



CRANFIELD UNIVERSITY

Benjamin Monin

**ARE FUND MANAGERS SKILLED OR LUCKY?
PRACTITIONERS' PERSPECTIVE**

Cranfield School of Management
Doctor of Business Administration
Academic Year: 2020 - 2021

Supervisors: Dr Vineet Agarwal and Professor Sunil Poshakwale
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This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Business Administration

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ABSTRACT

The market share of the passive fund management industry has increased from 3% in 1995 to 41% in 2020 (Anadu et al., 2020). This study investigates whether fund managers are skilled, and if they are, can investors distinguish between skilled and lucky managers?

The empirical research relies on the interviews of 20 fund managers. This sample covers various countries and different strategies and styles.

I find that fund managers firmly believe they can beat their benchmark. They have clear rationales behind their investment decisions and believe the ability to go beyond conventional wisdom and to differentiate between short-term noise and long-term trends is the key skill. Hence, they believe they should be assessed over at least a 3-year horizon. My results contrast with the popular belief that the market has a short-term view.

The fund managers also argue that the popular measure of their performance, the net alpha, is a poor proxy for measuring their skill for several reasons, the most important being that the management fee is not under their control. Further, skill can only be assessed through an intimate knowledge of their every trade, the degree of conviction, and the investment process. Hence, it is not possible to assess their skill using secondary data.

I also show the investors value more than just the financial return from their investment, and fund managers try to build trust with the investors. Finally, I demonstrate that the fund managers are aware of the biases and have developed elaborate systems to reduce their impact and to handle the inherent randomness of their environment.

These findings provide academics and practitioners with a framework to understand the complexities and challenges of the fund management industry, and why the performance is much more than simply net alpha. This research explores new topics which are fundamental to align investor and fund manager interest (e.g., relationship to information, portfolio management, etc.).

Keywords: *Active fund management, Behavioural Finance, Fund managers' skill and luck.*

ACKNOWLEDGEMENTS

I am indebted to my lead doctoral supervisor at the Cranfield School of management (SOM), Dr Vineet Agarwal, this thesis was a pleasant teamwork. From the onset and throughout the doctoral journey, Dr Agarwal has been a valuable Sherpa. I am also indebted to my co-supervisor Professor Sunil Poshakwale for his valuable feedback on several drafts.

I would also extend my thanks to my doctoral panel including Professor Ruth Bender (Panel member), and Professor Yacine Belghitar (Panel chair). Every panel was an occasion to reflect and progress. Although it would be inaccurate to say that every panel meeting had a happy ending, every panel was an occasion to grow as a future researcher. Thus, I am deeply indebted to the panel members who taught me to let the critique penetrates me.

I would also thank my DBA cohort members. It was a pleasure to exchange with them and a joy of the doctoral journey to have a couple of brothers in arms with me. Discussion about autism with Ian Iceton and discussion about Supply Chain Management in hospital from third world country with Esteban Lizarazo helped me to consider other topics than my own.

I would also thank the 20 fund managers who kindly took me by the hand and guided me through their world.

Thanks also to the beautiful country of England who gave me the chance to benefit from a wonderful university such as Cranfield to enjoy my doctoral journey.

My penultimate thanks to the saint patron of students St. Thomas Aquinas who protected me during my doctoral journey.

Last but not least, my thanks and appreciation to an infernal old man who kindly suggested that a doctorate would be helpful for my personal development.

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LIST OF ABBREVIATIONS

AMC	Asset Management Company
APB	Active Peer Benchmark
APT	Arbitrage Pricing Theory
AS	Active Share
AUM	Assets Under Management
BS	Black Scholes
BSW	Barras, Scaillet, Wermers
CAPM	Capital Asset Pricing Model
CNT	Conviction Narrative Theory
CRSP	Center for Research in Security Prices
FDR	False Discovery Rate
FPS	Flow Performance Sensitivity
IC	Intellectual Capital
LBS	London Business School
RS	Research Strategy
SBS	Skema Business School

1 INTRODUCTION

Over-reliance on secondary data and the limitations of quantitative models employed to estimate the proportion of skilled managers has led to a seemingly paradoxical situation known as the ‘active fund management puzzle’. Initial academic research such as Jensen (1968), Malkiel (1995), and more recently Fama and French (2009) concludes that active fund managers fail to generate enough outperformance to offset their fees. However, funds under active management in the US increased from approximately 2 trillion in 1998 to more than 4 trillion in 2019, even though passive fund management has gained market share in recent years, as shown Figure 1-1. Figure 1-2 shows the same trend in Assets Under Management (AUM) globally.

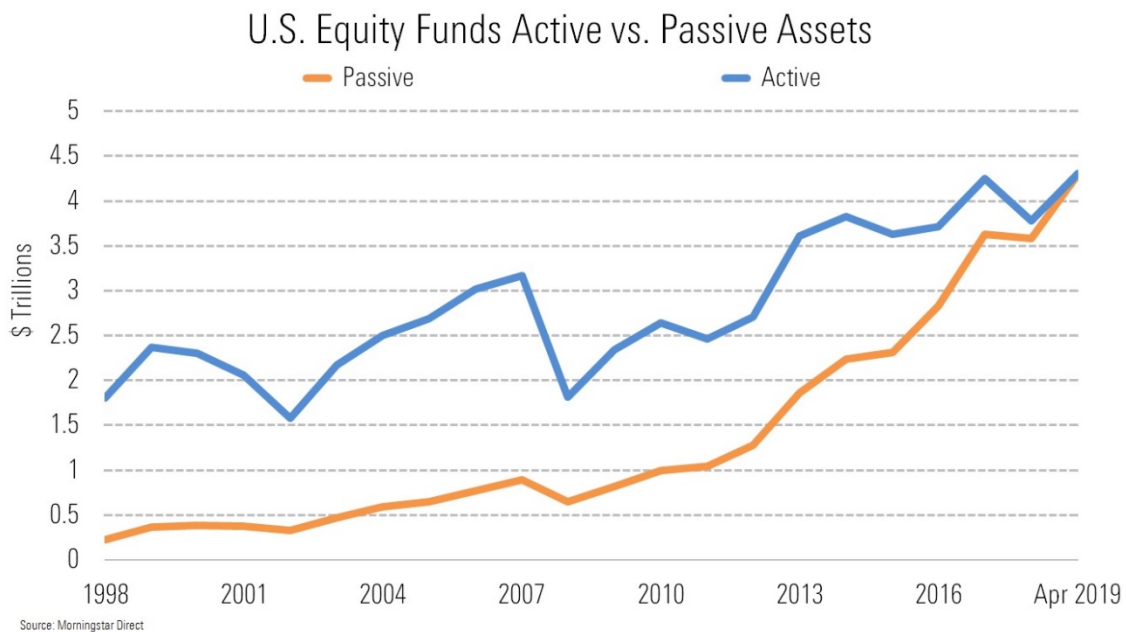


Figure 1-1 - AUM of US equity funds: Active versus passive (\$ trillion)

Reproduced from: <https://www.morningstar.com/insights/2019/06/12/asset-parity>

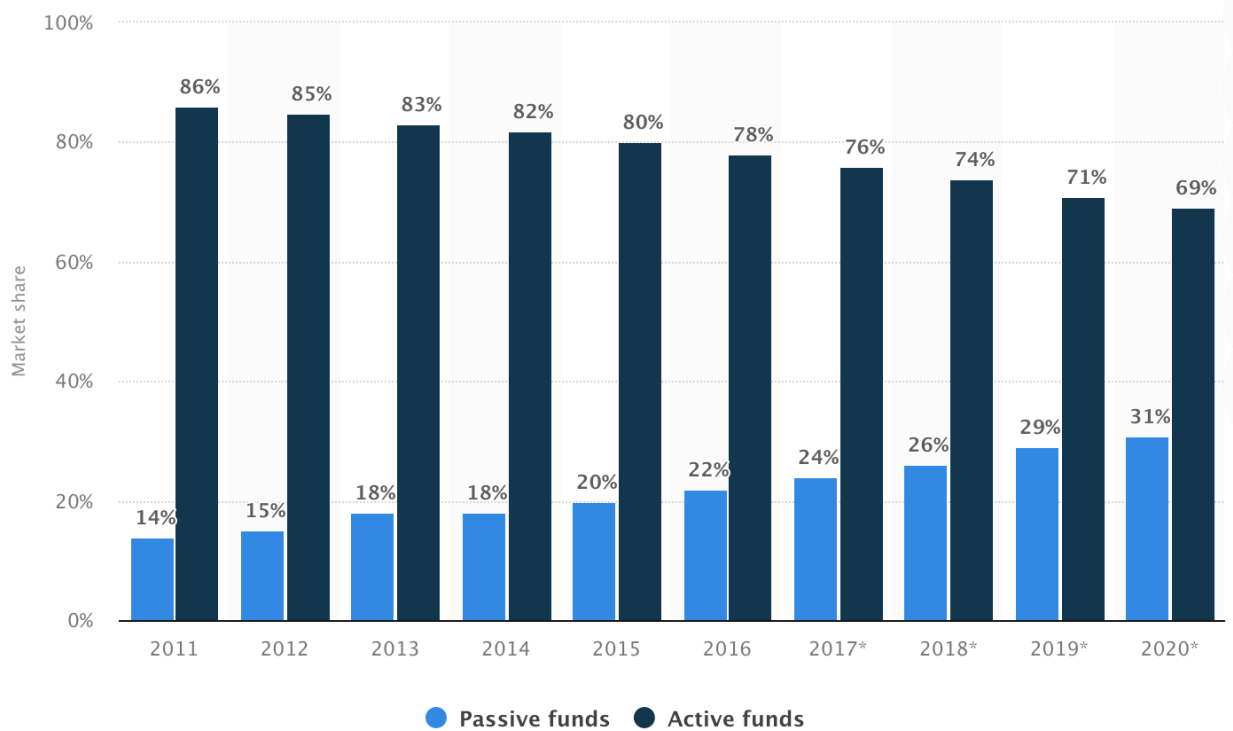


Figure 1-2 - Distribution of passive/active open-end funds worldwide from 2011 to 2020

Reproduced from: <https://www.statista.com/statistics/945153/market-share-of-passive-and-active-etfs/>

In parallel, the skill or ability of fund managers to deliver consistent outperformance generates a great academic debate as new academic articles have highlighted that fund managers have stock-picking skills when it matters the most (economic downturn, see Kacperczyk, Nieuwerburgh and Veldkamp, 2014) and that the stocks they buy outperform the stock they sell (see Jegadeesh, Chen and Wermers, 2000).

The empirical research in this area is largely based on secondary data and is susceptible to the “rampant positivist imperialism” criticism of Frankfurter (1994) whereby quantitative models became increasingly complex algorithms using bigger and bigger data sets for the sole purpose of demonstrating the use of the methodology as per Say’s

law¹; he further argues that the financial theory risks becoming RoboFinance.² Keasey and Hudson (2007) argue that without interaction with the practitioners, finance theory becomes a house without windows. Therefore, my study with primary data collected through interviews with practising fund managers fills the gap between academic research and the practitioners' perspectives/needs.

The ambition of this research is to explore further the debate about fund managers' skill, so the research question is:

Do fund managers have skills?

and the sub-questions are:

If they are (skilled), can investors break down their performance between skill and luck?

Is net alpha the appropriate measure of performance?

This research addresses this question through primary data. More specifically, I have interviewed (semi-structured interview) 20 fund managers and used an interview guide to elicit their view on whether they thought they were skilled enough to consistently beat their benchmark.

I contribute to the understanding of the active fund managers' world in several ways. First, I find there is a clear consensus among the fund managers that they have the skills to deliver outperformance. They are also clear that it is not possible to disentangle skill and luck by just looking at the returns earned by the fund. Second, they believe their performance should be assessed over a long-time horizon (at least three years). They are aware that some investors assess their performance over short horizons and confuse poor performance with lack of skill. Third, I demonstrate that the fund managers believe their job is more than simply the financial return, and the ability to build trust with investors in order to align their interests is crucial. Fourth, I establish the relationship between incentivised non-optimal investment decision making (risk-shifting, index tracking)

¹ Say's law refers to Jean-Baptiste Say's economic law whereby production is a source of demand.

² RoboFinance refers to the methodology whereby external direct observation contradicting results from a mathematical/statistical model are discarded. There is an absence of cross check with the practitioners.

driven by the pressures the fund managers face from internal and external sources and the value curve from Prospect Theory. Finally, I find that fund managers are aware of the heuristics and biases and develop tools such as sound investment processes fuelled by thorough data gathering and analysis to reduce their biases.

An additional contribution is that I address the paucity of research using primary data, thereby providing a cross check on existing results obtained through secondary data and limited quantitative models. Thus, I provide a holistic framework that connects parts of the fund managers' world that are usually analysed in isolation. Thus, this research establishes a bridge between the academic research, the practitioners, and the imperative for regulations to have a clear understanding of the industry to implement sound legislation to align the interests of fund managers and investors.

