

# HEDGE FUNDS AND BEHAVIOUR FINANCE

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## ABSTRACT

Investor behaviour often deviates from logic and reason, and investors display many behaviour biases that influence their investment decision-making processes. What are the reasons investors behave as they do? A portfolio investor's behaviour often deviates from logic and reason. Emotional processes, mental mistakes, and individual personality traits complicate tough investment decisions. Thus, investing is more than just analyzing numbers or figures and making decisions to buy and sell various assets and securities. A large part of investing involves individual behaviour. Ignoring or failing to grasp this concept can have a detrimental influence on portfolio performance of the investors especially in the long run.

Behavioral biases in investing encompass many types. For example, cognitive biases refer to tendencies to think and act in certain ways. A cognitive bias can be viewed as a rule of thumb or heuristic, which can lead to systematic deviations from a standard of rationality or good judgment. Some controversy still exists about whether some of these biases are truly irrational or whether they result in useful attitudes or behaviour. Other biases are more emotional in nature. Understanding investor behaviour can inform investors about these biases and help them improve their decision-making processes in selecting investment services, products, and strategies. As a result of the financial crisis of 2007-2008, the discipline of psychology began to focus even more on the financial decision-making processes of individuals. Although theory may deem markets to be efficient, investor biases can explain a lot about why assets are often mispriced.

This research work attempts to understand the hedge funds and how cognitive biases affect the investment in hedge funds. This study suggests that hedge fund returns appear to be affected only

by the illogical component derived from institutional trading rather than that emanated from individual portfolio investors, which guide investors in avoiding such funds and investment strategies that display greater irrational behaviour especially in the long run.

This research work also attempts to study to what extent hedge funds are affected by irrationality in their investment decisions. The research concludes that irrational behaviour does affect hedge fund returns despite their sophistication and active management style.

## INTRODUCTION

The irrational decision may follow an investment pattern that is consistent with the observed hedge fund returns yet far from fundamentals observed in the market. Factors beyond the original version of capital asset pricing model such as Fama and French and Carhart models, as well as less stringent models, such as APT and Fung and Hsieh, are studied, to test whether these models are able to capture the irrational nature of the funds.

After concluding that the institutional irrational sentiments do play an active role in hedge fund returns, it is also observed that the returns are not completely shielded against irrational trading; however, hedge fund returns appear to be affected only by the irrational component derived from institutional trading rather than that emanated from individuals.

Hedge fund exposure fails to deliver for investors due to exorbitant fees, high competition, the ineffectiveness of active management, and a general misunderstanding of the underlying exposures and correlations (i.e., hedge funds don't hedge). But the purpose of hedge funds from the perspective of the manager, parent company, consultants, and brokerages are to collect fees. How vulnerable are the various classes of investment decision makers to behavioural biases? Is there a difference in the degree to which they are susceptible?

There has been a well-publicized surge in passive investing since 2006 in tune with the much longer-term trend towards ever-greater inflows into equity index funds since 1976. These investment trends have occurred in response to the average expense ratios found in index funds as opposed to actively managed funds. Also, to consider the fact that index funds provide extremely cost-effective access to the financial markets that provide a distinct advantage to equity investors over time. It is difficult for active fund managers to succeed this cost advantage,

and the majority are not able to sustain in the long run. However, if hedge fund expense ratios were to be studied, it can be easily predicted that the active fund management industry will soon be out of business.

The surge of money flowing into passive and out of actively managed funds continues, but for long term investors it doesn't just come down to lower costs as some suggest.

Active managers, and especially long/short funds, have a long record of out-performance during bear markets; it is not unreasonable to expect such a market in the near future.

The study of behavioural finance indicates that although passive hedge funds outperform in the long term, almost no investor has the investment discipline to stay the course and reap the reward in the long run.

The assumption that stocks will out-perform in a low interest rate (ZIRP or NIRP) environment is not supported by relevant evidence; bonds can therefore diversify away risk better in such cases.

Portfolio investors using diversified portfolios that included long duration bond funds (TLT) and/or long/short hedge fund strategies (DHLSX, OTCRX, LSYM, QLENX) would be more likely to reach their investment goals.

This research however has the limitation that different sources of irrationality may have asymmetric effects on hedge fund returns. Using a different set of sophisticated investors along with different market sentiment proxies may yield different results.

This research argues that hedge fund investors can use irrational beta to gauge the extent of institutional irrational sentiments prevailing in capital markets for the purpose of re-adjusting their portfolios and therefore use the risk betas as an early warning sign. It can also guide investors in avoiding funds and strategies that display greater irrational behaviour especially in the long run.

This research study propagates the idea that the uncertain, hereafter irrational, component may follow a pattern consistent with the observed hedge fund returns, yet which is different from market fundamentals.

