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"Macro and Micro Factors Affecting Hedge Funds in India and Their Investment Strategies"

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ABSTRACT

This paper evaluates the performance of the Indian hedge fund database for the period of 2009- 2021 by taking a hedge fund (Eureka India Hedge Fund) to understand in-depth practical analysis. Comprehending the investing techniques utilized by hedge funds is crucial for regulators, scholars, and investors in the ever-changing financial markets. This research explores the world of Indian hedge funds intending to reveal the tactics they employ using a thorough regression analysis of the variables affecting investment returns, this study clarifies the effectiveness and distinctiveness of various approaches in the Indian financial landscape. There is a paucity of literature that particularly addresses the hedge fund environment in India because previous studies on hedge funds have primarily concentrated on developed economies. Research examining hedge fund tactics across borders offers insightful information about the larger framework of investing methods. Typical approaches have different risk-return profiles, such as macroeconomic, statistical arbitrage, event-driven, long-short equities, and macro. Despite this expansion, little is known about the precise investing strategies used by Indian hedge funds and the factors that influence their performance. Regression analysis is used in this work to try and close this gap by deciphering the complex methods that Indian hedge funds deploy and to analyse the macro and micro factors affecting hedge fund returns.

The study's conclusions provide insightful information on the investing methods used by Indian hedge funds. Significant correlations between fund attributes, market variables, and performance measures are shown via regression analysis. This study helps in making educated decisions in the Indian financial environment by explaining the nuances of investing methodologies and their performance determinants. The results highlight the significance of taking fund features and market dynamics into account when assessing hedge fund performance and point to areas that need more investigation in this emerging subject.

Keywords - Hedge Fund Strategies, Risk-Return Dynamics, Indian Market Landscape

1. INTRODUCTION

Unveiling the Strategies: A Regression Analysis of Investment Approaches in Indian Hedge Funds

Due to their reputation for using unusual and sometimes aggressive investing tactics to produce large returns, hedge funds have become important actors in the Indian financial scene. Investors who want to understand the internal workings of hedge funds face significant obstacles due to the inherent complexity and opacity of these operations. Inspired by the need to understand the nuances of Indian hedge funds' returns and investing strategies, this study sets out to explore this domain. The fundamental approach involves regression analysis, a powerful statistical instrument, to thoroughly examine the variables that influence investment returns as well as choices in this industry. Also, Hedge funds' attraction is rooted in their aptitude for smartly and creatively navigating the financial markets and frequently using advanced strategies to take advantage of market inefficiencies. In India, where the financial environment is distinguished by a special combination of chances and difficulties, it is critical to grasp the tactics used by hedge funds. Such complexity and strategy add to this difficulty, knowing that hedge fund operations are a type of activity which is performed in an opaque manner. Investors are left with the distress of finding a direction in these stubborn shadows while threading the eye of the needle.

In this context, regression analysis shines as a guiding light, providing a methodical means of pinpointing the factors that influence hedge fund investment returns and decisions. Through an analysis of a broad dataset that includes a range of fund attributes, market factors, and performance measures, this study seeks to clarify the enigmatic character of Indian hedge fund strategies. Linear Regression analysis is employed in this study to discover the primary elements that impact investment decisions and to extract the core of these strategies. The link between fund features, market dynamics, and hedge fund performance is a central focus of the inquiry. What effect does currency fluctuation have on risk-adjusted returns, and what role does fund flow play in determining investing strategies? Based on the state of the market or other economic data, are there any obvious trends in the performance of hedge funds? These inquiries function as the regression analysis's compass, directing it in the direction of a more thorough comprehension of the variables influencing hedge fund investments in India. This discovery has far-reaching ramifications that go well beyond the purview of academic study.

Regression analysis findings may be of great assistance to investors who are debating whether or not to invest in hedge funds.

Investors may better match their investing strategies with their preferred risk-return profile by understanding the factors that influence hedge fund success. In the same way, regulators charged with keeping an eye on the financial system would gain from knowing more about how hedge funds operate. Regression analysis insights can help shape regulatory frameworks, ensuring that hedge funds function within bounds that protect investor interests and market integrity. To sum up, this study is an attempt to shed light on the mysterious world of Indian hedge funds. Regression analysis is used to shed light on the variables that influence investment choices in this industry, providing knowledge that can be used in both investment plans and regulatory frameworks. This research attempts to promote a broader knowledge of the role hedge funds play in the Indian financial landscape by dissecting the intricacies of hedge fund operations. This will ultimately lead to more informed decision-making and a more robust financial system.

2. BACKGROUND

The Rise of Alternative Investments in India: Exploring Hedge Funds and AIFs

The Indian financial landscape has witnessed a significant evolution in recent years. The emergence of alternative investment options, particularly hedge funds and Alternative Investment Funds (AIFs), reflects this changing paradigm. This chapter delves into the characteristics, regulations, and investor considerations surrounding these investment vehicles.