The rest of the thesis is structured as follows: Chapter 2 presents the literature review, highlights the limitations of previous research, and justifies my research question within the existing corpus. Chapter 3 describes my ontological and epistemological stance and further delves into the choices made to align the research question and the design of the research methodology. Chapter 4 details the data collection and data analysis process to extract meaning out of the fund managers' interview transcripts. Chapter 5 introduces the holistic framework and presents the analysis of fund managers' responses to several topics related to their skills. Chapter 6 offers further reflection on the doctoral journey and the potential impact of the research. Chapter 7 highlights the conclusion and underlines the limitations of the research, and finally offers some thoughts and recommendations for further research.

2 LITERATURE REVIEW

In this section, I first describe the theoretical underpinnings of my thesis: the Prospect Theory (Kahneman and Tversky, 1979). I also explain the value curve, reference point and other critical concepts such as heuristics and biases. Then I analyse the existing academic literature and the current issues pertaining to my research. Finally, I analyse the extent to which the extant academic literature uses primary data to explain fund managers' behaviour. This review of the literature is also extensively used later in Chapter 5.

The last couple of decades have witnessed a sustained growth of AUM within the active fund management industry; its size has tripled between 2003 and 2019. However, early academic research fails to find evidence that active fund managers cover their fees, and deliver excess return over their benchmark (see e.g., Jensen, 1968; Malkiel, 1995). This paradoxical situation of the absence of positive risk-adjusted return but growing AUM is called the active fund management puzzle. A related strand of literature finds that only a small proportion of active managers possess stock-picking skills (e.g. Barras, Scaillet and Wermers, 2010; henceforth BSW, 2010). The results of BSW (2010) echo the long-run predictions from Berk and Green (2004) who anticipate a paucity of funds with positive alpha as these will attract most of the new inflow which in turn will put pressure on their ability to deliver performance so that their alpha will progressively dwindle to a level equal to their fees. Alternatively, Gerakos, Linnainmaa and Morse (2016) infer that fund managers charge fees and investors pay these fees primarily for the performance that stems from tactical factor exposure³. They argue that, especially for equity funds, investors are keen to pay a premium to obtain the performance related to successful tactical betas.

More recent literature however suggests several methodological shortcomings of the earlier work (see e.g., Jensen, 1968; Malkiel, 1995; Carhart, 1997) such as the failure to

³ Another synonym of tactical factors is smart betas. Smart beta strategies' ambition is to capture alpha through alternative index construction rules (different from the usual market cap) and weighting measures such as volatility, momentum etc.

consider the differential performance of actively managed funds during periods of economic expansion and recessions (e.g., Kacperczyk et al., 2008; Glode, 2011), or the extreme sensitivity of the methodologies used to measure the percentage of positive alpha funds, which can result in radically different results (e.g., Ferson and Chen, 2018).

There is also a vibrant debate on whether net alpha (risk-adjusted performance after costs) is the appropriate measure of performance (e.g., Berk and van Binsbergen, 2015) and whether the performance is limited to a financial number or do investors value something more within the service offered by their active fund manager such as trust (Gennaioli, Shleifer and Vishny, 2015). Gruber (1996) presents another explanation by highlighting the dichotomy between retail (investing through brokers) and institutional (buying their funds directly) investors when it comes to actively managed funds. He finds that there is a difference in performance between institutional and retail investors.

Other potential reasons for the active management puzzle include the influence of the fund management industry structure on the fund manager's investment decision making. For instance, the Flow Performance Sensitivity (henceforth FPS) depicts how inflows and outflows of a fund can help us understand seemingly counter-intuitive decisions by the fund managers when they are either far ahead and decide to track their benchmark or far behind their benchmark and decide to shift their risk profile. The literature also describes how fund managers cope with uncertainty around firm valuation and the embedded intellectual capital (hereafter IC) within it. They seem to favour qualitative (unprocessed) data coming from their meetings with the top management to infer a mosaic picture (investment thesis) which they confirm or disconfirm through further interaction with top management.

2.1 Theoretical Background

The theoretical background of my research is Behavioural Finance and more precisely the Prospect Theory developed by Kahneman and Tversky (1979). Before detailing the Prospect Theory, it is worth examining the salient difference in the underlying assumptions between Classical and Behavioural Finance. Under the assumption of perfect rationality, the homo economicus makes choices that are optimal. He knows all the choices available to him and can order them with an objective set of criteria. Once the ranking is done, he chooses the best choice available to him which maximises his utility.

Conversely, under the hypothesis of bounded rationality, investors do not look for choices that maximise their utility (perfect rationality hypothesis) but look for choices that satisfice⁴ them. Thus, the homo economicus under the hypothesis of bounded rationality does not chase an elusive optimal choice either because of limited cognitive ability or access to limited information.

Rubinstein (2001) argues that financial markets are at the very least, “minimally rational”; even if there are mispricing anomalies, investors may not be able to profit from these due to various reasons. He describes Behavioural Finance as a mere literature of anomalies.

The aim of Behavioural Finance is to make sense of the investor’s choices under the hypothesis of bounded rationality (Simon, 1955). As per Kahneman (2003), the Prospect Theory tries to map the bounded rationality and explore the biases that push investors away from optimal investing decision. The Prospect Theory posits the investment making process has two phases: the editing phase, and the evaluation phase.

1. *The editing phase*: This phase consists of a pre-analysis of the investment’s choices involved in the decision-making process. The goal is to simplify the possibilities at hand in order to have a simple picture to act upon. There are several steps in the editing phase such as:

⁴ Satisfice is the contraction of satisfy and suffice.

- Coding: outcomes are translated into gains or losses compared to a reference point.⁵
 - Combination: outcomes with the same payoff are combined for simplification
 - Segregation: prospects are broken down between their riskless and risky components.
 - Cancellation: common stages of two separate prospects are ignored
 - Simplification: rounding of outcome probabilities and/or discarding unlikely extreme event.
 - Detection of dominance: search for dominance of a prospect A over prospect B in all possible cases.
2. *The evaluation phase*: Once prospects have been ordered by value, the individual chooses the prospect with the highest value. The value (V) of a prospect is a function of two parameters π (decision weight $\pi(p)$ associated with each probability (p) and v (subjective value associated with a specific outcome). The formula is therefore:

Equation 2-1 - Prospect value formula

$$V = \sum_{i=1}^n \pi(p_i) v(x_i)$$

⁵ Reference point refers to the price of the purchase/sell of a financial asset.

Value curve

The value curve (Figure 2-1) used in the Prospect Theory is its key element and is different when compared to the value curve from the expected utility theory. Its main features are:

- The value curve is concave in the gains part, which means that individuals are risk averse when it comes to profit and will favour a riskless prospect over a risky one when dealing with positive outcome prospects. They lock the profit. Conversely, the value curve is convex in the losses part, which indicates that individuals are risk seeking when they experience losses and will be tempted to choose the risky prospect over the riskless one to “get even”. The sum of these two effects may lead to the “disposition effect” whereby an investor sells the stocks with an unrealised gain and keeps the stocks with an unrealised loss. Furthermore, investors tend to overweight prospects with a low probability and conversely underweight those with a high probability.
- The value curve’s slope is steepest at the reference point (intersection of x and y axes). This implies that the change in value will be evaluated relative to the reference point (purchase price). Thus, an investor will be more sensitive to a 10% move in the asset price if this happens in the loss area rather than in the gain area. This is illustrated in the value curve with a greater curve’s steepness (convex) in the losses part compared to the quasi flatness of the curve in the gain part (concave).

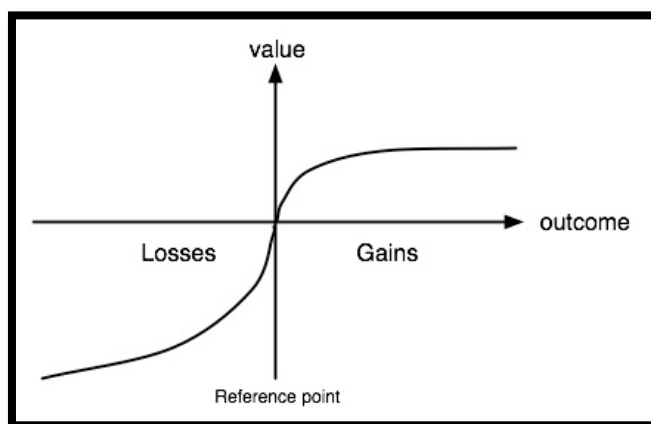


Figure 2-1 - Value curve from Prospect Theory

Heuristics and biases

These concepts were developed as cognitive biases in the field of Cognitive Psychology well before Kahneman and Tversky (1979) contextualised them into Behavioural Finance. Their taxonomy of biases and heuristics is widely used in subsequent academic work.

- The word *Heuristic* comes from the ancient Greek and means “find” or “discover”. It is defined by Gigerenzer and Gaissmaier (2011) as “a strategy that ignores part of the information, with the goal of making decisions more quickly, frugally and/or accurately than more complex methods” (p.454).

Amongst the most famous example of heuristics, is Pareto’s rule of 80/20, originating from Pareto’s work in 1896 where he finds that 80% of the Italian national income was earned by 20% of the Italian population. Another famous heuristic is the 1/N rule used by Markowitz (cited in Gigerenzer and Gaissmaier, 2011) to decide his pension fund’s allocation instead of the more complex weightings based on the ‘efficient frontier’, a concept that was paradoxically introduced to finance by Markowitz himself.⁶

- A *cognitive bias* refers to the systematic pattern of deviation from the norm or rationality in judgement, where inferences about other people and situations may be drawn in an illogical fashion. Individuals create their own “subjective social reality” from their perception. An alternative and more succinct definition as per Hilbert (2012) is that cognitive bias is “empirically observed deviation from normative expectation” (p.8).

Some well-known cognitive biases are representativeness, anchoring, and availability. Representativeness bias refers to the tendency to overestimate the correlation between two similar events. Anchoring bias refers to over-reliance on the initial information to make subsequent judgement. Availability bias is where people tend to rely heavily on immediate ideas they have when dealing with an issue.

⁶ The 1/N rule is a simple, equally weighted approach to asset allocation.

Overall, the Prospect Theory, through the value curve and the two-phase investment process, lays the theoretical background as to why, potentially, the homo economicus deviates from the optimal solution and chooses a “satisficing” option.

2.2 Academic literature review

The early academic literature on active fund management paints an unflattering picture of fund managers’ ability to deliver performance. Initial work from Jensen (1968) shows that fund managers, on average, are unsuccessful in providing excess returns to cover their fees. Further work by Malkiel (1995), Carhart (1997), and Fama and French (2009) concurs that returns generated by active fund managers barely, if at all, cover their fees.

Even if the academic literature and/or investors notice that some active fund managers deliver performance above and beyond their benchmark, the question is whether this is due to skill or are they simply lucky? In a seminal paper, BSW (2010) use the False Discovery Rate⁷ (FDR) method and classify funds into skilled, zero alpha⁸, and unskilled funds. They find that approximately 75% of the funds exhibit zero alpha (net of fees). In parallel, they also show that the proportion of skilled fund decreases by almost 14 points from 14.4% in 1990 to 0.6% in 2006. They offer two non-mutually exclusive explanations for their results: (1) an increase in market efficiency throughout the period, and (2) new managers coming in the industry have poor skills.

2.2.1 Do active fund managers have skills?

An important dimension to consider when measuring the fund manager’s performance is whether it is driven by skill or luck. Further, can investors break down performance into these two components? There is an extensive body of literature that has developed measures that distinguish between skill and luck.

Cornell (2009) sets up a simple mathematical formula whereby performance is the sum of skill and luck ($p = s + l$). He posits investors can only observe the sum of the two components and it is difficult for them to disentangle luck and skill. He shows that the

⁷ FDR refers to “a zero alpha fund that falsely exhibits significant estimated alphas” (p.6)

⁸ Unskilled funds are those whose performance does not cover their fees; zero alpha funds have a performance equal to their fees and skilled funds have a performance that exceeds their fees.

assessment of skill based on observed performance is highly dependent on the ratio of the variance of skill and performance. He finds that most of the variation in the cross-sectional performance for large cap value equity strategy is driven by luck. His results could be attributed to a reduction in the pool of skilled fund managers to 0.6% in 2010 from 14.4% in 1990 and an increase in the pool of poorly skilled managers to 24% from 9.2%, as documented by BSW (2010). Using an investor survey, Heuer, Merkle and Weber (2017) highlight that investors disregard cross-sectional information and volatility and therefore can mistakenly consider luck as skill. This can lead to inappropriate decisions in terms of capital allocation to lucky fund managers or to those who take excessive risk to attract inflows with flattering performance.

Hoberg, Kumar and Prabhala (2018) employ another proxy for skill: the ability of a fund manager to beat other with similar investment philosophy. They argue that the ability of a fund manager to deliver performance should be measured through his/her ability to deliver performance despite increased competition (similar to his/her ability to deliver performance despite decreasing return to scale). They find that increased competition makes the persistence of fund's alpha less likely.

Grønborg et al. (2021) suggest another method to identify funds with superior skills and discard those with predicted poor performance. They find that skilled fund managers are more likely to outperform during periods with high idiosyncratic volatility. Thus, skilled fund managers seem better prepared to profit from volatile finance market conditions than poorly skilled fund managers.