The capital asset pricing theory over time has evolved from purely rational equilibrium toward considering cognitive biases. It has been studied over time that investor perceptions and expectations play an active role in determining the stock prices and that investors' perceptions and assessment of financial information jointly incorporate both market fundamentals and from excessive optimism/pessimism.

Hedge funds play an important role in today's financial markets, improving overall liquidity in the market and efficiency at the same time making a wide range of risk hedges and position adjustments available to other investor participants. With the world equity markets experiencing an average down turn since around 2003 and low interest rates, portfolio investors have also valued hedge funds for the diversification benefits due to their low correlation with traditional assets, and less vulnerability to up and down-market trends. In this way, they have provided a new alternative to investors for achieving absolute and real returns. On the other hand, rising global equity prices since mid-2003 have transformed the overall investment behaviour of hedge funds, forcing them to take net long positions in world equity markets and to expand the scope and horizon of their investments. However, their investment behaviour is most likely to change again in the future in reaction to major developments in the financial markets.

### **HEDGE FUND INVESTMENT BEHAVIOUR**

As hedge fund investment behaviour changes, so does the nature of the macro risks trigger by hedge funds. Research in risk management of financial institutions is considered to have reduced the overall potential for widespread destabilization of financial markets as was seen in the 1998 bankruptcy of Long-Term Capital Management, in which losses of an individual hedge fund resulted in a spread of corporate bankruptcies and losses at the financial institutions that actually dealt with it. Let us take the example of the natural-gas fund losses. Financial institutions that had transactions with the hedge fund were able to manage resultant risks appropriately and thereby prevented a spread of risk that could have resulted in large portfolio losses. In recent years however, there is a growing concern for the accumulation of positions of hedge funds in low liquidity markets.

There is also the risk of adversely impacting the entire financial system if, for some reason, price adjustments are amplified in the process of unwinding these long and short hedge positions. The

central bank in such cases exchanges information and opinions about global financial markets with authorities and organizations around the globe in several international conferences. The discussions include large long positions that are being built up in some emerging-country currency futures markets and significant declines in the currency afterwards because these positions were unwound over a short period of time in the process of the price adjustments. There have also been discussions of relevant efforts to actively monitor the developments in commodities markets such as their liquidity similar to other financial markets because commodities have joined equities, bonds and other financial instruments as investment targets included in investor portfolios. When hedge funds or certain other market participants close out large positions in low-liquidity markets over a short period of time, it becomes very relevant whether the required liquidity will be provided by other market participants. Through day to day monitoring of market liquidity and understanding process of the mechanisms of supply of liquidity, central banks can very well share necessary information with other financial market participants and contribute to remove disorders during times of shock. Maintaining and reinforcing systems for gathering market relevant information and furnishing information to market participants is one of the important roles for central banks.

### **HEDGE FUNDS AND INVESTMENT STRATEGY**

Technically, hedge funds are defined as private investment partnerships that operate largely outside any regulatory net and as a consequence have maximum flexibility in their investment strategies. An investor protection rationale imposes regulation upon those companies collecting money from the broader public, but leaves unregulated those partnerships that only accept private placements. Hedge funds belong to this category. Their clients are high-net-worth individuals or investment companies, which are deemed to be in no need of investor protection. Hedge funds are especially known for the use of two kinds of strategies: the first one consists of taking directional bets on the likelihood of changes in macroeconomic indicators such as currency or interest rates; and the second one in trying to profit from perceived mispricing among similar assets and from inefficiencies in price formation. Hedge funds using the first type of strategy are known as macro funds or currency speculators and were active in Asia during 1997. Hedge funds using the second type of strategy are known as arbitrage or market neutral funds: an excellent example is LTCM, the US-based hedge fund that nearly collapsed in the

wake of the emerging market turmoil of 1998. Since the Asian financial crisis and to a larger extent, the near-collapse of LTCM, hedge funds have been among the most cited (and blamed) market actors in discussions of financial speculation and have somehow contributed to define the meaning of the term at the turn of the century (see for instance Krugman 1999: 119; Chancellor 1999: 335; Marsh 2002: 165). The question of whether their regulation could help avoid the recurrence of financial crises thus became a cornerstone in discussions on the Global Financial Architecture (GFA). In 1999, hedge funds were chosen as one of three main issues to be addressed by the Financial Stability Forum (FSF).<sup>5</sup> The FSF Working Group on Highly Leveraged Institutions (HLIs) was created along with a specific task force to address the role of hedge funds in the emerging market crises of 1997/1998, the Study Group on Market Dynamics. ‘HLI’ was the name chosen to identify hedge funds.

