond markets. Understanding what underlies fund size is thus crucial to appraise the long-term sustainability, resilience and attractiveness of private credit investments in today's financial markets.

Furthermore, the results of this regression model have practical implications for the investors, the fund managers, and the policymakers as they can determine which conditions are more favorable in which they are more inclined to expand or less inclined to grow. This aids in the appreciation of the impact macroeconomic environments have on investment in alternative credit markets.

4.4.1. Model I: Dependent Variable: Fund Size (Investments)

Table 3: Regression Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.392 ^a	.154	.147	445.95758
a. Predictors: (Constant), IV4: Funds' Investments (Bond Returns), IV1: Marco Credit Spread, IV3: Macro: Interest Rates, IV2: Macro: VIX				

The Model Summary table gives an overall assessment of the strength, power, and reliability of the regression model used in this study. This model aims to analyze the impact of some macroeconomic and financial market variables on the size of the private credit funds during the study period. The model incorporates macro credit spreads, market volatility (VIX), interest rates, and bond returns as input variables and fund size as the output variable. The statistics in the model summary are used to determine how well the variables selected explain variations in investment in private credit funds and whether the regression model is appropriate for further analysis.

R value of the regression model is (0.392). R is the correlation between all of the predicted values from the regression model and the actual values of fund size observed. The R value is (0.392), showing a moderate positive relationship between the independent variables and the dependent variable. This implies that the relationship among the selected macroeconomic variables together is meaningful to the dynamics of private credit fund size. The relationship is not strong, but it is still one that implies that changes in interest rates, credit spreads, market volatility, and bond market performance affect investment activity and capital allocation in private credit markets.

An R Square value of (0.154) means that the total variation in private credit fund size which is due to the combined effect of the selected independent variables accounts for only about (15.4%) of the total variation in the size of the private credit funds. That is, the model illuminates the relationship between variation in the macroeconomic environment and behavior of fixed income markets and evidence of variation in fund size during the period of interest. This (15.4%) is not a very high explanatory power, but it is still meaningful for financial and economic research because there are many other factors impacting investment markets besides those that are part of the model. Other considerations such as investor confidence, fund

manager reputation, borrower quality, regulatory changes, liquidity, geopolitical risk and institutional investment strategies, can also have an impact on the growth of private credit funds.

An explanation of more than 15% of the variation in fund size by only macroeconomic and bond market variables implies that these variables play a significant role in explaining private credit investment activity. The result testifies to the significance of macro-economic conditions in driving the growth of the private credit market and should not be neglected while assessing the growth and sustainability of the asset class.

The Adjusted R Square is reported as 0.147, which means that about (14.7%) of the variation in fund size is explained by the independent variables in the regression model after adjusting for the number of independent variables. Adjusted R Square is a more reliable measure than R-square, as it takes into consideration the number of explanatory variables included in the model and avoid the overestimation of the explanatory power. This is because the difference between the R Square value (0.154) and the Adjusted R-Square value (0.147) is relatively small, indicating that the regression model is not highly unstable and statistically sound. This implies that the variables included in the model are indeed relevant, and that the model is not over-parameterized with irrelevant variables.

Moreover, stability is shown between the two values, which is an appropriate indication that the variables chosen are appropriate and suitable for the research. The model is thus shown to possess a reasonable explanatory power for determining the relationship between macroeconomic conditions and growth in private credit markets.

The standard error of the estimate is (445.95758). It is a measure of the average deviation of the observed values of fund size from the values predicted by the regression model. The smaller the standard error the more accurate the predictions will be and the larger the standard error,

the more differences there will be between actual observations and predictions. In this instance, the standard error indicates that there is some discrepancy between the values of the fund size in the model and the actual values (Watts, 2026). This variation is, however, compatible with financial market research which is subject to changes in investment markets and which is subject to uncertainty and fluctuation in the economic, political and institutional environment.

However, such a variation does not diminish the usefulness of the regression model for analyzing the relationship between macroeconomic conditions and growth of private credit funds. The results suggest that while macroeconomic variables do not account for all fund size variations, they continue to be significant factors in investment decisions and growth in the private credit market (Dashmir Saiti and Borce Trenovski, 2021).

Table 4: Regression Model Summary- ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19329618.279	4	4832404.570	24.298	.000 ^b
	Residual	106399818.046	535	198878.165		
	Total	125729436.325	539			
a. Dependent Variable: DV1: Fund Size						

The ANOVA (Analysis of Variance) table is included to evaluate the overall significance, reliability, and validity of the regression model developed in this study. When using regression analysis, ANOVA is used to assess the statistical significance of the totality of the selected independent variables in accounting for the variation in the dependent variable. For this dissertation, the ANOVA table will be used to determine if there are significant differences between the macroeconomic variables and traditional fixed income indicators in terms of their effect on the size of a private credit fund over the time period examined.

The ANOVA results are broken down into two parts: regression and residual. The regression sum of squares is reported as (19,329,618.279), while the residual sum of squares is (106,399,818.046). The regression sum of squares is a measure of the variability of fund size that is accounted for by the independent variables in the regression model: macro credit spread, volatility (VIX), interest rates, and bond returns. Conversely, the sum of the squares that do not fit the model are known as the residual sum of squares, and may be due to other external variables not accounted for in the model.