In contrast to the earlier literature that argues fund managers do not have skills, Wermers (2000) uses two snapshots of equity holdings of mutual funds from 1975 to 1994 and shows that fund managers seem to have stock-picking skills as the stocks they buy outperform the Center for Research in Security Prices (CRSP) value-weighted index by 130 basis points per year before transactions costs. Jegadeesh, Chen and Wermers (2000) show that the stocks bought by mutual funds outperform the stocks they sell by a statistically significant 2% over the next year. In parallel, Tonks (2005) finds strong persistence of the excess return generated by fund managers over a one-year time horizon, though it fades beyond that. In a similar vein, Kosowski et al. (2006) and Cuthbertson, Nitzsche and O'Sullivan (2008) find that a consistent minority of fund managers have

stock-picking skills that allow them to earn returns higher than their fees. The outperformance is not only consistent, but also persists over time.

Chen, Adams and Taffler (2009) refine previous analysis by focusing on growth fund managers. They demonstrate that growth fund managers, especially those investing in stocks, have persistent ($> 1Y$) growth timing skills⁹; however, they find little evidence of market timing skills.

Bhootra et al. (2015) use a Generalized Binomial Distribution to show that when a fund is, and remains in, the top quartile (or avoids the bottom quartile), it is the result of skill.

There is also a rich body of literature that highlights the methodological shortcomings of the earlier literature that concludes fund managers do not have the skills. Kacperczyk (2011) explains the apparent lack of fund managers' timing skill during recessions while stock picking dominates during periods of economic growth. He suggests that an appropriate measure of fund managers' ability should give higher weight to market timing during downturns and to stock picking during booms. The reason for overweighting recession periods is that for a given sample period, there are fewer instances of recession than growth periods and averaging performance across different economic periods decreases the ability to identify market timing skill.

Puckett and Yan (2011) present another potential factor that leads to mismeasurement of fund manager's performance. They show that a substantial part of a fund's return is driven by intra-quarter trades and these previous studies about a fund manager's skill are likely to be biased downward as they usually proxy trading activity with the change in quarterly institutional holdings.

Similarly Andrikogiannopoulou and Papakonstantinou (2016, 2019) find that the proportion of positive alpha funds is much higher (13%) than that reported by BSW (2010). They explain that the FDR methodology tends to misclassify funds with a large alpha (e.g., +2% per year) as 0 alpha funds due to the low signal-to-noise ratio in fund return data. Similarly, Harvey and Liu (2018) use a noise-reduced alpha model to measure

⁹ Growth timing skills refers to the ability to successfully time activity across the growth/value spectrum and differs from market timing which is the successful forecast of "future market states and weighting equity exposure accordingly" (Chen et al., 2009).

the part of funds that has positive alpha. They posit that the usual approach of the fund-by-fund neglects valuable information embedded in the cross section. In so doing, they find that 10.6% of funds outperform, or in other words have positive alpha (vs. 0.6% for BSW, 2010).

2.2.2 Short-term versus Long-Term performance

There is also disagreement in the existing literature on whether the fund managers and investors have a short- or a long-term horizon. Further, should the fund manager's performance be assessed over the short or long term? The short-term performance is usually depicted as the elusive holy grail that retail investors are chasing after.

Jin (2005) demonstrates that the short-termism of fund managers derives from the short-termism of their investors. The underlying assumption is that fund managers are incentivized to produce short-term returns due to the double threat of the need to increase inflow; hence the fund's AUM, and the threat of being fired in the case of underperformance. However, the relationship is not reciprocal, meaning that the short-termism of fund managers does not influence the investor's horizon. However, this short-termism may be counterproductive for investors as the abnormal returns observed over short horizons (quarterly) fade away when evaluated over the long term (Bollen and Busse, 2005).

Lan, Moneta and Wermers (2014) find that the investment horizon is a proxy of a fund manager's skill so that stocks held by long-term horizon funds outperform stocks held by short-term horizon funds by 3% over the following five-year period. Cremers et al., (2016) concur as they find that amongst the funds with the highest Active Share¹⁰ (hereafter AS), those with patient strategies (buying and holding stocks for at least two years) outperform the rest by over 2% a year. Finally, Borochin and Yang (2017) corroborate previous findings as they find that long-term institutional investors exhibit superior investment skills than short-term horizon institutional investors.

¹⁰ AS is defined as "the fraction of the portfolio that is different from the benchmark index" (p. 2)

Consequently, there seems to be a misalignment between the investor's assessment horizon of performance and the needed strategy (high AS/patient) and horizon (>2Y) for a fund manager to deliver persistent outperformance.

2.2.3 Why don't we see the alpha?

2.2.3.1 Dichotomy of investors

Gruber (1996) makes a distinction between the disadvantaged clientele (mainly stock of money) who directs its investments on criteria such as advertising and broker advice likely to translate into underperformance, and the sophisticated clientele (flow of money) who directs its investment based on performance likely to translate into positive risk-adjusted returns.

Bergstresser, Chalmers and Tufano (2009) studied the benefits of a broker channel. They find that brokers offer funds that are smaller and more often foreign, compared to those sold through the direct channel. Unfortunately, the returns from these exotic funds do not offset the distribution fees.

Del Guercio and Reuter (2014) confirm Gruber's findings about the diverse fortune of customers regarding their investment in active funds, as they find little evidence that the funds sold directly to customers underperform index funds, while those sold through brokers experience weaker alpha and significantly underperform. Thus, they conclude that the overall underperformance of the active fund management industry is primarily driven by retail investors buying their funds through brokers.

Using a large survey of over 3,300 retail mutual fund investors, Capon, Fitzsimons and Prince (1996) find that approximately 40% of the respondents did not know whether the funds they have invested in are load or no-load funds. Further, over 70% did not know whether their funds were domestic or foreign, or whether they were equity or fixed income. The retail investors seem to be quite naïve about their investments.

This dichotomy between retail and institutional investors is also reflected in the different biases they suffer from. Whilst some biases are specific to retail customers such as

glamour stocks (Sharma, Hur and Lee , 2008), and cognitive dissonance¹¹ (Goetzmann and Peles, 1997), others are mainly related to institutional investors such as home bias¹² (see French and Poterba, 1991; Grinblatt and Keloharju, 2001), and herd bias¹³ (see Grinblatt, Titman and Wermers, 1995; Choi and Skiba, 2015). Finally, there are some biases shared across the different types of investor, such as overconfidence (see Barber and Odean, 2001; Puetz and Ruenzi, 2011) and self-attribution bias (see Fischhoff, Slovic and Lichtenstein, 1977; Mishra and Metilda, 2015). These differences in investors' behaviour may explain how they respectively assess fund managers' performance.

2.2.3.2 Is the thermometer broken?

The usual measure of performance, namely the net alpha suffers from several shortcomings. It can underestimate the actual performance delivered by fund managers if performance is averaged over different economic periods (Kosowski, 2006) and/or across different types of investors (retail versus institutional, naïve versus knowledgeable) (Guercio and Reuter, 2014).

Kosowski (2006) finds a significant difference in the alpha of approximately 3 to 5% between recessionary and expansionary periods. He posits that investors may favour fund managers who deliver alpha during recessions, as that is when the marginal utility of wealth is especially high. Glode (2011) echoes these findings and argues that averaging performance across different economic periods may understate fund managers' ability to generate excess return when it matters the most for investors.

The net alpha may also confuse investors by leading them to believe that it represents fund managers' skill, whereas their performance may be due to luck. More recent literature proposes new measures of performance that incorporate several dimensions missing from the net alpha, such as the difficulty for a fund manager to deliver performance as their fund's size increases (e.g., Pástor, Stambaugh and Taylor, 2015; Zhu , 2018), the ability to predict other parameters, such as asset growth (e.g., Doshi, Elkamhi

¹¹ Cognitive dissonance refers to the distress caused by conflicting cognitive element and the subsequent alteration of individuals beliefs to reduce the discomfort.

¹² Home bias refers to the tendency of investors to have most of their equity portfolio in their domestic equities thereby neglecting the diversification benefits.

¹³ Herd Bias refers to the tendency of investors to look at and copy other investors' behaviour.

and Simutin, 2014), and the difficulty to break down performance between common and idiosyncratic talent (e.g., Hunter et al., 2014).

There are several alternative performance measures proposed in the literature. For example, Berk and van Binsbergen (2015) argue that the net alpha measures the excess return provided to investors and that the excess return is not correlated with/or reflective of fund managers' skill. Instead, they propose that a measure of the value added by the fund manager is a better proxy than gross or net alpha. They give the example of a fund with 1 billion of AUM with a 2% performance versus a fund with 200 million AUM and a 10% performance. According to them, the two funds have an equal performance as they both extract 20 million of value from the market. This approach captures the decreasing return to scale in the fund management industry as per Pástor et al. (2015), whereby the value-added measure takes into account the increase in skill needed for a manager to deliver an equal performance, *ceteris paribus*, when the size of its fund increases. Doshi et al. (2014) advocate for a measure of "managerial activeness" which is called the active weight¹⁴. Using this new measure, they find that there is an excess return premium of 2.5% for active funds over passive ones. The active weight not only allows the measurement of the performance differential between active and passive management but can also predict several other important parameters, such as fund flows, value added etc. This measure is conceptually close to the AS concept of Cremers and Petajisto (2009). The key difference is that while active weight measures the performance of the fund manager portfolio against a market-cap weighted portfolio, the AS measures it against a broad benchmark index. Doshi et al. (2014) show that the active weight concept predicts the value added performance proxy from Berk and van Binsbergen (2015). Their main conclusion is that fund performance is positively affected by managerial activeness.

Hunter et al. (2014) offer an alternative measure of performance, namely the Active Peer Benchmark¹⁵ (henceforth APB). It improves the alpha estimation from the four-factor model through the inclusion of the peer group return, which reduces the idiosyncratic

¹⁴ Active weight is defined as "the absolute difference between the value weights and the actual weights held by a fund summed across its holdings" (p. 161).

¹⁵ APB returns refer to "the average peer group return, measured gross of fund expense ratios to focus on fund manager skill instead of fund cost efficiency" (p. 3).

noise. They find evidence of skill and that the APB model has more power to identify outperforming funds within most peer groups. It also allows them to refine the alpha measure by breaking it down between the alpha generated from common strategies which they call common talents, and the incremental alpha which they call idiosyncratic talent.

Cohen, Coval and Pástor (2005) argue that the fund manager's performance can be measured by the similarity of their portfolio to that of a successful fund manager. They show this measure carries information pertaining to future fund returns that is not included in alpha. Jordan and Riley (2015) advocate that a fund's volatility is predictive of its future performance. They find that a low volatility fund provides an extra 5.4% outperformance compared to a high volatility fund. They include the LVH factor (low vs. high volatility) in their model and highlight that the outperformance from low volatility funds is due to investing in low volatility stocks and not because of their skill. Kacperczyk et al. (2008) create the "return gap" concept to measure the intra quarter performance that investors cannot capture by looking only at quarterly reports. They describe the return gap as an effective proxy of the value added by the fund manager since the last disclosed holdings. They find that persistence in the return gap for up to five years, which indicates that this is related to systemic factors. Interestingly, this persistence is equally true for worst and best performers.

Thus, the usual measure of performance calculated as the excess return after fees (net alpha) may have severe limitations to assess fund managers' skill. Worse, it could mislead investors to either underestimate fund managers' performance or to mistake luck for skill.

2.2.3.3 Flow Performance Sensitivity/Money Doctors: Beyond alpha

The FPS, both for industry and remuneration (payoff) structures, is non-linear and convex, meaning that investors do not react equally towards positive/negative performance, as is illustrated by the value curve from Prospect Theory (loss aversion bias). Their reaction (inflow/outflow) is a function of multiple factors, such as ranking (Morningstar), level of fees, and the degree of their attention to a fund's information.

Sirri and Tufano (1998) highlight that one of the potential reasons that funds with high fees experience high inflow is that they reduce the searching costs for customers through

advertising. Moreover, customers seem sensitive to the big, complex and/or famous names of the fund management industry.

Javadekar (2017) offers an alternative explanation regarding the non-linearity of the FPS. He posits investors may have varying degrees of attention given their level of financial literacy. Thus, some investors may be quicker to react to performance than others. His results confirm that the FPS from firms with high recent performance is twice as steep and about 60% of it is explained by a fund's former performance. Thus, past performance acts as leverage for future performance through inflow.

Franzoni and Schmalz (2017) define more clearly the shape of the FPS and outline that the FPS is hump shaped and twice as large during moderate stress than extreme states. They posit that a fund's performance incorporates a signal about the fund manager's unobservable skill. Therefore, investors seem more confident in their ability to infer a fund manager's skill from his/her performance when it is not polluted by a high volatility which is quite frequent during extreme states.

Dyakov and Verbeek (2018) wonder if the FPS is sensitive to the return gap¹⁶ of Kacperczyk et al. (2008) as it is predictive of a fund's performance. They calculate that an increase of one standard deviation in the return gap in the previous year translates into an increase (0.74%) of subsequent inflows in the next quarter. However, they nuance this number as they outline that this is predominantly driven by institutional investors as their fund flows' sensitivity to the return gap is higher than the one from retail investors. They explain that this result is consistent with the hypothesis that separating bad fund managers from the good ones is a process that requires a certain degree of sophistication.