### **EFFICIENT MARKET HYPOTHESIS**

Contemporary financial theory and practice revolves around the Efficient Market Hypothesis (EMH), which postulates a link between the efficiency of the market and the rational behaviour of the investors herein. A complement to the EMH is the Theory of Arbitrage, which says that, even if investors are irrational, markets can still be efficient thanks to the operation of rational arbitrageurs, which by acting as ‘market contrarians’ help prices go back to their equilibrium level (Friedman 1953; Fama 1965). Sophisticated traders/arbitrageurs are not only perfectly rational and able to recognise the fundamental value of an asset, but are also able to correct another investors’ irrationality. By doing so, they will earn a net profit for themselves and bring prices in line with their fundamental values. Arbitrageurs thus become for the EMH what the invisible hand is for the theory of perfect competition. All those speaking against regulation of hedge funds both during and after the FSF debate drew upon this research argument.

### **HEDGE FUNDS AND REGULATION**

Since hedge funds depended on their counterparties for credit and other services (e.g. prime brokerage) and since those financial institutions were already regulated and governed, it was argued, the best option was to regulate/supervise hedge funds through them. Some researchers however (e.g. Eichengreen 2003) argue that 18 counterparties have placed hedge funds on a stricter credit diet and that this should pose less of a risk than before. The question arises is it really so? The resultant idea of indirect regulation is based on two assumptions: the first

assumption is that counterparties are adequately regulated and supervised in relation to their business with HLIs; the second assumption is that counterparties and regulators share the same agenda, that is, that counterparties have sufficient motivation and encouragement to comply with the norms. These research assumptions will be tested in the case of commercial and investment banks, which are the largest prime agents/ brokers for the hedge fund industry. As it is the industry is very competitive. The nature of the contracts that banks enter into with hedge funds makes their effective supervision extremely tough. Banks do not simply lend money to hedge funds – a rather straightforward operation. They mainly provide them with available credit through securities lending and fund derivative trading transactions. Securities lending gets particularly complex with the use of reverse repurchase agreements and contracts for difference, 14 which are both means to quickly and inexpensively leverage hedge funds' capital. It is difficult for counterparties' supervisors to track the many ways by which the assets are used as collateral for different transactions and what this implies in terms of risk.

## CONCLUSION

Has anything changed since the near-collapse of LTCM and the FSF debate? The opinions of regulators are split over this issue. Some of them think that banks and supervisors now pay more attention to the quality of risk management. As a Basel official said, 'in the US post--LTCM world, the ability of banks to disregard supervisors has diminished, so that supervisors have more power in redirecting banks towards desired risk management policies. Other Basel officials are less optimistic and argue that the capacity of supervisors to get a grasp of banks' activities with hedge funds should not be overestimated. As Crockett writes, 'consider [...] how little counterparties knew about the exposures of LTCM. And how little information is still available about the risk profiles of financial institutions generally' (Crockett 2001, my italics). According to another BIS official, supervising banks' transactions with hedge funds can be part (a small part) of the supervisory process, but it is not a high-level inquiry: 'It is more an issue of credit risk management by banks than the job of supervisors: it is impossible to supervise these aspects. In addition, exposures to hedge funds are really fast. Sometimes banks are not even aware of who the counterparty is (e.g. for certain swap agreements, or derivative funds). Hedge funds however need to borrow securities in order to sell short. Banks – especially investment banks – can provide this service. By doing so, they earn a whopping interest on the proceeds of the short

selling, trading and clearing commissions, and income from derivative transactions. Since hedge funds are heavy short sellers, the more they short the more banks find business with them profitable (Forbes 1998). It is difficult to exactly quantify the returns that banks profit from the provision of prime brokerage services, since no bank or financial house breaks out revenues that is derived from buying and selling of hedge funds. Yet an estimate can be obtained by looking at items such as net interest income or securities services and fees. In 2001, for instance, Goldman Sachs saw its net interest revenues increased by 46 percent over 1999 and Morgan Stanley by 20 percent over 1997 (Goldman Sachs 2001 Annual Report; Morgan Stanley 2001 Annual Report). Also, world over the banks started competing over the slice of the hedge fund industry they majorly serve as prime brokers. With increased competition, margins from prime brokerage are getting slimmer (FSF 2002: 4). This is another reason why the world banks have an interest in hedge funds trading more aggressively rather than more prudentially, and using due diligence, as the FSF REQUIRES.

The research paper has defined and dealt with the regulatory debate on hedge funds carried out at the Financial Stability Forum in Basel. Since 1998, hedge funds have been among the most debated instruments of financial markets. Discussions have focused on their ability to manipulate markets, affect financial stability and, more recently, defraud investors. Yet any attempt for their regulation has been accompanied by fierce contestation, with the conclusion often being a ‘much ado about nothing’. This research also concludes that the dispute over whether hedge funds should or should not be regulated cannot be resolved at the technical level, that is, by analysing the readily available empirical evidence. The empirical evidence brought forward to prove whether hedge funds are affecting stability and market integrity – the two main concerns this research study focused on – is far from being straightforward. Also, the finance inferences are often biased in favour of hedge funds because of the role they are assigned within the Efficient Market Hypothesis. Here behavioural finance can be linked and becomes relevant to the performance of the hedge funds.

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