The relatively high regression sum of squares suggests that the macroeconomic variables selected play a significant role in the explanation of the change in the size of private credit. While there is some unexplained variance that is likely for financial market studies, the results indicate that the independent variables have explanatory power in the private credit investment behavior and market expansion.

The value of the F statistic for the ANOVA table is also (24.298). In regression analysis, the F-Statistic is one of the most important indicators since it reflects the overall significance of the regression model. Specifically, it tests if the joint effect of all independent variables is significant in predicting the dependent variable as compared to a model with no independent variables.

The p-value of the F-statistic is (0.000). This value is significantly lower than the accepted level of significance of (0.05), which is widely recognized, so the regression model is statistically significant (Frost, 2017). That is, the chance of getting such outcomes by chance is very low. Thus, the null hypothesis – that the independent variables have no impact on private credit fund size – is rejected.

The statistically significant ANOVA result validates that the independent variables as a whole have a significant impact on the private credit fund investments. It has been seen that these

factors studied have a practical bearing on this, it is found that changes in credit spreads, interest rates, market volatility and returns on the bond market are important factors in explaining changes in the size of the fund over the period studied.

This is a very key result in the context of the dissertation as it highlights the close linkages between private credit markets and other macroeconomic and financial market conditions. The findings indicate that the growth of private credit funds is not autonomous with respect to the economic environment. Rather, the impact of monetary policy, market risk perceptions, lending conditions and fixed income market performance are strong drivers of investment decisions in private credit markets.

For instance, an increase or decrease in interest rates could change investor preferences towards floating-rate private credit investments, and an increase or decrease in credit spreads could affect the view of credit risk and the profitability of lending to a borrower. Likewise, periods of financial uncertainty and a stressed financial market can impact capital allocation decisions in both the private and public debt markets. The results of the ANOVA confirm the theoretical framework of the study including the risk-return tradeoff theory and the illiquidity premium theory covered in the literature review. The theories imply that investors react to market conditions by moving funds to investments that have better risk/return characteristics.

Furthermore, the statistically significant regression model enhances the credibility and validity of the overall analysis of the research. It validates the chosen variables, making them relevant and appropriate to explore the dynamics of the private credit market (Zapf, Wiessner and König, 2024). In addition, the results offer empirical support for the thesis that the general environment in which the economy operates has a strong influence on the nature and level of the growth and investment of private credit funds.

Table 5: Regression Model Summary- Coefficients

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.271	118.376		.332	.740
	Marco Credit Spread	139.053	25.467	.227	5.460	.000
	Macro: VIX / VSTOXX	8.405	5.166	.087	1.627	.104
	Macro: Interest Rates	84.403	11.862	.336	7.115	.000
	Funds' Investments (Bond Returns)	14.723	22.161	.031	.664	.007
a. Dependent Variable: DV1: Fund Size						

The coefficient table shows in detail the contribution to the size of the private credit fund of each independent variable when all other variables are fixed.

Constant:

The constant coefficient is (39.271) and significant at the value of (0.740). Since the significance level is greater than 0.05, the constant term is statistically significant. This means that the regression-predicted size of fund is statistically meaningful when all other independent variables are set to zero. But the constant is not the one most important to interpret as the study primarily focuses on the effect of the explanatory variables.

- **Macro Credit Spread**

The coefficient for macro credit spread is 139.053, the beta coefficient is 0.227, and the significance value is 0.000. The result shows that the size of private credit funds and credit spread are statistically significant. Moreover, for a given set of other factors, a rise in credit

spread by one unit is correlated with a rise in fund size of some other units. The beta coefficient also supports the direct relationship between the variables.

The study results indicate that tightened credit spreads have a moderate impact on the growth of credit investment. The higher the credit spreads, the more uncertain the market, the riskier the default, and the tighter the lending conditions. At these times, investors might be moderately inclined to participate in private lending operations, leading to slower growth in funds and lower investment allocations.

This finding is consistent with the financial market theory that states that increased credit risk dampens investor confidence and subsequently inhibits financing activity. Bigger spreads can also be a sign of worsening economic conditions where borrowers put themselves at higher risk of defaulting, which will deter private credit investments on a large scale (Christensen, 2024).

A result of this study, from the private credit fund perspective, it shows that despite their resilience and higher returns, they are not immune to macroeconomic stress. While private credit can provide high yields in times of spreads expansion, too much market risk can impact the growth of investment and fund expansion.

- ***Market Volatility (VIX)***

The coefficient for market volatility (VIX) is 8.405 with a beta coefficient of 0.087 and a significance value of 0.104. The significance value is greater than the 0.05 level, so the market volatility fund size correlation is not statistically significant. The coefficient is positive, but the lack of statistical significance suggests that variations in market volatility do not have a significant direct effect on the size of private credit funds in the range of years studied.