Goriaev, Nijman and Werker (2008) equally insist on the importance of the investor's dichotomy. They find that naïve investors are more likely to invest in highly marketed funds than sophisticated investors. They infer that retail investors update their information less frequently than institutional investors. Furthermore, they also infer that institutional investors update their information more frequently and use a shorter performance horizon

¹⁶ The return gap refers to “the difference between the reported funds returns and the return on a portfolio that invests in the previously disclosed fund holdings” (p. 2379).

in order to capture the short-term persistence of performance (e.g. Bollen and Busse, 2005)

Choi, Kahraman and Mukherjee (2016) analyse the ability of investors to infer fund managers' skill in a side-by-side case where a fund manager is responsible for two mutual funds. They find that investors partially infer the fund manager's skill as they correctly invest/withdraw their capital from the second fund based on the performance of the first, but not as much as they should. The investors correctly predict the direction of performance but not the magnitude.

As previously argued (subsection 2.3.2), the notion of performance is a rather elusive concept because the usual performance measures are not reflective of skill for multiple reasons. Another possibility is that performance is not all there is and that investors value other attributes offered by fund manager.

Gennaioli et al. (2015) develop the notion of money doctors¹⁷. They posit that fund managers can charge higher fees when their investors trust them. Money doctors lessen the anxiety of their customers to invest in risky assets. Thus, fund managers can charge higher fees and that increase in fees is not related to financial returns. That also implies that investors may value more than the financial performance.

Kostovetsky (2016) analyses the trust between investors and fund managers by looking at the mutual fund flows in response to the announcement of changes in the ownership of a fund's advisor. He outlines that most of the change in mutual flow is an increase of outflow driven by retail investors for whom trust is a major concern and they do not possess the skill/knowledge to monitor the fund's management. He concludes that intangible considerations are quite important for investors.

Germann, Loos and Weber (2018) check the money doctor concept's validity through an experimental study. They find that investors are ready to pay a "trust premium" to invest through a trusted fund manager. They also find that the difference in trustworthiness translates into the proportion of money invested in risky assets. The underlying belief

¹⁷ They define money doctors as "families of mutual funds, registered investment advisors, financial planners, brokers, bank trust departments, and others who give investors confidence to take risks" (p. 3).

from the experiment's participants is that trustworthy fund managers can deliver better investment performance.

Dorn and Weber (2015) add a layer of clarity to the understanding of the money doctor concept. They analyse the relationship between money doctors and their customers during an economic crisis and show that bad times always put the relationship to the test. They describe the loss of trust as a function of the percentage of asset delegated for management. They argue that saying trust does not depend on past performance may be true during normal times but is rather inaccurate during a crisis.

Linnainmaa et al. (2017) delineate the relationship between trust and risk taking. They find that the length of the relationship influences the degree of risk taken by investors. Therefore, there is a positive relationship between the portion of risky shares in one client's portfolio and the length of the relationship with the investment advisor. The length of the relationship is also an indicator of the likelihood for investors to sell their assets in the case of bad performance.

Chang, Solomon and Westerfield (2016) outline that another potential reason for the decreasing trust in money managers from investors may be due to cognitive dissonance¹⁸ (e.g., Goetzmann and Peles, 1997). They posit that as investors are prone to a reverse disposition effect when investing in mutual funds, they must find a reason to sell their losing funds to resolve their cognitive dissonance. As they delegate the management of their assets to a money doctor, they can realise their losses while scapegoating the fund manager for poor performance. Another way to say this is that investors blame fund managers for poor performance, sell their losing funds, and escape the psychological stress of introspection.

If the fund manager's skill is summarised by using a formula, this would be as follows:

Equation 2-2 - Fund managers' skill formula

In/Out flow of money = Delta in Alpha + Delta in Trust (less volatile)

¹⁸ Cognitive dissonance is defined as “the discomfort that arises when a person recognizes that he or she makes choices and/or holds beliefs that are inconsistent with each other” (Festinger, 1957).

This implies that their skill is the sum of the financial returns (net alpha) and the trust (money doctors) they build with their investors. Further, I posit that the skill part related to the trust they build with their investors is less volatile than their financial returns (quarterly assessed).

To summarise, there is an emerging consensus that fund managers do have stock-picking skills. The evidence on their ability to generate risk-adjusted performance after costs is less clear but there is a large body of literature that questions the suitability of this measure and proposes several alternatives. Further, there is more to performance than simply the financial returns. In the next subsection, I explore how fund managers may be influenced by the external or internal environment and how this may cause conflicts of interest amongst the different stakeholders of the active fund management industry.

2.2.3.4 – Agency costs/Conflict of interest

2.2.3.4.1 Internal Agency costs/Conflict of interest

Another caveat to add to the classic performance measure in the previous academic literature is the underlying assumption that a fund manager manages only one fund and is, *a priori*, not part of a family fund¹⁹. However, this is seldom realistic.

Fund families have strategies to increase their profits which are non-performance-related, such as: fund proliferation to take advantage of positive spillover²⁰ (Massa, 2003), increase fees if they are below industry average to exploit investors' myopia (Khorana and Servaes, 2000), increase the complexity of prices so that investors have a harder time to know what they pay for (Carlin, 2009), or only promote funds which have a flattering recent track record (incubation bias) (Evans, 2010). These strategies are, however, not available to single fund firms.

Brown and Wu (2016) describe the fund's alpha as the sum of two components: a fund skill and a family skill. The sum of the two skills is called the component skill. They

¹⁹ Fund family refers to a set of funds with a different investment philosophy offered by one management company (for instance Vanguard, Fidelity or Blackrock etc.).

²⁰ Spillover effect refers to the fact that there may be a negative/positive collateral effect in having a dog/star fund in the bottom/top 5-10% of its category. Other funds from the same family could experience lower/higher inflow because/thanks to the bad/good publicity of the dog/star fund.

further outline a positive common-skill effect and a negative noise effect as the two drivers of how family performance influences the estimated skill and fund flows of a fund that belongs to a family of funds. More specifically, a fund manager can be responsible for two or more funds; this can lead to severe conflict of interest.

Del Guercio, Genç and Tran (2018) depict a “side by side management” where a fund manager is responsible for both a hedge fund and a mutual fund. They find that mutual funds with at least one side-by-side hedge fund manager underperform those with no side-by-side managers by just under 0.1% a month, or 1.15% a year, using Carhart’s alpha. This implies that a fund manager can neglect his/her performance on the mutual fund part to favour his performance on the hedge fund part where the incentives are more rewarding. One could even argue that fund managers transfer their performance from the mutual fund part to the hedge fund part. They add that they do not find such underperformance when there is no simultaneous management between mutual and hedge fund parts.

Gervais, Lynch and Musto (2005) posit that an added advantage of a family fund is that it reduces the search cost of investors throughout their decision to fire or retain their fund managers. For instance, if a fund manager who is part of a family fund is not fired after a bad performance, investors can infer that his poor performance was mostly due to lack of luck rather than lack of skill, as in the latter case he probably would have been dismissed. They conclude that pooling fund managers into family funds is a helpful tool to monitor them with greater accuracy, hence managing money more profitably.

2.2.3.4.2 - External Agency costs/Conflict of interest

Another dimension missing from the usual measures of performance is the effect of the asset management company’s structure and how it influences a fund manager’s behaviour. It may lead to a conflict of interest between performance’s persistence and the growth of a fund’s AUM.

Brown, Harlow and Starks (1996) compare the fund management industry to a golf tournament where the winner is the one with the best performance relative to the other participants. As such, they deem it rational for a fund manager to alter his portfolio composition during the year if he is lagging behind competitors. They compare this

behaviour to the call option payoff influenced by the relative performance ranking. They also point out that this is even more salient as the competition is increasing. Consequently, the structure of the industry may influence the fund manager's decision and lead him/her away from optimal decisions to maximise his/her performance. For instance, a fund manager, who believes they are far ahead of their competitors mid-year and want to lock their performance so that they will more than likely be in the top quartile at year-end, may decide that it is optimal to de-risk their fund and subsequently track their benchmark for the remaining six months of the year. The fund manager may rationally assess that their payoff structure has a limited upside, thus when this cap is reached, they have no incentive to provide extra profit to their investors.

Chevalier and Ellison (1997) corroborate this analysis and outline the agency problem between the fund manager and their customer. There can be a misalignment between a customer's expectation that fund managers will maximise the risk-adjusted expected returns whilst fund managers can use non-performance-related strategies to maximise their own profits.

Nanda, Wang and Zheng (2004) outline what they call the star/dog fund²¹ effect and its impact on the shape of inflow/outflow. In essence, they describe the extra inflow coming from having a star fund in the fund's family. They further depict the asymmetry between star and dog funds. This asymmetry could be the source of extra risk as the fund manager does not feel the burn of outflow when the fund is underperforming. They describe the relationship of investors to performance (namely FPS) as a call option payoff whereby investors are extra sensitive to performance when a fund manager is in the top quartile. Thus, this structural bias within the investor's FPS may incentivize fund managers to shift risk in order either to escape the bottom group or shift risk to achieve the top quartile.

Huang, Sialm and Zhang (2011) argue that this fund manager's behaviour, whilst rational, may be detrimental to investors. They discover that the reason for the risk shifters' sub-optimal performance is their poor stock selectivity, rather than their timing skills. This is

²¹ A star/dog fund refers to "the top (bottom) 5 percent funds with the highest (lowest) monthly average returns" (p. 9).

more than detrimental to fund's customers, as one way to shift risk is to buy stocks with higher beta or to buy fewer stocks.

2.2.3.5 Overconfidence

In their seminal paper, Fischhoff et al. (1977) study and describe how overconfident people tend to exaggerate their existing knowledge correctness. They mention that through their experiment, they came across people who were wrong too often when confident they were right. They also posit that the source of overconfidence is multivariate.

Barber and Odean (2001) deduce that gender relates to overconfidence when they infer that the inferior performance from men's stock portfolio is due to overtrading caused by overconfidence and not those men trading different stocks from those traded by women. However, these two previous papers study the overconfidence bias at the individual level. Recent academic papers such as Jin et al. (2016), and Choi and Lou (2010) study overconfidence at the institutional investors level. They proxy overconfidence with AS. They posit that a positive correlation between AS and SPR (sum of positive benchmark-adjusted portfolios returns) would indicate a biased attribution. They assume that this correlation reflects the differential between confirming and refuting public signals. Thus, they infer the self-attribution bias as the driver of overconfidence.

Jin et al. (2016) concur as they find robust evidence that fund managers become overconfident after an outstanding performance.

Mishra and Metilda (2015) study the link between self-attribution bias and various factors. They show that self-attribution bias tends to increase with education but is not related to gender and/or an investor's experience.

Eshraghi and Taffler (2012) measure managerial overconfidence through analysis of the narratives in the reports that fund managers send to their investors. They outline the inverted U-shape of the relationship between fund manager overconfidence and the subsequent performance so that a high level of overconfidence translates into a subsequent poor performance in the next 12 months.

Puetz and Ruenzi (2011) acknowledge an increased trading frequency following good performance. Their finding corroborates the prior theories of overconfidence. They use the turnover ratio as a proxy for overconfidence and their results show a clear U-shaped relationship between a fund's turnover ratio and its prior performance. One reason is that the worst performers shift risk i.e., their portfolio profile, to catch up with their benchmark, the other reason is that the top performers trade more as they become overconfident after a good performance.

Adebambo and Yan (2016) use a different proxy for overconfidence as they construct an overconfidence index made up of six parameters: manager gender and tenure, portfolio turnover and concentration, prior performance, and portfolio idiosyncratic risk. They find the source of momentum lies in the dynamic of overconfidence which is fuelled by self-attribution bias. This implies that the momentum reversal is expected to be stronger for the stocks where overconfident fund managers have invested in. Their results confirm this expected momentum reversal as they find a stronger return continuation for stocks held by overconfident investors than the stocks held by the least confident ones. One last proxy to measure overconfidence is an institution or investor's size.

Ekholm and Pasternack (2008) posit a negative correlation between size and overconfidence. Their hypothesis assumes that larger investment portfolios are managed by more experience investors *ceteris paribus*. They use data of Finnish investors and document robust evidence that investor size influences investor behaviour under new information, as large investors on average are more sensitive to good/bad news than small investors. Consequently, they conclude that larger investors are less overconfident than the smaller ones. Menkhoff, Schmidt, and Brozynski (2006) mention one caveat regarding the overconfidence bias. They warn that the impact of experience on overconfidence is subject to the interpretation of overconfidence. If overconfidence means an overinflated ego, then there is a positive relationship with experience; if overconfidence means an inflated precision of knowledge, then the relationship is decreasing with experience. Finally, they conclude that elusiveness of the concept of overconfidence may not be appropriate for applied empirical work. Experience seems to be an antidote to self-attribution bias, as Choi and Lou (2010) underline that managers in the 1950s seemed immune to the bias. Conversely, Mishra and Metilda (2015) highlight

that fund managers with a couple of decades of experience are relatively more overconfident than their less experienced peers. Analogously, there seems to be no clear-cut consensus regarding the structure of a fund (individually or team managed) and the related effect on overconfidence and performance.

However, Cici (2012) acknowledges that behavioural biases do not seem to be lessened by a team approach to portfolio management. Puetz and Ruenzi (2011) agree, as their results provide no proof of any difference in degrees of overconfidence between team or single managed funds.