2.1. Indian Hedge Funds: A New Chapter in Investment Strategies

Hedge funds, a globally established asset class known for their complex strategies and active management, have found a foothold in India. CapVeda, credited as the nation's first market- neutral hedge fund, exemplifies this trend. These funds employ a diverse toolkit, potentially incorporating leverage, short selling, and derivatives, to achieve their high-return objectives. However, this complexity necessitates regulatory oversight. The Securities and Exchange

Board of India (SEBI) plays a crucial role in governing Indian hedge funds, outlining specific guidelines to ensure investor protection and market stability.

The rise and expansion of hedge funds reflect a dramatic shift in the available investment options within the everchanging Indian financial environment in these cases. Despite being relatively new in comparison to Western markets even

then the idea of hedge funds has gained a lot of momentum recently due to a combination of reasons such as shifting investor tastes, market dynamics, and regulatory frameworks. Hedge funds, which were once thought to be exclusive investment vehicles for wealthy and institutional investors looking for alpha- generating techniques outside of traditional asset classes also, have progressively made a name for themselves in the Indian finance scene in that case.

Apart from legal advancements, the growth of the trajectory of hedge funds in India has been significantly influenced by market dynamics and investor preferences at large. Hedge funds have become more and more appealing investment alternatives for instance with their distinctive techniques and potential for better returns as investors look for ways to generate alpha and diversify their portfolios. A growing number of institutional investors, including family offices, pension funds, endowments etc., have made hedge fund investments because they understand how much they can improve portfolio performance and control risk at large. In addition, India has adopted hedge fund tactics more quickly as a result of technological improvements in many spheres and the globalization of financial markets. Hedge fund managers are better equipped to execute intricate strategies in the area and take advantage of market inefficiencies when they have access to a wider range of investment possibilities and advanced trading platforms that are here. As a result, hedge fund solutions have multiplied in India to meet the varied demands and preferences of investors at large.

2.2. A Broader Canvas: Understanding Alternative Investment Funds (AIFs)

AIFs represent a broader category encompassing various alternative investment vehicles in India. These funds pool capital from sophisticated investors, including high net-worth individuals (HNIs), institutions, and family offices. Unlike traditional mutual funds, AIFs offer access to a wider spectrum of assets. This may include unlisted companies, real estate, commodities, or derivatives, allowing for greater diversification within an investor's portfolio. Similar to hedge funds, AIFs often have high minimum investment thresholds, catering primarily to sophisticated investors with a higher risk tolerance.

The adoption of legislation for alternative investment funds (AIFs) in 2012 was a significant turning point in the growth of hedge funds in India to a very large extent. Greater clarity and openness were made available to investors and fund managers alike by the AIF laws, which established a specific legal framework for hedge funds and other alternative investment vehicles. By creating reporting standards there was, defining acceptable investing methods, and expediting registration processes, this regulatory framework improved investor trust and market integrity, also which in turn enabled the expansion of hedge funds.

2.3. Investor Considerations: Diversification and Potential Benefits

For investors seeking to diversify their portfolios and potentially achieve higher returns beyond traditional avenues, AIFs offer a compelling proposition. The flexibility in investment strategies allows AIF managers to exploit market opportunities that may be inaccessible through conventional methods. However, it is crucial to acknowledge the inherent risks associated with these alternative investments. The complex strategies employed by hedge funds and AIFs can lead to higher volatility and potential losses.

These affluent investors are looking for portfolio diversity and alpha production, which hedge funds may be able to provide with their special investing methods and approaches to risk management. However, the high costs and complexity of hedge funds may be unaffordable for smaller organizations and individual investors. Certain investor groups' access to hedge funds is further restricted by regulatory limitations and liquidity reasons. More alike Institutional investors are drawn to hedge funds because of their ability to successfully manage risk and improve portfolio returns, this happens especially for those with lengthy investment horizons. For example, pension funds must satisfy long-term responsibilities, for instance, so they look for assets that may reduce downside risk while producing consistent returns over lengthy periods.

2.4. Regulatory Framework: Ensuring Stability and Transparency

SEBI's AIF Regulations, 2012, act as the cornerstone for regulating both hedge funds and AIFs in India. These regulations categorize AIFs based on their investment strategy and mandate specific compliance requirements for each category. This regulatory framework fosters transparency within the alternative investment landscape, promoting investor protection and market integrity.

The journey of hedge funds in India can be traced back to the early 2000s decade when regulatory changes and market liberalization initiatives began to pave the way for their establishment in the whole nation-state. Initially, the regulatory environment posed challenges for the growth of hedge funds in those cases, as stringent regulations and capital controls limited the flexibility and scope of investment strategies at large. However, over time, regulatory frameworks evolved to accommodate the unique characteristics of hedge funds in many areas, allowing for greater participation and

innovation within the industry at large.