This is an interesting discovery, especially since the traditional financial markets tend to have significant investment volatility during times of high volatility. But private credit investments differ from publicly traded securities in that they are less frequently marked to market, and in that they are, for the most part, structured in a way that is less liquid and has longer investment horizons. Therefore, private credit fund managers and institutional investors might not be as sensitive to volatility shocks as public market investors. This could be why volatility has only a modest impact on fund size.

Further, the discovery might imply that in spite of market volatility, institutional investors are still investing in private credit due to its income-generating nature and diversification merits. Thus, the impact of volatility on investors' mood in the public markets can be a significant factor in the growth of private credit funds, but it seems to be less direct in this model.

- ***Interest Rates***

One of the most pronounced and statistically significant relationships in the regression model is the relationship between interest rates. The interest rate coefficient is (84.403), the standardized beta coefficient is (0.336), and the significance is (P – value is 0.000). The result shows that the size of private credit funds and the interest rates are positively related. In particular, there is an 84-unit change in fund size for every unit increase in interest rate, all else equal. Many private credit loans are floating-rate, which would, in large part, account for the positive relationship. Bonds or annuities may suffer when interest rates are rising, while private credit investments can be enhanced when interest rates are rising, as the yields on loans will rise as well (KKR, 2023).

Private credit investments, therefore, may become more appealing compared to traditional bonds when interest rates rise. Therefore, investors with a focus on higher income and insulating themselves from inflationary pressures may choose to invest more in private credit

funds, leading to increased fund size. This discovery is very supportive of the theoretical aspects presented in the previous part of the dissertation, especially the risk-return tradeoff theory and the theory of illiquidity premium. The result also confirms the findings of previous studies to indicate that private credit has a relatively good performance during monetary policy tightening periods.

Moreover, the positive sign of the beta coefficient suggests that interest rates are one of the most important factors impacting on the growth of private credit funds in the model. This shows that monetary policy can make a big difference in investor allocation in alternative credit markets.

- ***Bond Returns***

The coefficient for bond returns is (14.723) with a beta coefficient of (0.031) and a significance value of (0.007). Although there is a significant relationship between both the variables as p-value is lower than (0.05), there is moderately positive influence of the returns on bond performance on the size of private credit funds. The moderate relationship shows lower yet significant interlink, meaning that the growth of private credit funds is moderately affected by the growth of traditional fixed income returns over the period.

This finding could signal that private credit is becoming treated as a distinct asset class, instead of just a bond alternative. While comparing yields is one reason, institutional investors may invest in private credit for other factors such as diversification or illiquidity premiums and through private lending opportunities. Furthermore, the minimum significance in the relationship indicates that the growth of private credit funds slightly linked to macroeconomic conditions or structural shifts in markets and more associated with short-term changes in public bond market returns.

The discovery is significant as it sheds light on the changing nature of private credit in institutional portfolios. Private credit does not necessarily compete with conventional fixed income investments but, instead, can serve as a complementary alternative asset class that possesses unique risk-return attributes.

4.4.2. Model II: Dependent Variable: Funds Returns (IRR):

The first model of the regression analysis is directed towards assessing the impact of selected macroeconomic variables, the performance of traditional fixed income markets, and returns of private credit funds in the form of IRR. Fund Returns (IRR) is considered the dependent variable due to being the key dependent measure to assess the profitability and performance of private credit investments in this regression model. In the analysis, independent variables considered were macro credit spread, market volatility, measured by the VIX index, interest rates and returns on bonds. These variables are chosen based on theories and past empirical research that indicate that wider economic and financial market conditions are important for determining the performance of the private credit market.

This regression model is used to identify the significance of the fluctuations in the macroeconomic and market conditions on the returns earned by private credit funds in the period of study. The determinants of fund performance have gained a great deal of significance in academic and practical investment research for two reasons: first, institutional investors have adopted private credit investments as an alternative to traditional fixed income investments, and second, the majority of private credit investments are backed by assets.

This analysis is important in the context of the dissertation as one of the major aims of the study is to compare the private credit funds' returns and sustainability with traditional fixed income investments during different economic conditions. The features of higher yields, floating rates, and illiquidity premiums make private credit funds seem like a good income-

generating investment. But there is some doubt about the impact of macroeconomic risk factors, market uncertainty and overall financial conditions on these returns.

The regression model thus suggests empirical evidence of the vulnerability of private credit returns to economic conditions and financial market shifts. The analysis also addresses the question of whether the returns of private credit are mostly led by macroeconomic conditions, or rather are relatively independent of the returns on public markets. Therefore, the results advance the knowledge on the risk-return relationship, resiliency, and investment practices of private credit funds versus traditional fixed income investments.

Table 6: Regression Model 2 Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652 ^a	.426	.421	.97017
a. Predictors: (Constant), IV4: Funds' Investments (Bond Returns), IV1: Marco Credit Spread, IV3: Macro: Interest Rates, IV2: Macro: VIX / VSTOXX				

The Model Summary table summarizes the explanatory power, predictive power and overall reliability of the regression model in Model II. The aim of this model is to explore how the availability of selected macroeconomic and financial market variables affect the returns of private credit funds, which are presented in the form of Internal Rate of Return (IRR). The model uses macro credit spreads, market volatility (VIX), interest rates, and bond returns as independent variables, with IRR as the dependent variable. Statistics in the model summary are crucial as they provide information on the extent to which the variables chosen in the model explained the changes in the performance of private credit funds over the period studied.