By contrast, Jin et al. (2016) disagrees and outlines significant differences in AS between solo and team managed funds. More precisely, they infer a larger degree of irrationality for solo managed funds and that this translates into a greater likelihood to be prone to behavioural biases.

This subsection highlights that fund managers can be exposed to biases for several reason pertaining to either the structure of their environment (becoming overconfident after a lucky year), or their cognitive ability (such as self-attribution bias). Thus, the mindset of fund managers is constantly challenged as their performance varies over time. Therefore, they must find ways to handle both the swings in their moods and the randomness of the financial markets.

2.2.4 How do fund managers handle randomness?

2.2.4.1 Portfolio management

I have described in the prior subsection that fund managers could experience biases/heuristics when they are confronted with under/out performance. Further, the financial markets they operate in have a degree of randomness. Even a strategy that works in the long run will experience short periods of poor performance due to the volatility and noise in financial information/data. I now analyse how their portfolio management changes under these conditions of uncertainty and short term adverse or favourable performance.

2.2.4.1.1 Risk Shifting

Mutual funds explain their investment philosophy, style, and strategy through an objective statement which then trickles down into a fund objective category (e.g., growth, value etc.). The extant literature depicts a reality slightly more complex as to the nature of a fund's investment philosophy. First and foremost, the investment philosophy of a fund can be misclassified.

Di Bartolomeo and Witkowski (1997) find that approximately 9% of the equity funds from their sample are severely misclassified whilst another 30% are somewhat misclassified. Bams, Otten and Ramezanifar (2017) concur as they find that bad surprises await those investors who pick funds solely on their declared investment style. They outline that 14% of funds are significantly misclassified. They posit two reasons for misclassification: (1) the potential misinterpretation due to the vagueness of the actual style taxonomy as per Di Bartolomeo and Witkowski (1997), and (2) as a non-performance-related answer to an increased level of competition (ibid.). The former reason would be unintentional while the latter would be motivated by considerations such as the spillover effect. Thus, there is no clear-cut consensus on the impact of misclassification.

Sensoy (2009) further adds that more than 30% specify a mismatched benchmark and he infers those self-designated benchmarks are a choice which is motivated by the will to improve inflows. Di Bartolomeo and Witkowski (1997) find misclassified funds generate large positive unexpected wealth for their investors; however, they warn that this at the cost of a higher risk.

Conversely, Bams et al. (2017) show that misclassified funds clearly underperform well classified funds within a range of 0.92% and 1.18% annually, based on Carhart's alpha and total net return. Therefore, they argue regulatory change is needed to enhance the clarity of the funds' taxonomy and/or reduce the temptation for mutual funds to adopt a risk profile that is very different from the marketed benchmark.

2.2.4.1.2 Index Tracking

As per Cremers and Curtis (2015) closet indexing happens when a fund that pretends to be actively managed closely tracks an index that investors could buy at a lower cost. They break down the investment into an active managed fund as a simultaneous investment in

a virtual index fund and a virtual hedge fund. They argue that the fee paid for the virtual hedge fund is opaque and, in most cases, far above real hedge funds' fees. The fee structure's opacity is an incentive for fund managers to charge investors for a service which is not always delivered (i.e., virtual hedge fund investment). As a consequence, they recommend to use the concept of AS²² (Cremers and Petajisto, 2009) to track the discrepancy between a fund's portfolio and its benchmark. They posit that to beat the market, a portfolio must differ from the market. They consider that the bare minimum AS level which characterizes active fund management is 50%; anything less than 50% AS indicates that a fund is a closet indexer and a falsely advertised actively managed fund. Their underlying assumption for this threshold is that a fund needs to be at least 50% different from the index as they posit that over any period, at most half of the benchmark assets will outperform the benchmark return. They analyse two cases of funds (Fidelity Magellan Fund and the AQR Large Cap Momentum Fund), and find their portfolios change over time. They argue investors will have a difficult time to identify a change in the fund's investment strategy if they rely solely on the fund's prospectus. Thus, investors face a shortage of information to assess a shift in the fund's portfolio structure consecutive to a change of fund manager. They develop a new measure, namely the Active Fee, which indicates the price paid by investors for the portfolio's fraction that differs from the benchmark (% of AS). Alternatively, Cremers et al. (2016) highlight that the transparency of low cost index funds regarding their fees incentivizes active fund management to be equally transparent as to what part of their fees represents the index/passive management part and which part represents the active part. In summary, there are mainly three tools to clearly identify index tracking which, as per Cremers et al. (2016), represent about one in five mutual funds worldwide: (1), the use of AS to identify which funds are index tracking disguised as active fund, (2) the use of the active fee so that investors know what price they pay for the fund's fraction that is different from the market (i.e. the price of a fund manager's conviction), and (3) the development of better advertising for explicit index funds in order to foster a true competition between passive and active fund.

²² AS "can be easily interpreted as "the fraction of the portfolio that is different from the benchmark index" (Cremers and Petajisto, 2009).

2.2.4.2 Information

Information plays a crucial part in the fund managers' investment process. Figure 2-2 of Arnswald (2001) describes the investment activity as a recursive process that starts with the investment philosophy that guides the information to be acquired and analysed. The process includes rules for decision making that determine the investment behaviour. Performance evaluation and its impact on the remuneration of the fund managers would in turn influence the investment philosophy. Fund managers frequently update their investment philosophy through information acquisition and performance. Further, there is a constant need to update information as it is necessary to shape investment ideas and to validate or amend investment decisions.

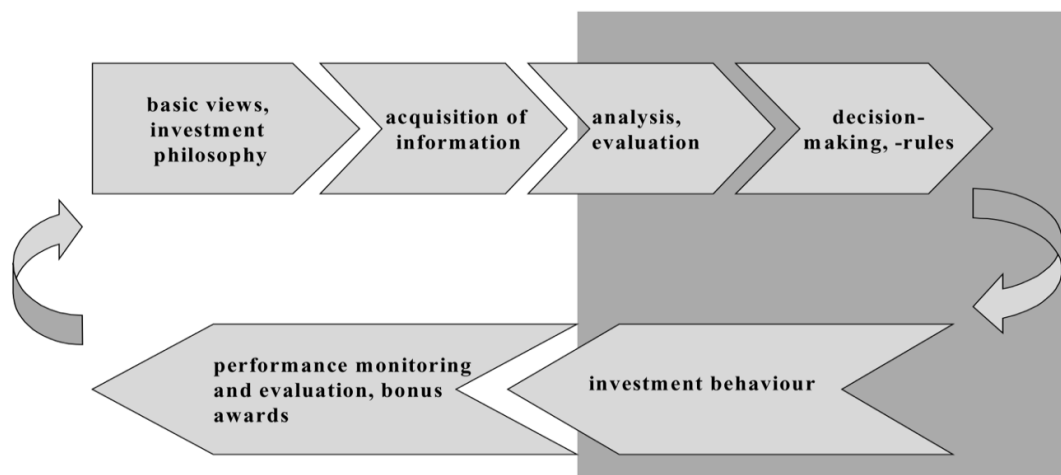


Figure 2-2 - Investment process

Reproduced from Arnswald (2001, p. 56)

Barker (1998) describes the market for information (Figure 2-3) as the sum of two different parts: (1) the market for financial reporting (information between companies (e.g., CEO or FD) and the analyst/fund manager), and (2) the market for financial analysis (between analyst and fund manager). He highlights that fund managers favour qualitative data, especially meetings with the top management of companies.

Figure 1
The market for information

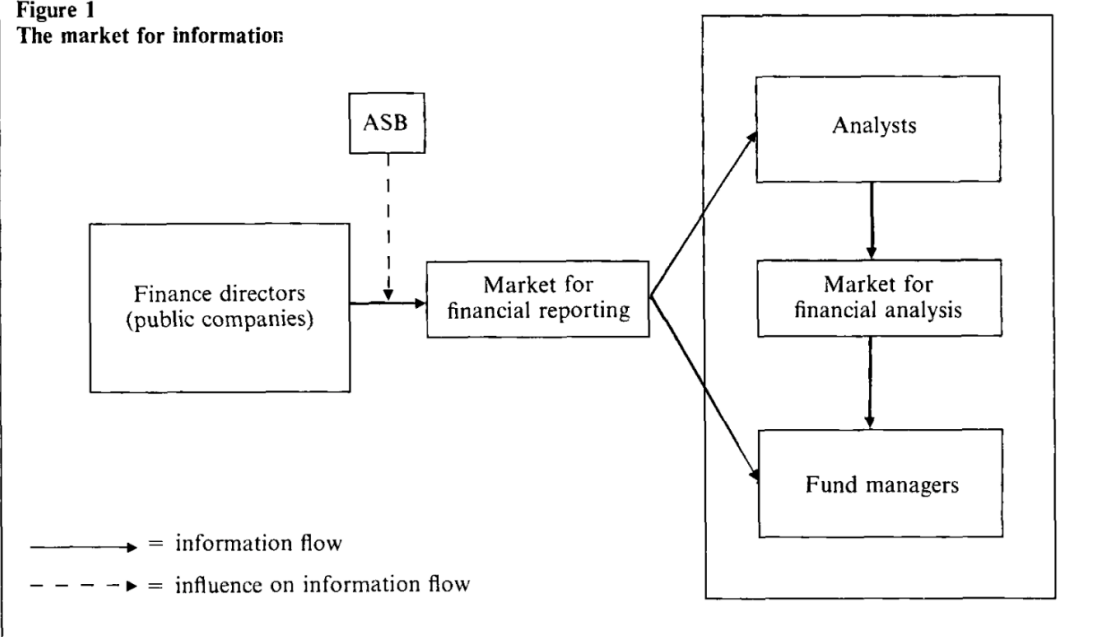


Figure 2-3 - Market for information diagram

Reproduced from Barker (1998, p. 5)

Holland and Doran (1998) concur and further describe financial meetings with top management as a way to gain premium information. In so doing, fund managers can build superior models, even more so when an increasing proportion of stock value is driven by intangible assets and/or IC. Throughout their various meetings, the fund managers assemble the different pieces of information to make a mosaic view out of them. Once established the mosaic view can be used to implement stock selection and allocation with a sufficient degree of certainty. Throughout this process, fund managers' aim is to lessen the "black holes" or remove poor performers from their portfolio and then forecast which companies can be the future winners to pick.

Barker et al. (2012) outline that fund managers are looking for non-price-sensitive information during meetings with the top management. The role of information is to validate/disconfirm the initial investment thesis from the fund managers.

Henningsson (2009) offers another potential frame as to how fund managers select/determine which information is valuable for them. He posits that the fund managers are nodes between three different fields of forces/networks, namely: involvement of organisation code, market prices and rationale, and agendas surrounding certain

companies. In so doing, fund managers are part of a dynamic system where the value they confer to information is not a process which is done in isolation but rather is the result of a comparison with their various networks and/or the influence of social forces. This reliance on qualitative data underlines a crucial issue within the fund management industry, namely that fund managers seldom rely on theoretical tools built by academic research (CAPM²³, APT²⁴). These tools are deemed too fiddly to set up and the information they require is difficult to find/gather (e.g., Coleman, 2014 & 2015). Fund managers favour qualitative, non-price-sensitive, raw information to lessen the randomness of stock valuation stemming from the IC part.

Holland (2016) advocates for the development of a new theory namely the Behavioural Theory of the fund management firm (Figure 2-4) where investment decisions are analysed considering the dynamics and interactions between individuals, teams, and firms. He highlights the interaction between the external and internal factors, their influence on the investment process, and ultimately the fund managers' financial performance.

²³ CAPM or Capital Asset Pricing Model describes the relationship between expected return of investment, risk-free rate, beta of the investment, and the market risk premium.

²⁴ APT or Arbitrage Pricing Theory is an alternative to CAPM, it states that the expected return of an asset X is a linear function of the asset's sensitivities to various factors.

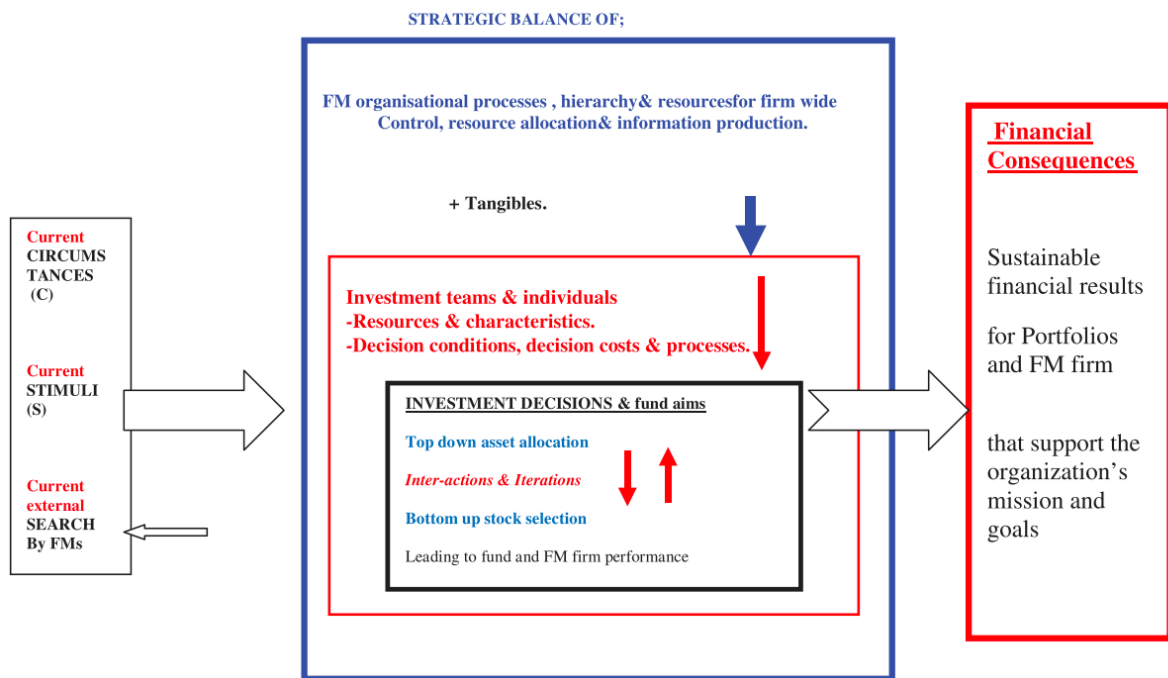


Figure 2-4- Behavioural Theory of the fund management firm
 Reproduced from Holland (2016, p. 1007)

Analysis of the fund manager's relationship to information highlights their hunger for practical concepts and their reliance on qualitative data (meeting with top management) to cope with the uncertainty around stock valuation and its growing IC part. I will analyse if the academic research echoes this desire for practical theories built through primary data.