2.5 Features of Hedge Funds

This study aims to shed light on the most common investing approaches used by Indian hedge funds and investigate how these approaches affect fund outcomes. This study aims to determine the range of investment techniques used by hedge funds operating in India by a thorough review of data particular to the Indian market. It seeks to ascertain the frequency and importance of various strategies, including quantitative methods, event-driven investing, long/short equities, and macroeconomic strategies. This investigation aims to offer a thorough grasp of the Indian hedge fund industry's investing environment.

A basic trade-off at the centre of all this intricacy is whether the extra costs involved in participating in hedge funds outweigh the possibility of increased portfolio diversity and alpha production. The necessity for a comprehensive grasp of the benefits and downsides of hedge fund investments across a range of asset classes and investment strategies is highlighted by the continuing discussion in the investing sector in all this system. Hedge funds are popular because of their ability to provide alpha or returns that are higher than the market. Hedge fund managers use a range of investing methods like, from event-driven and macroeconomic approaches to microeconomic and fund-specific factors there are many, so in an attempt to take advantage of market inefficiencies and produce greater returns. Adding to it, Hedge funds can take advantage of opportunities that regular investment vehicles would miss by implementing methods like leverage, derivatives, or other advanced mechanisms that are not commonly used by standard investment funds. Further, it's been seen that while chasing alpha there are dangers of its own, which include increased volatility and the possibility of large losses such as during bear markets or unfavourable circumstances. The ability of hedge funds to provide portfolio diversity is another advantage that is said to exist. The very conventional asset types, like equities and bonds, move in tandem and are vulnerable to market fluctuations, particularly during times of market turbulence. It is to be noted that Hedge funds can provide a source of non-correlated returns by utilizing a variety of techniques and a broad range of asset classes which can improve a portfolio's overall risk-adjusted performance to all. Although, achieving true diversification through hedge funds requires careful due diligence and selection of strategies that exhibit low correlation with traditional asset classes as it is one of the most important aspects.

Hedge funds have some potential benefits of their own but they also have some significant disadvantages one of which is the expensive fee structure. Typically, hedge fund managers charge a performance fee, which is a proportion of profits made and also in addition to a management fee, which is determined as a percentage of assets under management. Additionally, these fees consist of a large chunk of the profit, especially during times of poor performance. It raises questions about whether investing in hedge funds is still more advantageous than not in depth. Hedge funds can put together teams of individuals with a variety of backgrounds and specialities who are talented and experienced in spotting and capitalizing on investment opportunities that typical asset managers would miss in such—cases. Also, hedge funds are prized for their ability to produce alpha in periods of market turbulence or downturn it is a feat that is sometimes hard to duplicate using more traditional investing vehicles in depth. Traditional asset classes like stocks and bonds may have large drawdowns are during moments of market stress, such as economic recessions or times of increased volatility, also which might result in losses for investors.

However, hedge funds uses alternative asset classes that have no link to traditional markets, hedging tactics to reduce downside risk, or strategies to profit from market disruptions. Also Hedge funds stand out from the competition due to their capacity to produce positive returns or, at the very least, protect money in challenging market situations. Further, this highlights the significance of hedge funds as a tool for portfolio diversification. Hedge fund detractors sometimes point to their exorbitant fees, opacity, and unpredictable performance as justifications for approaching them cautiously. Hedge fund supporters counter that the costs and dangers involved in participating in hedge funds are justified by the special talents of hedge fund managers and their capacity to produce alpha, especially during down markets. Hedge funds provide a way to access specialist skills and maybe find alpha-generating opportunities that would not be available elsewhere in today's more unpredictable and complicated financial markets, where typical investing techniques may fail to generate consistent returns. Different investor types have different levels of eligibility for hedge funds as an investment vehicle depending on things like investment horizon, risk tolerance, and goals. Institutional

investors, such as endowments and pension funds, are better suited to devote a part of their portfolios to hedge funds since they frequently have larger appetites for risk and enormous resources.

2.6 Drawing Comparison

Pension fund portfolios are thought to profit greatly from the addition of hedge funds due to their capacity to produce alpha and provide diversification advantages. In the same way, endowments, whose goal is to protect and increase wealth across several generations, frequently invest a part of their assets in hedge funds to increase returns and lower portfolio volatility. Hedge fund investment may provide substantial challenges for smaller organizations and individual investors, Particularly during times of underperformance this happens, these fees have the potential to severely reduce returns, making it difficult for individual investors to justify the cost. Furthermore, investors attempting to comprehend the dangers and possible returns connected with these investments may encounter challenges in such cases due to the intricacy of hedge fund offers, which includes complicated legal documentation and a lack of transparency in major cases. Investors may find it challenging to determine the actual risk exposure and performance attribution of hedge funds in these cases due to their frequent lack of complete transparency on the underlying assets in contrast to regular mutual funds or exchange-traded funds (ETFs) at large. Moreover, compared to conventional investment vehicles, the development and upkeep of hedge fund investment structures are more expensive. This covers fees paid to service providers including fund administrators and prime brokers, as well as costs related to legal and administrative duties.