The results reveal that the R value is (0.652), meaning that there is a strong positive relationship between private credit fund returns and the independent variables. The overall correlation between the predicted values obtained from the regression model and the actual observed

values of IRR is indicated by the R value. In financial and economic studies, the number 0.6 is typically used as a benchmark for a relatively strong association level, implying that the set of selected macroeconomic variables collectively has a significant explanatory power on the performance of the private credit funds.

The discovery suggests that changes in interest rates, market volatility, credit spreads, and bond market conditions are closely related to changes in private credit returns. Model II shows a much stronger relationship between the independent variables and the dependent variable, whereas Model I only shows a relationship for fund size and results in a lower R value. This indicates that macroeconomic conditions play a higher role in the profitability of private credit and investment returns than in overall fund growth or fund size.

The R Square value is reported as (0.426), which indicates that about 42.6% of the fluctuations in the private credit fund returns are explained by the combined effect of the independent variables selected. That is, changes in macro credit spreads, market volatility, interest rates and traditional bond market returns account for almost half of the variability in IRR in the specified period of study. In financial market research, such an explanatory power is regarded as relatively high, as investment returns are affected by many factors, none of which can be controlled or predicted by the researcher.

Thus, the ability to explain (42.6%) of the variability in private credit returns with macroeconomic and financial conditions underscores the importance of such factors in explaining the performance of private credit funds. The findings indicate that private credit returns do not occur randomly and are not independent of the general market trends. Instead, it is sensitive to monetary policy, credit market risk, and financial stability.

The results also show that interest rate fluctuations, risk perceptions of investors, and alterations of the loan market have a great impact on the profitability of private credit

investments. This is particularly relevant given the fact that private credit funds are now considered to be alternative investments with medium-term, more predictable return rates and higher returns than fixed income alternatives. The reasoning of this model then leads to the conclusion that macroeconomic conditions play a key role in private credit performance.

Adjusted R Square of (0.421) means that the amount of variability in IRR not explained by the predictors selected in the model is about 42.1% when the number of explanatory variables in the model is taken into account. The adjusted R-squared is a better indicator than the R Square since it takes into account the potential for over-fitting the model by adding an unnecessary variable.

The difference between the R Square value (0.426) and the Adjusted R Square value (0.421) is very small, which illustrates a statistically stable, reliable, and well-specified regression model. The result indicated that the independent variables selected played a significant role in explaining the changes in returns of private credit funds and that the model was not over-fitted by using unnecessary variables. From a practical point of view, this validates the choice of macroeconomic variables in the analysis of the performance of private credit for the purposes of this dissertation.

Table 7: Regression Model 2 Summary- ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	372.960	4	93.240	99.061	.000 ^b
	Residual	503.561	535	.941		
	Total	876.522	539			
a. Dependent Variable: DV2: Fund Returns (IRR)						

The ANOVA table is used to test the overall statistical significance, validity and reliability of the regression model developed in Model II. In regression analysis, the ANOVA table is used

to see if the combination of the chosen independent variables explains a significant percentage of variation in the dependent variable. In this study, we use the ANOVA analysis to evaluate if macroeconomic factors and fixed income market indicators are significant determinants of returns for private credit funds (as measured by the Internal Rate of Return (IRR)).

The ANOVA results separate the overall variability of the dependent variable into regression variance and residual variance. The regression sum of squares is (372.960), and the residual sum of squares is (503.561). The regression sum of squares is the variance of returns that the private credit funds have in the model after eliminating the variation due to the independent variables chosen in the model: market volatility (VIX), interest rate, private credit fund returns, and macro credit spread variance. The residual sum of squares on the other hand, reflects the amount of variation in the fund returns that is not accounted for by the regression relationship and it may be due to other explanatory or unobserved factors not considered in the regression.

The relatively large R^2 indicates that the macroeconomic and financial market conditions account for a large share of the variation in the returns of private credit funds. The result of this finding indicates that the variables measured in this study have explanatory power that is meaningful to describe the performance of private credit in the study period. While there is some unexplained variation, as there always is in research for financial markets due to uncertainty and external shocks, the model still accounts for a good share of the variation in IRR (Roth, 2026).

The results, therefore, have implications for the general thesis of this dissertation as regards the relationship between the performance of private credit funds and macroeconomic conditions and the evolution of financial markets. The results show that private credit is not an autonomous source of returns in the economy. Rather, they are very sensitive to changes in the

conditions of credit, to uncertainty about the market, to the conduct of monetary policy, and to the riskiness of financial markets.

An F-statistic value of (99.061) is also reported in the ANOVA table. The F-Test is one of the most useful test statistics in regression analysis as it assesses the overall significance of the regression model. That is, it determines if collectively all the independent variables provide a significant increase in the predictive power of the model compared to one without any independent variables.