2.2.5 Primary data

In the earlier parts of this Literature Review, the use of secondary data shows severe weaknesses, limitations to capture the performance and even less the skills provided by active fund managers. First and foremost, the indicator used, initial assessment of the added value provided by active fund managers was an average of the performance across types of investors, different economic periods, and various strategy styles. In so doing, the academic research could not explain a puzzle such as the active fund management puzzle. However, one could wonder if the puzzle exists in its own right or if it is due to the limitations of the secondary data used to measure the outperformance of fund

managers. Frankfurter (1994) labels this over-reliance on quantitative models and secondary data as “rampant positivist imperialism”, whereby researchers develop statistical/mathematical models which become increasingly more complex, hence requesting more inputs. This situation is called RoboFinance where conclusions about individual’s motivations are drawn from numbers and regressions without cross checking with practitioners if the models fit their reality. In so doing, “rampant positivist imperialism” and “RoboFinance” result in an academic corpus that is similar to a “house without windows” (Keasey and Hudson, 2007).

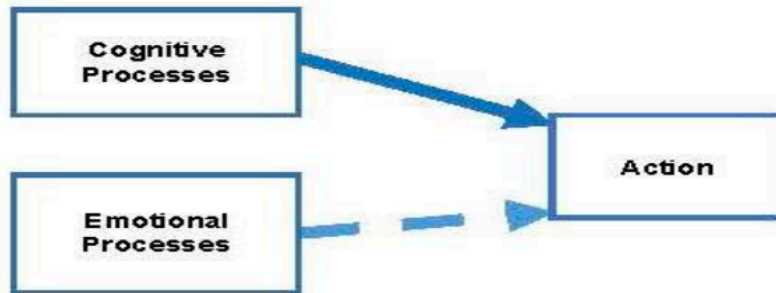
Frankfurter and McGoun (2002) further elaborate on this pitfall and warn against the assimilation of Behavioural Finance as the “literature of anomalies” (e.g., Rubinstein, 2001).

Coleman (2014, 2015) interviews fund managers and finds that they seldom use the quantitative models (a few exceptions with the Black Scholes (BS) model, duration etc.) developed by academic research, either because these models do not work or because the input data for these models are not available. He further highlights the investment process from fund managers and details their risk management, portfolio construction etc.

Further recent academic research with primary data (see Eshraghi and Taffler, 2015; Taffler, Spence and Eshraghi, 2017) describe a few tools (calculation, narratives, sense-making) that fund managers use to handle their anxiety due to the randomness of their environment.

This need to develop academic research using qualitative methods has been partially addressed with recent literature such as Tuckett and Nikolic (2016), and their Conviction Narrative Theory (CNT) decision making model (Figure 2-5). The CNT model incorporates the role of narratives within the investment decision process and shows how narratives are the bridge between cognitive/emotional processes and the fund managers’ investment decision.

Model A: Simplified Two System Decision-Making



Model B: CNT Decision-Making Model



Figure 2-5 - CNT Theory

Reproduced from Tuckett and Nikolic (2016, p. 17)

Thus, the academic research in Behavioural Finance tilts towards the use of quantitative data resulting in paradoxical puzzles and an over-reliance on secondary data. These quantitative models are built in isolation without cross checking if they are fit for use by practitioners. In so doing, prior academic results such as the percentage of positive alpha funds (as per BSW, 2010) are sensitive to the methodology used (FDR), its inherent biases, and the variance of the results is such that the added value from fund managers is severely compromised. Therefore, the ability to develop new theories/tools fit for use by practitioners is related to the nature of the data used to describe/understand the motivation of the practitioners.

The above literature review advocates that the empirical research, so far, adopts predominantly a myopic approach to assess fund managers' skill. In so doing, it has provided mixed results as to whether fund managers can offer persistent performance to their investors. There are several reasons for this: 1) the research so far has proxied the

fund managers' skill with the net alpha, which incorporates fees that the fund managers do not set themselves and neglects the decreasing return to scale of fund managers' ability to deliver performance; 2) the fund managers' skill is not subsumed by financial returns only; their skill is also a function of the trust they can build with their investors; 3) the fund managers may be incentivized by industry and remuneration structures to wander away (risk shifting, index tracking) from their initial investment philosophy and this may lead to a conflict of interest between fund managers and their investors; and 4) fund managers try to handle the randomness of their environment through portfolio management which is fed by informational data (quantitative and qualitative).

The paucity of empirical research which uses primary data to assess fund managers' skill prevents the ability to cross check if the extant literature results are confirmed by the practitioners. Thus, this research addresses this lack of primary data-oriented research regarding whether fund managers can persistently offer positive adjusted risk returns. The use of primary data allows us to elicit the fund manager's point of view. This is the *sine qua non* condition to cross check the extant academic research with the practitioners' experience.

3 RESEARCH METHODOLOGY

Blaikie (2007, p. 5) indicates that “before a researcher can undertake a social enquiry, a number of choices have to be made, these include:

- The research problem to be investigated.
- The research question or questions to be answered.
- The research strategy or strategies to be used to answer these questions.
- The posture to be adopted by the researcher towards the researched; and
- The research paradigm containing assumptions about reality and how it can be studied”

The first two points have been addressed in Chapter 1 of this thesis and hence are not covered here; in this chapter, I focus on the last three.

Blaikie (2007) further argues that these points imply dilemmas, which he defines as a choice where there is no straightforward answer. The researcher needs to weigh the different alternatives and choose those best suited, given his research question. I address each dilemma and consider the most appropriate choice for my research by comparing and analysing various options available at each step.

Following the structure of Figure 3-1, I detail each choice as follows: 1- research ontological and epistemological stance, 2- subsequent research paradigm, 3- research strategy, 4- research stance, and 5- research design.

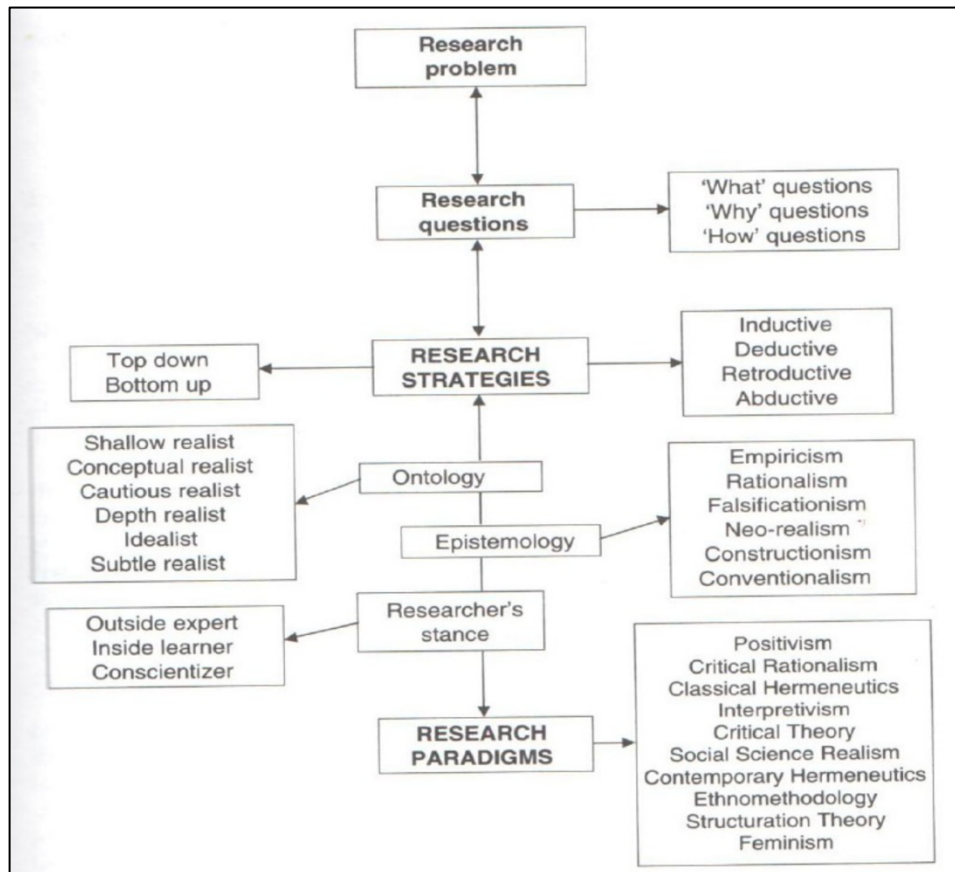


Figure 3-1 - Researcher's choices diagram

Reproduced from Blaikie (2007, p. 27)

3.1 Ontological and epistemological stance

The consistency between the research questions and the research method depends on the philosophical stance the researcher embraces. It connects the theoretical research question and the pragmatic method to collect data. First and foremost, the researcher establishes their stance regarding ontological and epistemological questions. As per Duberley, Johnson and Cassell (2012), ontology refers to the extent knowledge of a given phenomenon whilst epistemology relates to the theory of knowledge.

As per Bryman and Bell (2015, p. 32), the ontological positions can be split between two views: Objectivism and Constructionism (or Constructivist). The main difference between these two views is whether the phenomenon and its meanings are independent from the social actors. As per Bryman and Bell (2015, p. 28), there are two epistemological positions: Positivism and Interpretivism. The difference between the two stances is whether natural sciences methods can be applied across all phenomena or if

there is a need for a specific strategy that considers the specificity of the differences between people and objects.

Thus, I adopt a subjectivist (constructionist) ontological stance as I believe that the phenomena I observe i.e., fund managers' skills are not separate from the social actors themselves (fund managers). I also chose Interpretivism (or regulatory) as an epistemological stance as I use a specific method to interact with individuals (semi-structured interview), and this method does not belong to natural sciences.

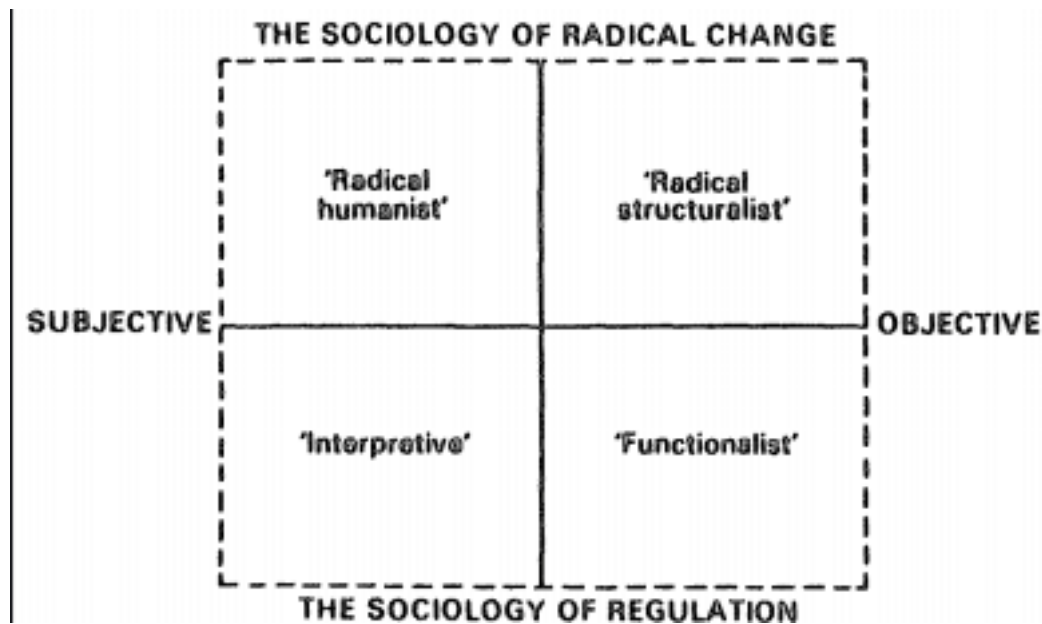
3.2 Research Paradigm

The intersection of the ontological and epistemological stances results in a two-by-two table with four research paradigms (

Table 3-1) as per Burrell and Morgan (1979).