Hedge funds also frequently impose lengthier lock-up periods and fewer redemption alternatives, which forces investors to commit their cash for longer periods with less freedom to withdraw from the investment. This illiquidity can be a major disadvantage for smaller institutions and individual investors with shorter investment horizons or liquidity demands. Likewise, regulatory limitations may make investing in hedge funds even more difficult, especially for individual investors. Compared to typical investment vehicles, hedge funds are sometimes subject to less strict regulatory scrutiny, which provides investors with less protection and remedies in the case of misbehaviour or malfeasance. The kinds of investors who can invest in hedge funds may also be restricted by regulatory regulations, potentially denying ordinary investors or those with lesser investment amounts access.

In summary, the emergence of hedge funds and AIFs signifies the growing sophistication of the Indian financial market. These investment vehicles offer investors diversification and the potential for superior returns, albeit with higher risks. As the alternative investment landscape in India continues to evolve, a deeper understanding of these instruments and their regulatory framework is essential for informed investment decisions.

Although hedge funds may provide advantages such as portfolio diversification and alpha production, their appropriateness differs according to the goals, risk tolerance, and investment horizon of the client. Also, Hedge funds may be a beneficial addition to the portfolios of institutional investors with long investment horizons and large resources, whereas smaller institutions and individual investors may encounter obstacles including high fees, complexity, and illiquidity at large. As a result, investors must carefully weigh the benefits and drawbacks of hedge fund investing in those cases and determine whether or not these instruments suit their risk tolerance and investing goals.

3. INVESTMENT STRATEGIES IN HEDGE FUNDS

Hedge funds are well known for their adaptability in using a range of investing techniques designed to minimize risk and achieve absolute returns for more benefit. Hedge funds can experiment with a wide range of investment strategies such as designed to take advantage of market inefficiencies and produce alpha, in contrast to standard investment funds, which are frequently constrained by benchmark requirements as such. Comprehending the range of investment strategies employed by hedge funds it is essential for interpreting their performance patterns and determining their appropriateness in different market scenarios in such cases. The long-short equity strategy is one of the most popular ones in that sense used by hedge funds worldwide. Also, this strategy entails taking long positions in companies that are predicted to increase in value while concurrently shorting equities that are predicted to decrease in value. Further, Hedge funds seek to produce profits independent of the direction of the general market by keeping a balanced exposure to both long and short positions and depending instead on the relative performance of individual assets. Conversely, event-driven strategies make use of business events like mergers, acquisitions, restructurings etc, also bankruptcies to make money by taking advantage of price inefficiencies in it.

Predicting and benefiting from more general economic trends and policy changes are the main objectives of macroeconomic strategy in depth. Depending on their assessment of the state of the world economy, there is hedge funds that employ macroeconomic methods and sometimes take positions in interest rate instruments, commodities, currencies etc. Also frequently called algorithmic or systematic trading, quantitative techniques use statistical analysis and mathematical models to find trading opportunities and automatically execute deals. These methods might include statistical

arbitrage, trend-following, or high-frequency trading, among others of that.

The suitability and efficacy of these investment techniques in hedge funds within the Indian market environment depend on some variables, such as investor preferences, legal restrictions, market dynamics etc.. Certain methods could be easily adapted to the Indian setting, but others would need new techniques or adjustments to deal with particular market constraints. We may learn a great deal about these techniques' potential adaptability and efficacy in the Indian market landscape by exploring the nuances of these tactics and their past success in other market situations. This knowledge establishes the foundation for the Indian hedge fund industry's strategic capital allocation and well-informed decision-making.

1. Long short equity strategy -

Hedge funds use the Long/Short Equity Strategy as one of their most popular and adaptable strategies at large. Hedge funds use this approach to simultaneously take short positions in equities they believe will decrease in value and long positions in stocks they believe will increase in value of the fund. Hedge funds usually perform extensive fundamental analysis for long positions, evaluating company financials, management calibre, industry trends, and growth possibilities to find cheap or high-potential companies. The goal of these long bets is to take advantage of market upside possibilities. However, hedge funds use a similar process to find expensive or fundamentally poor equities for short positions. Hedge funds try to make money by borrowing shares, selling them, and then intending to buy them back at a cheaper price later. The Long/Short Equity Strategy has several benefits, including the ability to produce profits in both long- and short-term market inefficiencies, reduce market risk through diversification, and provide good returns independent of market direction. But there are hazards associated with it as well, such as limitations on short sales, margin requirements, and the demand for careful stock selection and risk management. All things considered, this approach offers hedge funds adaptability and the chance to produce alpha under different market circumstances.