The significance level of the F statistic is given as 0.000. This value is significantly lower than the accepted level of significance of (0.05), therefore, the regression model is statistically significant. This is a very low chance due to randomness. Therefore, the null hypothesis that states that there is no relationship between the independent variables and the private credit fund returns are rejected.

The very high F-statistic also shows that the regression model has a strong explanatory power and statistical validity. From the practical perspective, this signifies that the set of macroeconomic variables chosen significantly and meaningfully affects private credit fund returns over the study period. As a result, the model is able to offer substantial empirical support for the link between economic conditions and private credit performance.

This significant ANOVA result in this dissertation is of great importance because it validates the strong relationship between private credit returns and financial and economic developments. The results indicate that despite being private and illiquid, private credit investment is not entirely immune from the public financial market conditions. Instead, the credit performance of private credit is affected by shifts in market volatility, credit risk, interest rates and investor sentiment (Josh, 2024).

For instance, the impact of an increase in interest rates can be a positive effect on private credit returns due to floating-rate loan structures, or lender returns and risk premiums can rise as spreads widen. At the same time, uncertain events in the market can change the nature of credit deals and their quality of borrowers, and thus the profitability of private credit funds.

The results of the ANOVA further support the theories discussed in the previous part of the dissertation, namely the Risk-Return Tradeoff Theory and the Illiquidity Premium Theory. Risk-Return Tradeoff Theory: Investors require higher returns when they take on more financial risk (Chen, 2024). The statistically significant association between the macroeconomic variables and IRR helps to substantiate the notion that private credit returns are closely associated with economic risks and market conditions.

Similarly, according to the Illiquidity Premium Theory, investors need extra return for investing in illiquid assets like private credit. The results suggest that macroeconomic uncertainty and market conditions do have an impact on perceptions of the liquidity and risk of the borrower, as returns demanded by private credit investors vary significantly.

Additionally, the significant ANOVA results enhance the confidence and validity of the regression model. The results validate the choice of the independent variables as suitable and relevant for study in the determinants of performance of private credit funds. This makes the conclusions about the relationship between private credit returns and macroeconomic conditions in the study more reliable.

Table 8: Regression Model Summary- Coefficients

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.091	.258		31.420	.000
	Marco Credit Spread	.387	.055	.240	6.989	.000

	Macro: VIX	.060	.011	.233	5.306	.000
	Macro: Interest Rates	.486	.026	.733	18.831	.000
	Funds' Investments (Bond Returns)	.071	.048	.057	1.481	.039
a. Dependent Variable: DV2: Fund Returns (IRR)						

The coefficient table allows for a more granular understanding of the specific impact of each of the independent variables on returns to private credit funds when other variables are held constant.

- ***Constant***

The value of the constant coefficient is (8.091) and its significance value is (0.000). Since the significance level is below 0.05, the constant term is statistically significant. The constant value shows that if the values of all the independent variables are zero, then the expected return on the private credit fund (IRR) will be about (8.091%).

The baseline return is important since it offers a sense of the potential for positive returns from private credit funds beyond the direct impact of the macroeconomic variables selected. This outcome confirms the income-generating aspect of private credit investments and further reinforces the notion that private credit is still appealing given its relatively stable return characteristics.

- ***Macro Credit Spread***

The macro credit spread has a coefficient of (0.387), the standardized beta coefficient of (0.240) and a significance value of (0.000). The finding suggests a strong positive relationship between credit spreads and private credit fund returns that is statistically significant.

For every one-unit increase in credit spread, the IRR is estimated to increase about (0.387) units, *ceteris paribus*. The positive beta indicates that the widening of credit spreads does indeed positively affect the private credit fund.

This is economically sensible since the credit spreads are wider in general, implying that lending risk is associated with greater compensation. Private lenders may require more interest rates and more stringent lending conditions during times of higher credit risk, thus boosting the return on private credit investments.

The finding is highly in favor of the risk-return tradeoff theory which was reviewed in the literature. The theory is that investors need to be paid more to take on more credit and default risk. Hence, the wider the credit spread, the better it is for private credit funds because they can earn more on their credit and their potential return increases.

But the outcome also implies that a portion of the returns could be due to an increase in borrower risk and economic uncertainty. As such, spread widening can help boost profits, but can also make companies more susceptible to default and financial distress in a downturn.

- ***Market Volatility (VIX)***

The coefficient of the market volatility (VIX) is (0.060) and the beta coefficient is 90.233, and the significance value is (0.000). This suggests that there is a positive relationship between market volatility and returns of private credit funds that is statistically significant.

The positive sign indicates a positive correlation; that is, when uncertain and volatile market conditions increase, so do the returns of private credit. This result is initially puzzling as volatility tends to have a negative impact on traditional financial markets. Private credit markets are still very different from public equity and bond markets, however. Banks and public lenders could see a decline in lending during periods of market volatility due to increased risk

management policies and uncertainty. The opportunities brought by this allow private credit funds financing under more generous conditions and higher yields.