At the intersection of a subjectivist ontology and a regulatory epistemology is the interpretive research paradigm. As per Burrell and Morgan (1979, p. 31), the interpretive paradigm posits that the social world is created by the action of the social actors. Therefore, the social reality is shared through assumptions and the networks of the social actors. This description echoes with my research question as I elicit the fund managers' point of view to understand how they create their social reality. Furthermore, I also wish to unearth their underlying beliefs, and assumptions. This research paradigm is consistent with my qualitative approach (Table 3-2) using semi-guided interviews with fund managers to describe and understand their perspective on their industry.

Table 3-1 - Research Paradigms



Reproduced from Burrell and Morgan (1979)

Table 3-2 - Orientations in Qualitative research strategy

Orientations	Qualitative
Research strategy orientation	Inductive, generation of theory
Epistemological orientation	Interpretivism
Ontological orientation	Constructionism

Adapted from Bryman and Bell (2015, p. 38)

3.3 Research Strategy

Blaikie (2007, p. 8) defines research strategies as a process to generate new knowledge. Research strategies are meaningful tools to address questions such as “what” and “why”, there are mainly four research strategies a researcher can adopt (Table 3-3).

Table 3-3 - Description of the four research strategies

Table 1.1 The logics of the four research strategies				
	<i>Inductive</i>	<i>Deductive</i>	<i>Retroductive</i>	<i>Abductive</i>
Aim:	To establish universal generalizations to be used as pattern explanations	To test theories, to eliminate false ones and corroborate the survivor	To discover underlying mechanisms to explain observed regularities	To describe and understand social life in terms of social actors' motives and understanding
Start:	Accumulate observations or data	Identify a regularity to be explained	Document and model a regularity	Discover everyday lay concepts, meanings and motives
	Produce generalizations	Construct a theory and deduce hypotheses	Construct a hypothetical model of a mechanism	Produce a technical account from lay accounts
Finish:	Use these 'laws' as patterns to explain further observations	Test the hypotheses by matching them with data	Find the real mechanism by observation and/or experiment	Develop a theory and test it iteratively

Reproduced from Blaikie (2007, p. 8)

Blaikie (2007, p. 10) defines abductive RS so that its “starting point is the social world of the social actors being investigated. The aim is to discover their constructions of reality, their ways of conceptualizing and giving meaning to their social world, their tacit knowledge. The main access a researcher has to these constructions is through the knowledge that social actors use in the production, reproduction and interpretation of the phenomenon under investigation”.

I can infer from Table 3-4 which represents the alignment between research strategies and research paradigms and my previous research paradigm's choice that the appropriate RS for my research is abductive as it is consistent with the interpretive stance. Neither the inductive RS (I do not ambition to establish universal generalizations) nor the deductive RS (I do not try to eliminate/corroborate theories) fit the purpose of my research. Lastly, the retroductive RS does not correspond to my research's goal as I do not aim at documenting or finding a model through observation and/or experiment.

Table 3-4 - Research paradigms and strategies mapping

Research Paradigm	Research Strategy			
	Inductive	Deductive	Retroductive	Abductive
Positivism	✓			
Critical Rationalism		✓		
Classical Hermeneutics				?
Interpretivism				✓
Critical Theory	✓	✓		✓
Social Realism			✓	✓
Contemporary Hermeneutics				?
Ethnomethodology	✓			
Structuration Theory				✓
Feminism	✓			✓

Reproduced from Blaikie (2007, p. 204)

3.4 Research Stance

In addition to the choices of research paradigm and strategy, a researcher must choose their stance regarding their relationship with the researched.

As per Blaikie (2007, p. 11), there are three choices to make in order to adopt a research stance: 1) does the researcher consider himself as an outsider or insider with respect to the relationship he wishes to develop with the research participants?, 2) does the researcher consider himself as an expert or a learner, does he come with previous knowledge to explain certain phenomena or does he make sense of research participant's values, interpretations of their own world?, and 3) does the researcher work on, for or with people? Does he act as an expert who is the sole beneficiary of the research? Is he acting as a consultant or expert?

My responses to those choices are: 1) my research aims at obtaining the research participants' experiences and narratives therefore I adopt an outsider stance as I intend to maintain neutral in the process of collecting data, 2) this research seeks fund managers' experience through semi-structured interviews, hence I advocate for a learner stance, and 3) my research does neither work on people (I do not have an expert stance) nor work for them (I do not act as a consultant providing knowledge to a group), meaning I work with

people acting as a facilitator to shed light on phenomena affecting research participants (e.g. fund managers).

Consequently, my full research stance is outsider learner working with people.

3.5 Research Design

The choice of a method and sample for data collection and interpretation must be consistent and aligned with the quality criteria of the research, i.e., reliability, replication, and validity. This research's ambition is to understand if fund managers are skilled, therefore I chose a descriptive, exploratory, qualitative, and flexible approach: descriptive rather than normative as my goal is to offer a clearer picture of a phenomenon rather than create new theory to solve an issue; exploratory rather than confirmatory as the proposed research does not test *a priori* hypotheses but rather tries to analyse *a posteriori* and give meaning to the collected data through the chosen research method; qualitative rather than quantitative as the proposed research will deal with primary data gathered through semi structured interviews; flexible rather than fixed research as the variables of interest are not quantitatively measurable.

As per Bryman and Bell (2015), a research design refers to a framework which is used to collect and analyse data. The choice of a research design is reflective of the researcher's priority on a range of dimensions during the research process. Their taxonomy of research designs includes five different types:

- Experimental: can be a laboratory or field experiment. Usually involves the necessity to manipulate an independent variable to assess whether it influences the dependent variable.
- Cross Sectional (or social survey): entails the study of more than one case to establish and study variations at a single point in time with quantitative or quantifiable data without manipulating them.
- Longitudinal: can be either a panel or cohort study, which aims to survey a sample of identical people over a period of time.
- Case Study: can either be a single or multiple case study of an organisation, location, person, or single event. Case studies can be intrinsic, instrumental, or multiple.

- Comparative: entails the study using more or less identical methods on two or more contrasting cases (ibid., p. 72)

I adopt a hybrid research method between multiple cases (interviews) and comparative studies since I will contrast the results from multiples interviews to consider what the similarities or differences are across cases. My research method is not experimental as I do not manipulate variables, is not cross sectional as I do not study the variation at a single point in time and is not longitudinal as I do not survey a panel over a period of time.

4 DATA COLLECTION & ANALYSIS METHODS

4.1 Data collection method

As per Bryman and Bell (2015, p. 49), a research method is a way to collect data. It can take different formats such as questionnaires, surveys, interviews etc.

My instrument for data collection is to interview fund managers. In order to be consistent with my qualitative RS, I chose a semi-structured format, as neither a structured interview (more suited for a quantitative RS) nor an unstructured interview (I need a structure to build my interview guide and address my research question) fit my requirement. While I need a spinal cord with a definite template of questions, I also want to ensure the interviewee feels free to go “off track” to share meaningful examples.

According to Lindlof and Taylor (2002), an interview can be any of the following:

- Ethnographic: informal and impromptu questions
- Informant: repeated conversations with an expert
- Respondent: interviewee is asked to share their experience
- Narrative: story telling or describing a plot
- Focus group: questions shaped to nurture a debate between multiple participants

With such a taxonomy, my interview structure would be respondent as I am looking for insights from the fund manager’s experience.

Alvesson and Ashcraft (2012) list four possible ontological and epistemological stances a researcher can adopt for the interview process:

- Neo-positivism: “practitioners of this approach typically claim to capture what is really ‘out there’ by following a research protocol and gathering relevant responses, while minimising researcher influence and other sources of ‘bias’” (ibid., p. 241)
- Romanticism: “romantic interviewer, advocating a more ‘genuine’ human interaction, seeks to cultivate interpersonal relations founded on a rapport, trust,

commitment and ‘warmth’ between researcher and interviewee, such that the latter feels free to express the self openly” (ibid., p. 242)

- Localism: “emphasize that interview statements must be understood in context, specific to the situation in which they are produced” (ibid., p. 243)
- Reflexivism: “comb the process and not merely the content of interviews precisely for how that process informs the phenomena under investigation” (ibid., p. 244)

Given the interview stance for my research, I advocate that the interview is not a scientific process therefore Neo-positivism is discarded; however, I intend to remain neutral and therefore the Romanticism stance is inappropriate. While the initial focus is whether fund managers are skilled, my research has the potential to inform adjacent topics therefore, I adopt Reflexivism as the interview orientation. As much as possible, the interviews were face to face to encompass verbal and non-verbal information. The purpose of the proposed research was presented as an introduction to the interview. Confidentiality and anonymity were the rules and have been offered to each interviewee. With all interviewees’ agreement, interviews were audio recorded.

The interviews were conducted either face to face or through audio calls when face to face interviews were not possible due to Covid-19. The interview format was semi-structured²⁵ through an interview guide (Appendix 1). The interview guide summarises the main topics to be explored with the fund manager. It is a helpful tool to give a spinal cord to the interview structure while allowing freedom to the interviewee to state what is important from his/her point of view as a practitioner. The interviews were audio recorded, and I transcribed every interview audio file and sent it to the fund managers for amendments and approval in accordance with the conditions described in the consent form. These interview transcripts were uploaded in NVivo. The use of NVivo was motivated by the ability offered by the software as per Figure 4-1 to start from the initial gathered data i.e., the interview transcript, and work iteratively through cycles of coding to develop, categories, themes, and potential framework.

²⁵ As per Galletta and Cross (2013), the semi-structured interview “provides a repertoire of possibilities. It is sufficiently structured to address specific topics related to the phenomenon of study, while leaving space for participants to offer new meanings to the study focus” (p. 24).

This translates in my research into 20 interviews (data), more than 1,000 annotation/highlights (code), which I iteratively transform through code mapping into 37 versus codes (Figure 4-10) then into 34 versus codes (Figure 4-11) allocated to four categories.

4.2 Data description

The access to the fund managers was through my network as an alumnus from the London Business School (henceforth LBS) and the Skema Business School (hereafter SBS) or through the network of a DBA cohort member. Of the total of 20 interviews, 14 interviews were conducted with alumni from the LBS, 4 were possible through one DBA cohort member network, and 2 other interviews were with SBS’ alumni. The alumni from the LBS were identified through the school’s portal after querying the alumni database with keywords such as: portfolio manager, hedge fund manager, and mutual fund manager. After identification of potential interviewees, an email was sent requesting an interview. More than 200 emails were sent for the 14 positive replies, which translates into a “success rate” of approximately 7%.

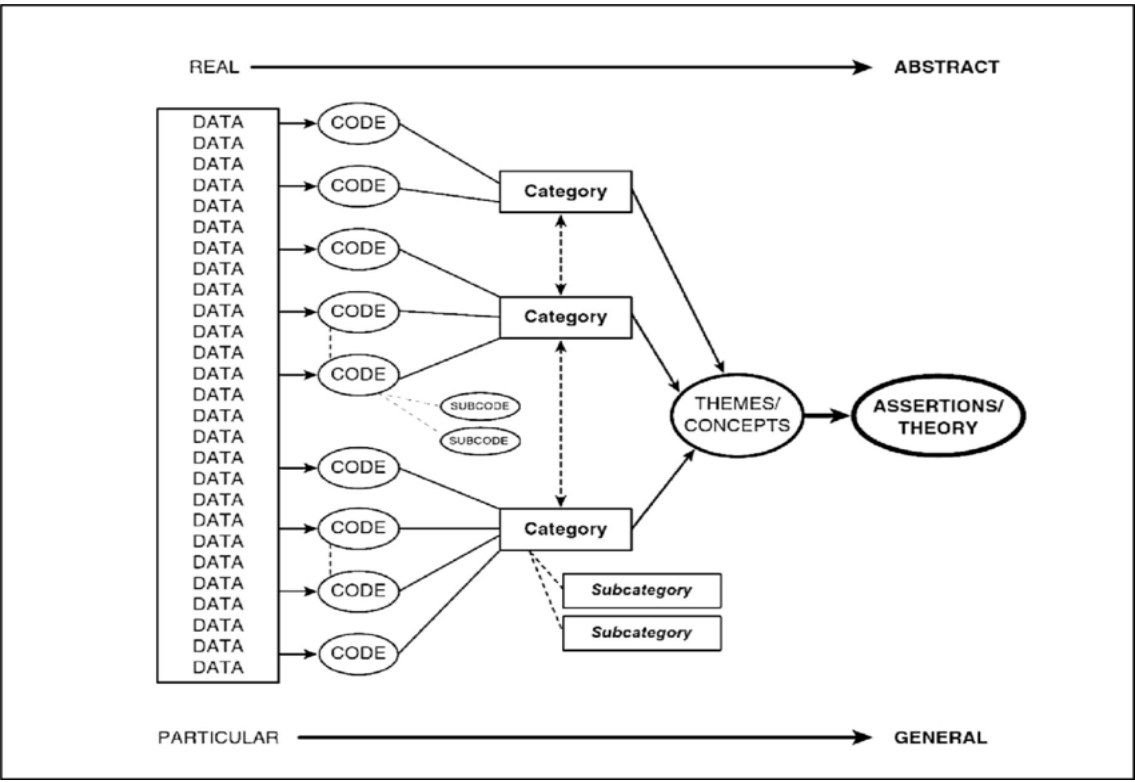


Figure 4-1 - From code to theory
 Reproduced from Saldaña (2014, p. 14)

Table 4-1 presents the main characteristics of my sample: it shows the fund manager's average age is approximately 42 years with a standard deviation of 6 years, and their average experience is approximately 16 years with a standard deviation of 6.7 years. It is worth noting that most of the fund managers have a Master's as their highest degree and three of them have a PhD. It is also worth noting that this may result from the fact that the LBS is a graduate school therefore alumni will have at least a Master's degree.