2. Event-Driven Strategy-

It takes advantage of business events or catalysts etc. These occurrences might be bankruptcies, regulatory changes, spin-offs, mergers, acquisitions, or other big business moves that exist. By using this approach, hedge funds seek to pinpoint assets that are mispriced as a result of the market's response to these occurrences that happen. Event-driven investment entails a thorough examination of event-specific elements, including timing, regulatory clearances, deal terms, and any risks or synergies. Also, Hedge fund managers evaluate the possibility and significance of various event-related outcomes to predict market movements and spot profitable opportunities. Further Hedge funds using event-driven strategies make use of their knowledge of corporate finance, also legal research, and market dynamics to take advantage of inefficiencies in stock prices that arise before, during, or following the event. This approach necessitates close attention to detail, in that a thorough comprehension of the event's ramifications, and the capacity to respond quickly in response to shifting market conditions. When implemented effectively, there is also an event-driven strategy that has the potential to provide compelling risk-adjusted returns by capitalizing on market structural inefficiencies and event-driven price fluctuations. Further, they do also have risks regarding transaction execution, market volatility, and event outcomes, thus rigorous risk management and extensive due diligence are required.

3. Macro Strategy-

Hedge funds use a macro strategy that analyses and takes advantage of global policy moves and broad macroeconomic trends to produce profits. To make informed investment decisions, hedge fund managers that employ this method thoroughly investigate and analyse economic data, central bank policies, geopolitical concerns, and other macro issues etc and further issues. Hedge funds may have positions in a variety of asset classes, including fixed-income instruments, currencies, commodities, and stock indexes, depending on their macroeconomic forecast on it. Also to profit on expected shifts in interest rates, inflation rates, currency values, or more general economic trends, they could use directional trades, relative value tactics, or theme investing techniques in that. Hedge funds can take advantage of opportunities in international markets and adjust their portfolios to shifting market circumstances according to the macro strategy's flexibility at large. This strategy does, however, come with concerns regarding the precision of macroeconomic forecasts, the unpredictability of policy, and geopolitical developments in it. Macro strategy execution needs a thorough grasp of international markets, rigorous risk management, and the capacity to respond quickly to changing macroeconomic circumstances. All things considered, the macro strategy gives hedge funds a wide range of tools to help them navigate and profit from macroeconomic events and trends, which may improve portfolio diversification and risk-adjusted returns.

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4. Quantitative Strategy-

Hedge funds use quantitative strategy, which is the methodical use of statistical analysis, algorithmic trading tools, and mathematical models to find and seize trading opportunities. Further Using this approach, hedge fund managers create complex quantitative models using proprietary algorithms, market trends, and historical data. These models carry out transactions automatically, also frequently at high frequency and across a range of asset classes, following predetermined rules and signals. Also, numerous techniques can be included in quantitative methods, including trend-following, statistical arbitrage, high-frequency trading, and machine learning algorithms. Now Hedge funds use quantitative strategies to manage risk in their portfolios, capture alpha, and take advantage of short-term market inefficiencies. Also, there are hazards associated with quantitative techniques as well, such as model flaws, data biases, and execution slippage, which calls for strict monitoring, testing, and risk management protocols. Further Highly developed quantitative skills, a solid infrastructure, and ongoing model improvement to accommodate shifting market conditions are necessary for the successful implementation of quantitative tactics. All things considered, the quantitative strategy gives hedge funds a methodical way to trade and may improve portfolio performance by automating and making data-driven decisions.

5. Relative Value Strategy-

Hedge funds use the Relative Value Strategy, which focuses on finding and taking advantage of mispricing or value discrepancies in linked securities such as asset classes, or markets. When employing this tactic, hedge fund managers go through a lot of data to find asset combinations that have a connection or historical link. Then, to profit from the convergence or divergence of their prices, they simultaneously place long and short positions on these pairs. Diverse techniques can be included in relative value methods, including volatility trading, pairs trading, convertible arbitrage, and fixed-income arbitrage. Hedge funds aim to produce steady returns by taking advantage of price differences across linked assets as a means of protecting themselves from more general market fluctuations. Relative value techniques do, however, come with hazards, including model assumptions, liquidity limitations, and correlation breakdowns, which call for close risk monitoring and management. Relative value methods must be executed successfully, which calls for a thorough grasp of market dynamics, proficiency with quantitative research, and the capacity to spot and take advantage of asset price inefficiencies. All things considered, the relative value strategy gives hedge funds a methodical way to trade and may improve portfolio performance by offering a variety of uncorrelated and diversified sources of return.