This helps to give private credit funds greater power to negotiate and a greater risk premium during stress periods. This discovery is thus consistent with the notion that private credit is able to do a relatively good job in less than optimal economic conditions versus traditional fixed income investments. Furthermore, the outcome incorporates the under-liquidity and/or private credit negotiations of private credit investments, which can limit initial exposure to public markets volatility, but may also enable lenders to earn higher rewards.

- ***Interest Rates***

In the regression model, interest rates have the greatest connection to the returns of the private credit funds. The coefficient for interest rates is 0.486, which standardized coefficient has a value of 0.733 and a significance value of (0.000). The result suggests a very strong positive correlation, and statistically significant, between interest rates and private credit returns. A rise in the interest rate of 1 unit would cause the IRR to increase by about 0.486 units. The model's interest rates beta coefficient of 0.733 indicates that interest rate is the most significant variable that influences the performance of private credit funds.

The finding is quite similar to that of private credit investments, which tend to be short-term and are often held by individuals. Many private credit loans are floating-rate loans, that is, loan yields rise automatically with rising benchmark rates on credit. Therefore, increased interest rates directly benefit the income of private credit funds in the rising interest rate environment. Traditional fixed-income securities, on the other hand, tend to lose value when interest rates rise. This is one of the key benefits of private credit over traditional fixed income markets, therefore, and suggests the interest rate-private credit return relationship.

The outcome is also impacted by the post-2021 monetary tightening cycle in global financial markets, which drove up interest rates making floating-rate private credit more attractive.

- ***Bond Returns:***

The coefficient for bond returns is (0.071), and the beta coefficient is (0.057) with a significance value of 0.039. The significance value is greater than 0.05, so the relationship between the bond returns and the returns of private credit funds is statistically insignificant.

This finding shows that the returns of traditional fixed-income markets had minimal impact on private credit fund performance over the time period analyzed.

This discovery implies that the returns of private credit are less dependent on public bond market returns. This could be due to the different underlying characteristics, customer base and valuation process of private credit investments.

Private credit investments involve less frequent mark-to-market, custom tailored terms and are negotiated privately, in contrast to publicly traded bonds. This means that private credit performance might be more sensitive to the direct lending standard and relationship with borrowers than to short-term bond market volatility.

This discovery is significant because it backs the diversification advantages of private lending in institutional portfolio. Private credit returns seem to be relatively unrelated to that of traditional bonds, and therefore, private credit can help investors limit their exposure to public, fixed-income markets.

4.5. Chapter Summary:

The chapter presented empirical results and statistical testing of the risk-return relationship of private credit funds versus traditional fixed income investments. The data was tested using

descriptive statistics, correlation testing, and regression models to examine the relationship between private credit and macroeconomic variables and financial market variables. The descriptive statistics indicate the performance and distribution patterns of the various variables within the study time period. The correlation tests illustrate significant relationships between interest rates, credit spreads, fund size, and returns, indicating that the performance of private credit investments is affected by macroeconomic conditions. The results of the regression analyses show that the macroeconomic variables significantly influence the fund size and fund performance (IRR) of private credit funds.

Moreover, interest rates and credit spreads appeared to have had a significant impact on private credit performance, with other variables exhibiting less clear impacts. The results also support the idea that the return of private credit funds are significantly related to macroeconomic and financial market conditions rather than being completely isolated from public markets. This chapter generated and evaluated significant evidence on the relationship between private credit and the macro-financial conditions. The results offer a basis to understand if private credit funds can offer a more competitive risk-return profile compared to public markets and conventional fixed income investments. In the subsequent chapter, discussion focuses on interpretation of results by putting them in the context of the relevant literature, theory and broader impact on the financial markets and investors.

Chapter 5: Discussion

Based on this explanatory correlation and regression results, this study shows that private credit funds (measured by Internal Rate of Return (IRR)) significantly exceeded the traditional fixed income investments during the study period. This observation is in line with what has been reported in the previous studies. Böni and Manigart (2022) showed that returns of private debt funds differ significantly both within and between vintages and strategies and that the top performing funds generate significant premiums over the returns of public market counterparts.

Likewise, Block et al., (2024) polled private debt funds and discovered that the total returns on these funds have always been greater, compared to similarly rated public bonds, which incorporates some of the illiquidity and complexity premiums inherent in private credit structures. The result is also consistent with Davydiuk et al., (2024), who reported that the spreads that direct lenders in the US middle market received on their leveraged loans were significantly higher than the spreads on leveraged loans. The average positive returns of a bond,

however, is an informative element of the macroeconomic context of this study. The 2021-2025 period saw central banks embark on an extremely hawkish monetary tightening cycle, with the European Central Bank (ECB) leading the way with highly aggressive rate hikes in response to high inflation. This rate environment resulted in mark-to-market losses on fixed-rate bonds, especially of investment-grade bonds with longer durations. This is exactly what is discussed in the study of Sabu (2024), where the author calls attention on the increased duration risk associated with an up-trending rate cycle and bond pricing sensitivity to the rate cycle.

The present research is different from previous studies in terms of geographical focus. The seminal work on private credit performance, such as Kaplan and Schoar (2005) and Harris, Jenkinson and Kaplan (2014), focuses on North American fund data, but in this study the authors use panel data from ten economies in the European Union. The private credit market has expanded considerably in Europe, as well as in North America, but the institutions, regulations and borrowers are different (IMF, 2024).

5.1. Excess Performance and Benchmark-Adjusted Returns:

The regression results of Model II, regression of private credit fund returns (IRR) on interest rates show that the interest rates have a statistically significant and positive relationship with private credit fund returns (IRR) ($\beta = 0.486$, $p < 0.001$). This may be the most significant discovery from a performance perspective based on a benchmark. During a traditional fixed-income period, higher rates mean lower bond prices, and thus lower overall returns. In private credit, on the other hand, most direct lending instruments have floating rates, so that a higher benchmark rate corresponds to higher coupon income, which can boost the fund's returns. This phenomenon also aligns with the excess return rationales behind the illiquidity premium and benchmark-adjusted methodologies described by Suhonen (2024), who identified the small-

cap value and leveraged loan risk factors direct lending returns represent that do not exist in traditional investment-grade or high-yield benchmarks.

The credit spread variable also had a significant positive correlation with fund returns ($\beta = 0.387, p < 0.001$), suggesting that increasingly higher credit spreads (which are generally seen as bad credit conditions/risk buying sentiment) were correlated with higher IRRs for private credit funds. This appears at first glance to be against the theory, since during periods of tight credit apparently the private credit market gets the better of pricing; however, it fits the theory that when credit tightens, borrowers will be forced to pay higher spreads for the credit that is available when they have no option to obtain it from the public credit market. Avalos et al (2025) attribute this to the global drivers of private credit, which they describe as: “bank credit contraction and higher corporate spreads are associated with higher private credit issuance and better lender pricing.”

The volatility variable (VSTOXX) is also statistically significant for the fund returns with the lower magnitude, $\beta = 0.060, p < 0.001$. This result is quite similar to that reported in the broader risk adjusted returns literature on alternative investments. Private equity returns contain payoffs for systematic risk factors not reflected in simple benchmarks, and the positive volatility coefficient here confirms such a mechanism in private credit, as argued by Jegadeesh et al., (2009). In times of higher market uncertainty borrowers are willing to pay more for their credit for financial certainty, and just because private credit funds are bilaterally negotiated and illiquid, they can make the most of it. According to Cai and Haque (2024) contend that this opacity and structural flexibility of private credit allows managers to earn risk-adjusted returns that are not a full part of risk compensation, and that this interpretation is in line with the excess returns observed in this study.

In Model II, however, bond returns are statistically significant and related to fund returns ($\beta = 0.071, p = 0.139$), suggesting that the performance of private credit funds is driven by different factors than that of the traditional fixed income benchmarks, in the short run. The result is consistent with previous studies by Lehtipuu (2025) which studied the performance of private credit sub-asset classes and concluded that short-run co-movement of public bond indices with private debt returns is low.

5.2. Performance Persistence among Private Credit Fund Managers:

The fund size variable had a significant positive correlation with the fund return ($r = 0.366, p < 0.001$) and was also significant in the regression model for IRR (Model II). This is in line with the theory that larger, more established fund managers have more risk-adjusted return due to their typically higher deal flow, superior borrower access and more sophisticated structuring capabilities. In the seminal paper on private equity, Kaplan and Schoar (2005), were among the first to show that the persistence of performance is strongest among the top quartile managers, and that manager selection is an important determinant of private markets outcomes for investors.

Böni and Manigart (2022) specifically looked at persistence in private debt funds and concluded that historic performance is relevant for future performance, especially in the direct lending business. Novelli and Pignataro (2026) also suggest that the quality of the decisions made and the governance process of private credit are important factors for return persistence, and manager-level heterogeneity is a major contributor to the cross-sectional return dispersion for the asset class. The methodological approach followed in the study of Kaplan and Schoar (2005) and Böni and Manigart (2022) is not directly tested in this study, which emphasizes the test of the fund's performance in sequence. The adoption of fund size as a persistence proxy

has its own set of limitations because fund size is a measure of the past success of the fund's fundraising efforts, not an actual measure of sequential return persistence. .

5.3. Impact of Macroeconomic and Market Conditions on Private Credit Returns:

However, the macroeconomic environment has had a particularly strong impact on the performance of private credit funds over the course of this study (2021-2025), and the empirical results of this study bear out the fourth research objective. The interest rate was the most significant predictor of fund returns of all variables tested (standardised $\beta = 0.733$, $p < 0.001$), as mentioned above. This is a direct result of the ECB's consistent rate-hike policy since 2022—in response to the post-pandemic inflation and significantly increased the floating-rate coupons that private credit funds on their loan portfolio receive, leading to an increase in IRR. The result is also in line with Suhonen (2024) who documented the return dynamics of macro-bonds and with the IMF (2024) finding that the increasing rate environment benefited private credit funds to a greater extent than fixed-rate bond holders.

The positive and significant credit spread coefficient further supports the notion that private credit returns are sensitive to the credit cycle in a unique manner. Similarly, Farounbi, Okafor and Oguntegbe (2021) report on the same pattern in their comparative study of private debt and conventional bank lending in emerging economies: when credit stress occurs, private lenders earn more risk premium, due to the absence of mark-to-market pressure and the ability to negotiate covenants that benefit the private lender's downside.