6. Special Situations Strategy-

Hedge funds deploy a Special Situations Strategy that focuses on spotting and seizing special opportunities that come from spin-offs, distressed debt, business restructurings, and other unusual situations in depth. Also using this approach, hedge fund managers hunt for overlooked or undervalued stocks through extensive legal due diligence and fundamental examination. Companies going through bankruptcies, mergers, acquisitions, divestitures, or regulatory changes are examples of special situations. Also, Hedge funds may invest in derivatives, equities securities, or distressed debt to profit from projected outcomes or internal company restructurings. The exceptional circumstances strategy's goal is to produce alpha by taking advantage of mispricing brought about by significant shifts in the business environment or corporate events. However, there are dangers associated with this method, including those related to timing uncertainty, regulatory obstacles, and liquidity limits, which call for close risk management and oversight. Expertise in corporate finance, legal analysis, and the capacity to handle challenging and changing circumstances are necessary for the effective implementation of the unique situations approach. All things considered, the exceptional circumstances approach gives hedge funds chances to profit from distinct market inefficiencies and maybe increase portfolio returns by making value-oriented investments in revolutionary company happenings.

4. AIM OF STUDY

This study uses techniques for performance evaluation, to give a thorough examination of hedge fund performance in India. The study aims to identify patterns, trends, and insights that can guide investment returns, decisions, regulatory policies, and industry practices in the Indian financial market by critically analysing the performance of Indian hedge funds within the context of market conditions, regulatory dynamics, and investment strategies. In conclusion, the research aims to further our knowledge of hedge fund activities in India and their influence on the development of the country's financial environment.

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5. RESEARCH QUESTION:

- 1. What are the key investment strategies employed by Indian hedge funds, and how do they relate to their performance?
- 2. How do regulatory frameworks and market conditions in India impact the implementation and performance of hedge fund investment strategies, and what implications (e.g. returns, fee structure, profitability) does this have for investors and industry stakeholders?

6. HYPOTHESIS:

Macroeconomic factors (e.g., economic growth, currency fluctuation) will exhibit varying risk- return profiles.

Specific variables associated with hedge fund (e.g., Net Asset Flow, Fund Inflow, Decline) will influence fund performance.

7. METHODOLOGY

The present study's approach entails the use of linear regression analysis to investigate the correlation between the performance of hedge funds and diverse independent variables that signify attributes linked to micro and macro factors. Finding the elements that substantially affect hedge fund performance in the context of the Indian market is the aim.

Dataset:

YEAR	Economic Growth	Interest Rate	Currency fluctuatio ns	Inflows	Net Asset Inflows	Decline	MSCI India Growth	Eurekahe dge India Hedge Fund Index
2010	0.25	0.06	-0.02	2.05	-1.06	-1.23	0.156	0.13
2011	0.11	0.07	0.03	0.01	0.87	0.00	-0.236	-0.24
2012	0.10	0.07	-0.06	-0.82	-0.96	0.17	0.305	0.13
2013	0.03	0.08	-0.13	3.64	15.72	2.23	0.125	-0.09
2014	0.09	0.08	-0.12	-0.28	-1.91	4.11	0.310	0.34
2015	0.16	0.07	-0.01	-0.25	-2.93	-0.89	0.007	0.05
2016	0.06	0.06	-0.07	2.13	0.53	-0.06	-0.023	0.04
2017	-0.05	0.06	-0.02	-0.52	-0.47	-0.09	0.327	0.26
2018	0.17	0.07	0.04	0.18	0.64	-0.59	-0.042	-0.07
2019	-0.16	0.05	-0.09	-0.39	-1.64	1.37	0.068	0.01
2020	-0.16	0.04	-0.02	2.47	-1.21	11.55	0.118	0.20

The Regression is carried out on the above data set for the duration of available data.

Global Regions	Mar-21	2021 YTD
Arbitrage	-0.60%	0.97%
CTA/managed futures	0.20%	2.49%
Distressed debt	0.84%	5.58%
Event driven	1.59%	6.91%
Fixed income	0.47%	1.87%
Long/short equities	1.26%	6.49%
Macro	0.27%	2.19%
Multi-strategy	0.70%	2.98%
Relative value	0.92%	3.44%

The table above shows strategies employed by the Eureka India hedge fund and the returns generated by them, but due to the paucity of data for the remaining years, strategy-specific regression could not be run.

Linear Regression Model:

A linear regression model will be employed in the study to examine the correlation between the performance of hedge funds and independent variables which indicates Indian financial system-related factors. The success of hedge funds, as determined by return metrics like annualized return, will be the dependent variable in the regression model. These performance measures act as stand-ins for evaluating how well hedge fund features and broad market factor produce returns concerning the amount of risk assumed.

Independent Variables:

The regression model's independent variables will identify traits linked to certain Indian hedge funds factors. To illustrate various investing philosophies, characteristics including exposure to macroeconomic issues, interest rate, MSCI India Growth etc. These parameters seek to capture the distinctive qualities of every strategy and their possible influence on the performance of hedge funds.

Data Analysis:

Linear regression analysis will then be conducted using statistical software to estimate the coefficients of the independent variables and assess their significance in explaining hedge fund performance.

Interpretation and Implications:

The regression analysis's findings will shed light on the link between the success of hedge funds in the Indian market and the attributes of microeconomic and macroeconomic factors. Also, the research attempts to educate investors, fund managers, and policymakers on the effectiveness of various investment strategies and possible paths for improving hedge fund performance by identifying key performance-influencing characteristics. Furthermore finally, being aware of the function of control variables will help separate the systematic from the idiosyncratic influences on hedge fund returns and determining the effect of investment strategies on performance at large.

8. EXPECTED CONTRIBUTION

The objective of this research is to ascertain the most often used investing strategies by Indian hedge funds and examine the correlation between micro & macro factors and the corresponding risks and returns at large. We'll investigate the significance of variables including net asset flow, inflows, decline and macroeconomics by thoroughly analysing hedge fund data in the Indian market. Also, we may learn more about the current investing environment and the techniques that fund managers choose by evaluating the frequency and returns of these strategies throughout the Indian hedge fund market. Also additionally, the goal of this study is to learn more about the risk-reward dynamics of particular hedge fund strategies used in the Indian market. Our goal is to determine how strategy selection, risk exposure, and past performance of hedge funds using various methods relate to one another.

The study's conclusions will be very helpful to investors trying to understand the intricacies of the Indian hedge fund market. Further Investors may choose strategies and allocate their portfolios more wisely if they are aware of the risk-reward profiles linked to various investing approaches. Additionally, investors will be able to evaluate the applicability of these strategies in light of their investment goals, risk tolerance, and market outlook thanks to insights about the performance drivers of certain hedge fund techniques. To this extent, the overall goal of this research is to offer practical insights that enable investors to confidently navigate the Indian hedge fund market. This study adds to a better knowledge of hedge fund investments in the Indian market by identifying popular investment methods, examining their risk-return dynamics, and providing insightful information for investors.

8.1 Analysis and Interpretation

Dependent Variable:

• Eurekahedge India Hedge Fund Performance or Return (e.g., annualized return)

Independent Variables:

- 1. Economic Growth: Strong economic growth can benefit many hedge fund strategies, particularly those focused on equities or cyclical assets. Conversely, slowdowns can lead to losses.
- 2. Interest Rates: Changes in interest rates can affect the cost of borrowing for hedge funds using leverage and influence valuations of various asset classes (e.g., rising rates can hurt bond prices).
- 3. Currency Fluctuations: Currency movements can affect the value of hedge fund assets denominated in foreign

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currencies.

- 4. Net Asset Flow: The net amount of funds the investors are depositing and withdrawing from the hedge fund.
- 5. Fund Inflow: The amount of funds the investors are investing through the hedge fund
- 6. Decline (Negative Performance): The amount of negative contribution to the net performance of the fund, this being negative can indicate investors withdrawing money and an overall negative impact on fund performance.
- 7. MSCI India Growth: The MSCI India Growth captures large and mid-cap securities which exhibit overall growth style characteristics in India. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate, long-term historical EPS growth trend and long-term historical sales per share growth trend.

Linear Regression

Model Fit Measures

Model	R	R²	
iš.	0.997	0 995	

Model Coefficients - Eurekahedge India Hedge Fund Index

Predictor	Estimate	SE	t	р
Intercept	-0.9138	0.14988	-6.10	0.009
CURRENCY FLUCTUATION	0.9884	0.27269	3.62	0.036
NET ASSET FLOW	-0.0475	0.00542	-8.77	0.003
INTEREST RATE	14.7446	2.52315	5.84	0.010
ECONOMIC GROWTH	-1.1719	0.22815	-5.14	0.014
FUND INFLOWS	0.1270	0.01895	6.70	0.007
DECLINE	-0.0102	0.00427	-2.38	0.097
MSCI India growth	0.8929	0.05593	15.97	<.001

9. REGRESSION MODEL

Hedge Fund Performance = β 0 + β 1 Currency Fluctuation+ β 2 Net Asset Flow+ β 3 Interest Rate + β 4 Economic Growth + β 5 Fund Inflows + β 6 Decline (Negative Performance) + β 7 MSCI India Growth + ϵ

Where:

- $0,1,...,9\beta 0,\beta 1,...,\beta 9$ are the coefficients (Estimate)i
- ε is the error term.

9.1. Overall Model Fit:

The model's R-squared value of 0.995 indicates a very strong relation between the model and the data. The variance in hedge fund performance is explained up to 99.5% by the independent variables included in the model out of the overall model.

9.2. Predictors & Significance:

- Net Asset Flow (t = -8.77, p-value = 0.003): A negative coefficient indicates that higher net asset outflows (investors withdrawing money) are associated with lower hedge fund index returns. This relationship is statistically significant.
- Interest Rate (t = 5.84, p-value = 0.010): A positive coefficient suggests that higher interest rates are associated with increased hedge fund index returns. This relationship is also statistically significant.
- Economic Growth (t = -5.14, p-value = 0.014): A negative coefficient implies that lower economic growth is linked to higher hedge fund index returns. This might be because hedge funds can employ certain strategies to profit during

economic downturns. This relationship is statistically significant.