The positive correlation between credit spreads and fund size ($\beta = 0.227$, $p < 0.001$) for Model I is also notable. The figure implies that the more credit risk is perceived, the more investment capital goes into private credit funds, which may be due to investor caution in times of stress, or due to the substitution of investment capital into more liquid instruments. The finding is consistent with those of Avalos et al., (2025) who find credit cycle conditions to be a significant

driver of growth in private credit AUM, and with the BIS-level worry that private credit markets, though resilient in mild downturns, have not yet been tested in severe financial crises. The IMF (2024) also cautions that private credit is currently at a “high level” that has not been seen in the past during a major stress cycle, and that the lack of transparency in valuations could exacerbate systemic risk during a stress cycle.

Unlike many of the preceding studies, the focus of this study is not on the US private credit market, but rather on the European private credit market, and furthermore on a time frame that covers the post-pandemic recovery as well as the subsequent rate normalization cycle. The results validate the broader European picture of macroeconomic forces driving the returns on private lending that is observed in the literature of the United States, and also account for some aspects of monetary policy transmission in Europe, including ECB rate decisions and ECB spreads in the Euro area.

Chapter 6: Conclusion and Recommendations

6.1. Conclusion:

The purpose of the study is to analyze the risk–return relationship between private credit funds and conventional fixed income investments for the time frame of 2021 to 2025. The primary objective was to identify if private credit provides better risk-adjusted and benchmark-adjusted returns and if macroeconomic and financial market conditions, including credit spreads, interest rates, volatility (VIX), and the performance of the bond market, affect the returns.

The empirical findings indicate that there is a significant relationship between the performance of PCFs and the macroeconomic variables. The interest rates, the credit spreads, and the volatility of market were found to have significant impact on fund returns (IRR) as well as fund size in both correlation analysis and regression analysis. The regression results showed, in particular, that interest rates and credit spreads were the most important factors of the private credit returns, which is an indication of their sensitivity to monetary policy and the conditions of the credit market.

A major result of the study is that private credit returns are far from being independent of public financial markets. Despite the marketing of private credit as an alternative asset, asset class that is much less correlated, the findings suggest that it remains sensitive to the macroeconomic cycles and indicators of financial stress. This calls into question the notion of the private credit as a completely stable or insulated investment category.

Currently, the analysis validates a high return potential of private credit, especially when credit spreads widen and interest rates rise. This highlights why private credit is more inclined to offer floating-rate returns and illiquidity premiums, which enable it to offer superior returns than standard fixed-income securities.

6.2. Limitations:

Though the findings are important, the limitations should be considered when interpreting the results of this study.

- Firstly, the study is based on published data sources such as financial databases and macroeconomic indicators. These sources are common in academic research and are considered to be reliable but may still have limitations in terms of reporting errors, methods of estimation, and the consistency of the data sets. In particular, private credit data is generally provided on the basis of internal reporting of the funds, and may not reflect current market valuations.
- Secondly, the study is limited due to the data availability issues on Private Credit Funds. Private credit markets do not have high frequency, transparent market pricing as in traditional bond markets. Consequently, IRR is adopted as the main performance indicator, and known pitfalls of IRR include cash flow assumptions and timing bias. This could make the returns on a fixed income security less comparable with returns of other fixed income securities traded publicly.
- Finally, the study is limited to a relatively short period of study (2021–2025). While this window is important for the economy – including the post-COVID era and interest rate increases – it does not necessarily reflect the long-term structural response of private credit markets to various economic cycles, including very deep recessions.

6.3. Recommendations:

This study yielded some recommendations for investors, fund managers and future researchers.

- The findings indicate that investors should not simply blindly replace conventional fixed income assets with private credit; rather, they need to assess the risks associated with private credit thoroughly. Private credit has higher return potential, but is very sensitive to macro conditions such as interest rates and credit spreads. Thus, the investor should take into account economic cycles when distributing investment into private credit funds. Expected interest rate changes and credit market conditions should be taken into account in make-up allocation strategies.
- Investors are also encouraged to invest in a mix of private credit and traditional fixed income assets instead of investing too much in one asset class. This is because private credit has the potential to deliver better returns in some market contexts but it is not necessarily the best performer in all situations compared with bonds.
- The results are particularly relevant for fund managers, who should pursue a more flexible investment approach based on macroeconomic conditions and cycles. During periods of interest rate increases and rising credit spreads, private credit funds can offer better returns, potentially offering strategic opportunities. But under conditions of low rates or rate cuts, risk management and borrower selection become a more important issue.
- Future research is recommended to use a longer time period and finer-grained data, such as loan-level cash flows and default data. Furthermore, future research may benefit from using other nonlinear models or machine learning to better explain the nonlinear relationships between macroeconomic conditions and private credit performance. Moreover, the analysis of regional disparities in the credit market could give more information on the risk-return relation in the world market.

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Appendices

Appendix A: Analysis Graphs