- Fund Inflows (t = 6.70, p-value = 0.007): A positive coefficient indicates that higher net asset inflows (investors depositing money) are associated with higher hedge fund index returns. This relationship is statistically significant.
- MSCI India Growth (t = 15.97, p-value < 0.001): A positive coefficient suggests that a strong performance in the MSCI India stock market growth index is linked to higher hedge fund index returns. This relationship is highly statistically significant.

9.3. Insignificant Predictors:

The coefficients of Currency Fluctuation and Decline (Negative Performance) are not statistically significant (p-value > 0.05). This could mean that these factors have a weaker influence on the hedge fund index returns

This linear regression model provides a statistically significant explanation for the variation in the Eurekahedge India Hedge Fund Index. The model highlights several factors that can influence the performance of the hedge fund index, including net asset flows, interest rates, economic growth, fund inflows, and the performance of the broader Indian stock market. These findings can be valuable for investors seeking to understand the drivers of hedge fund returns in the Indian market. Policymakers could also use these insights to inform regulatory measures aimed at fostering a conducive environment for hedge fund performance in India.

CONCLUSION

The study analyses the factors affecting the performance of hedge funds in India. The analysis finds that a statistically significant relationship exists between several factors and hedge fund returns. These factors include net asset flows, interest rates, economic growth, fund inflows, and the performance of the broader Indian stock market.

In other words, hedge funds that experience higher net asset inflows, higher interest rates, lower economic growth, and are invested in a strong-performing stock market tend to have higher returns.

By leveraging the strengths of effective strategies such as Equity Long-Short while addressing challenges associated with others, stakeholders can optimize investment decision-making and enhance overall portfolio performance. Additionally, the study underscores the importance of fee transparency, accountability, and alignment of interests between managers and investors in maximizing investor outcomes. Furthermore, policymakers can use these insights to inform regulatory measures aimed at fostering a conducive environment for hedge fund performance in India, potentially by encouraging the adoption of successful investment strategies and promoting fee structures that align with investor interests.

Overall, the regression analysis provides a comprehensive understanding of the drivers and challenges of hedge fund performance within the Indian market, offering a roadmap for stakeholders to navigate and capitalize on opportunities in this dynamic and rapidly evolving industry. By embracing evidence-based investment approaches and fostering a culture of transparency, accountability, and investor-centricity, the Indian hedge fund industry can unlock its full potential and contribute to the growth and development of the broader financial ecosystem.

Moving forward, several suggestions emerge from the findings of the regression analysis of investment approaches in Indian hedge funds. Firstly, investors should carefully evaluate the performance track record and investment strategies of hedge funds before allocating capital, with particular attention to the effectiveness of strategies such as Equity Long-Short in navigating the Indian market landscape. Additionally, investors should prioritize fee transparency, accountability, and alignment of interests when selecting hedge fund managers, considering the negative association between management fees and performance identified in the study. Moreover, fund managers can enhance performance outcomes by leveraging successful strategies while actively addressing challenges associated with others, such as the Fixed-Income Arbitrage strategy. This may involve refining investment processes, enhancing risk management frameworks, and adopting a more agile and adaptive approach to portfolio construction. Furthermore, fund managers should prioritize investor education and communication, providing transparent and timely insights into investment strategies, performance drivers, and fee structures to foster trust and confidence among investors.

Policymakers play a crucial role in fostering a conducive regulatory environment that promotes innovation, transparency, and investor protection within the Indian hedge fund industry. This may include measures to streamline regulatory processes, enhance market infrastructure, and promote best practices in governance and risk management. Additionally, policymakers can incentivize the adoption of successful investment strategies through regulatory incentives and support programs aimed at fostering innovation and enhancing market efficiency. Finally, industry stakeholders should

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collaborate to promote knowledge sharing, talent development, and capacity building within the Indian hedge fund industry. This may involve establishing industry forums, organizing training programs, and facilitating networking opportunities to foster a culture of collaboration, innovation, and continuous improvement. By embracing these suggestions and working collaboratively towards common goals, stakeholders can unlock the full potential of the Indian hedge fund industry, contribute to economic growth and development, and create value for investors, managers, and society as a whole.

The findings have shed light on crucial insights, indicating the significant influence of variables such as net asset flow, interest rates, economic growth, fund inflows, and the performance of the broader Indian stock market on hedge fund returns. These insights hold practical value for investors and fund managers, providing nuanced understanding that can inform investment decisions and strategy allocation. Additionally, policymakers can leverage these insights to shape regulatory measures conducive to fostering a thriving environment for hedge fund performance in India.

By unravelling the intricacies of the Indian hedge fund market, this study contributes to a deeper comprehension of popular investment strategies, and their risk-return dynamics, and offers actionable knowledge for investors navigating this landscape. It is a step forward in empowering investors with the understanding needed to confidently engage with the Indian hedge fund market.

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