Table 4-1 - Fund managers characteristics

Country	Count	Percentage
Brazil	1	5%
Chile	2	10%
France	1	5%
Mexico	1	5%
Monaco	1	5%
Switzerland	1	5%
UAE	1	5%
UK	12	60%

AUM size	Count	Percentage
1 M-100 M	4	20%
100 M - 500 M	7	35%
500 M - 1B	7	35%
>1 B	2	10%

Function	Count	Percentage
Hedge Fund manager	6	30%
Mutual Fund Manager	13	65%
Wealth fund Manager	1	5%

Number of years of experience	Count	Percentage
5Y - 10Y	5	25%
10Y - 15Y	7	35%
15Y - 20Y	3	15%
20Y - 25Y	2	10%
25Y - 30Y	1	5%
30Y - 35Y	2	10%

Gender	Count	Percentage
Female	1	5%
Male	19	95%

Age Category	Count	Percentage
25-30	1	5%
30-35	1	5%
35-40	1	5%
40-45	12	60%
45-50	2	10%
50-55	3	15%

4.3 Data analysis: NVivo® tools

4.3.1 Classification/Attributes/Values

In order to analyse the interview transcript, every transcript initially uploaded into NVivo as a file was created as a case. Each case (interview) was given attributes and values (Table 2). These attributes and values were uploaded into NVivo through a classification sheet (CSV file). I have eight different attributes that describe an interviewee: Age, Gender, Job Title, Underlying, Number of years of experience, AUM, Country, Highest educational qualification. These classifications will be helpful later when analysing the data through Cross Tab or Matrix queries.

4.3.2 Queries

Amongst all the tools available in NVivo, I will go through the ones that were the most helpful to make sense of the data by either looking at one case on its own or comparing cases using the values and attributes previously described.

4.3.2.1 Visualising the data

The most useful tool identified in NVivo to visualise the data is the text search query, especially when using the word tree format as an output of the query. The example I use in Figure 4-2 is a text search query of the word alpha in the twelfth interview where it is a major and valuable topic, especially regarding the alpha that may be embedded in information. More precisely, the fund manager argues that the process to extract alpha from information has evolved since the last decade, and this process is also the source of economies of scale that shape the fund industry. Namely, the financial cost to extract alpha is a fixed cost that only firms of a certain size can afford.

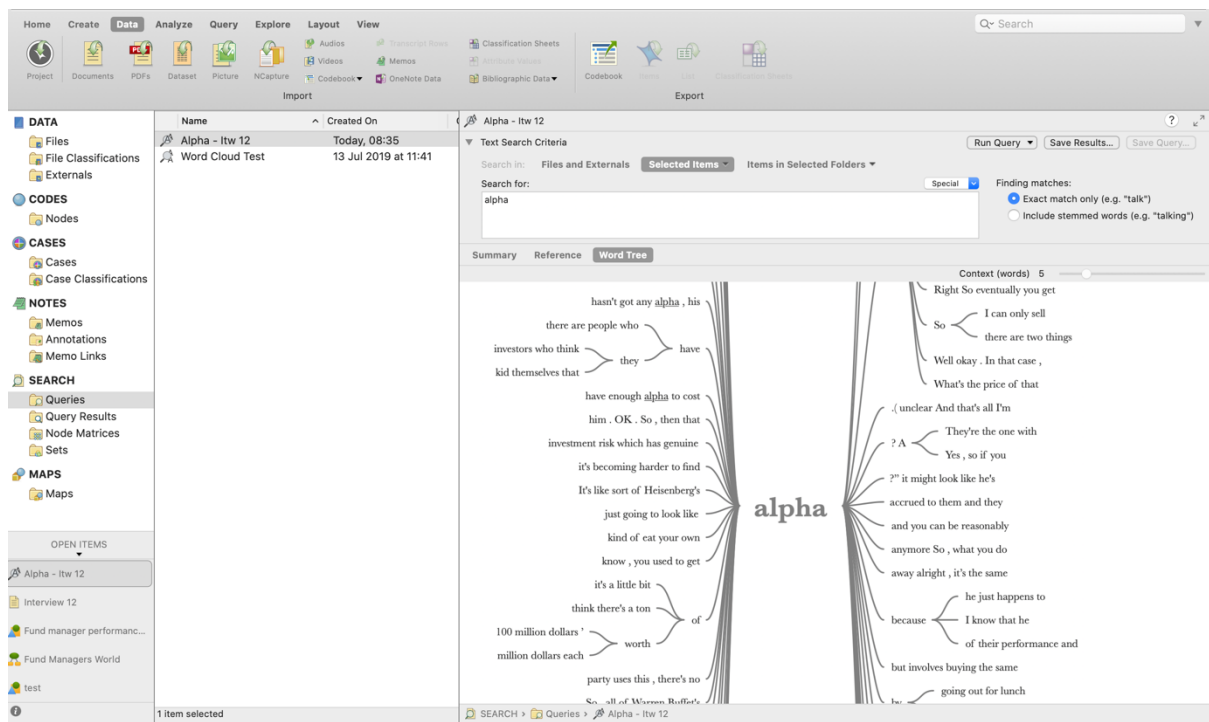


Figure 4-2 - Text search query

4.3.2.2 Comparing the data

For the cross comparison of the results across the different interviews, I mainly used the matrix coding query. However, as a prerequisite, I needed to come up with a node structure and attributes to define each case (interview). In the example (Figure 4-3), I perform a matrix coding query between Hedge Fund Manager and Mutual Fund Manager on the node “Beat the benchmark”.

This allows me to identify potential differences between categories across the interviews. I can therefore identify the interest of a specific category given a certain topic and contrast that across the different cases (interviews). For instance, a matrix coding can be done on all interviews with all nodes to have an overview of the elicited interest of nodes in each case.

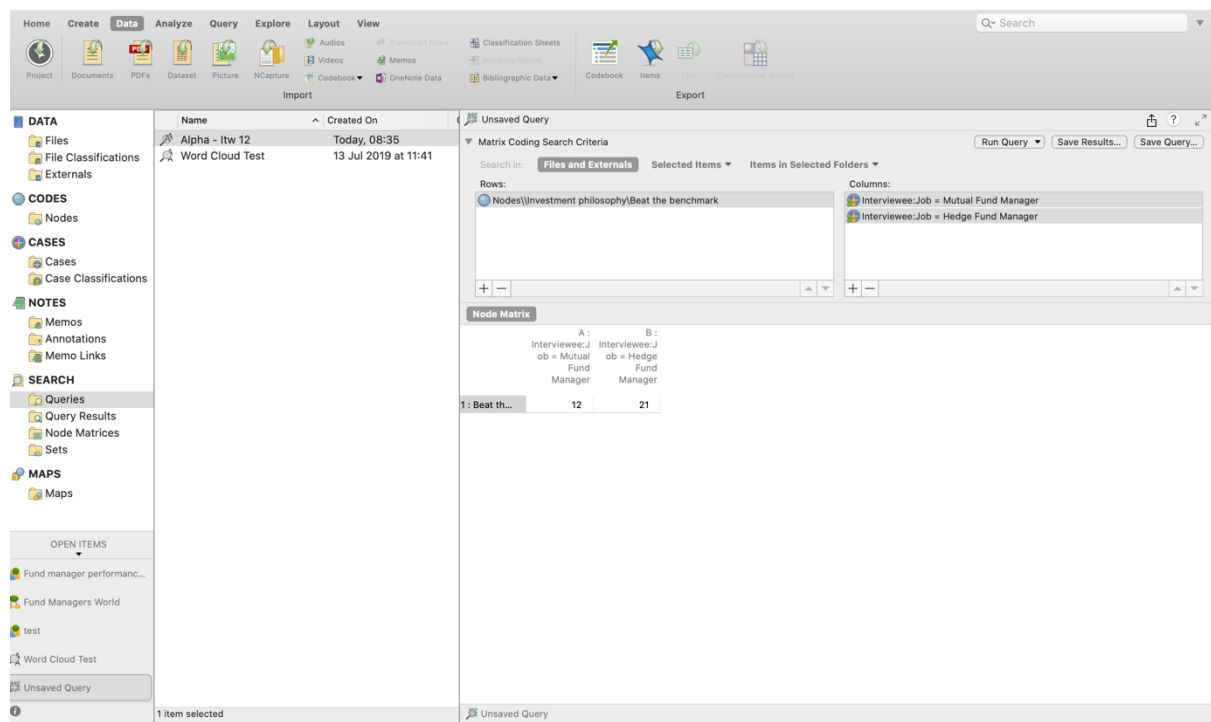


Figure 4-3 - Matrix coding

4.4 Data analysis: NVivo® coding

As per Saldaña (2014), the process of coding is “cyclical rather than linear” (p. 68); he describes two cycles involved in the coding process and lists the methods available for each cycle (Figure 4-4). The first and second levels of coding organise themselves in such

a way that “the individual pieces of inventoried hardware and wood are the first cycle coded data; and their appropriate arrangement into organised categories on the floor, the tools, and the assembly process are the second cycle coding methods of how everything fits together” (ibid., p. 234). Saldaña outlines that the choice of coding method is a function of the research question. To relate this to my thesis question “Do fund managers have skills?”, he adds “epistemological questions (research questions) address theories of knowing and an understanding of the phenomenon of interest. Aligned Research questions might begin with: “How does...?”, “What does it mean to be...?”, and “What factors influence...?” These types of question suggest the exploration of participant actions/processes and perceptions found within the data” (ibid., p. 70). As a consequence, my first level coding is split into three different methods namely: In vivo coding (Elemental methods – Figure 4-4), Process coding (Elemental methods – Figure 4-4), and Values coding (Affective methods – Figure 4-4). I will further describe how each method of coding works in NVivo, after the three initial levels of coding.

4.4.1 First coding cycle

4.4.1.1 In Vivo Coding

As per Saldaña (2014), “In Vivo Coding a subculture’s unique vocabulary or argot is one method of extracting these indigenous terms” (ibid., p. 106). My motivation for using in vivo coding as my first method of first level coding stems from its application to virtually all qualitative studies and its ease of use for beginners. Consequently, I embrace the “verbatim principle”, using terms and concepts drawn from the words of the participants themselves. By doing so, “the researchers are more likely to capture the meanings inherent in people’s experience” (Stringer, 2014; p.140). Through in vivo coding, annotations (Figure 4-5), and a recursive process carefully transcribed in memo (Figure 4-6), I end up with a list of nodes (Figure 4-7) that are helpful to map the themes which are pervasive, at first, in the different interviews. The node structure is equally subject to a recursive process as coding new interviews allows me to unearth new themes and grants access to a better delineation of the previous themes through an iterative process.

FIRST CYCLE CODING METHODS
Grammatical Methods
Attribute Coding
Magnitude Coding
Simultaneous Coding
Elemental Methods
Structural Coding
Descriptive Coding
In Vivo Coding
Process Coding
Initial Coding
Affective Methods
Emotion Coding
Values Coding
Versus Coding
Evaluation Coding
Literary and Language Methods
Dramaturgical Coding
Motif Coding
Narrative Coding
Verbal Exchange Coding
Exploratory Methods
Holistic Coding
Provisional Coding
Hypothesis Coding
Procedural Methods
OCM (Outline of Cultural Materials) Coding
Protocol Coding
Domain and Taxonomic Coding
Themeing the Data
SECOND CYCLE CODING METHODS
Pattern Coding
Focused Coding
Axial Coding
Theoretical Coding
Elaborative Coding
Longitudinal Coding

Figure 4-4 - First and second cycle coding
Reproduced from Saldaña (2014, p. 68)

4.4.1.2 Process Coding

As per Saldaña (2014, p. 111), Process coding “is appropriate for virtually all qualitative studies, but particularly for those that search for routines and rituals of human life”. Given my thesis question’s nature, the ambition of which is to unveil part of the fund managers’ process(es) to express their skill to the fullest, the Process coding method is pertinent. The coding process is translated in NVivo with annotations using gerunds to emphasize actions that happen in the fund manager transcripts. One example (Figure 4-8) shows how

this was applied in the current research. The result is 396 annotations across 20 interviews.

4.4.1.3 Values Coding

The third and last method used for first level coding is Values coding. As per Saldaña (2014) “Values coding is the application of codes to qualitative data that reflect a participant’s values, attitudes, and beliefs, representing his or her perspectives or worldview” (p. 131). A value is “the importance we attribute to ourselves, another person, or thing, or idea” (ibid.). An attitude “is the way we think and feel about ourselves, another person, thing, or data” (ibid.).

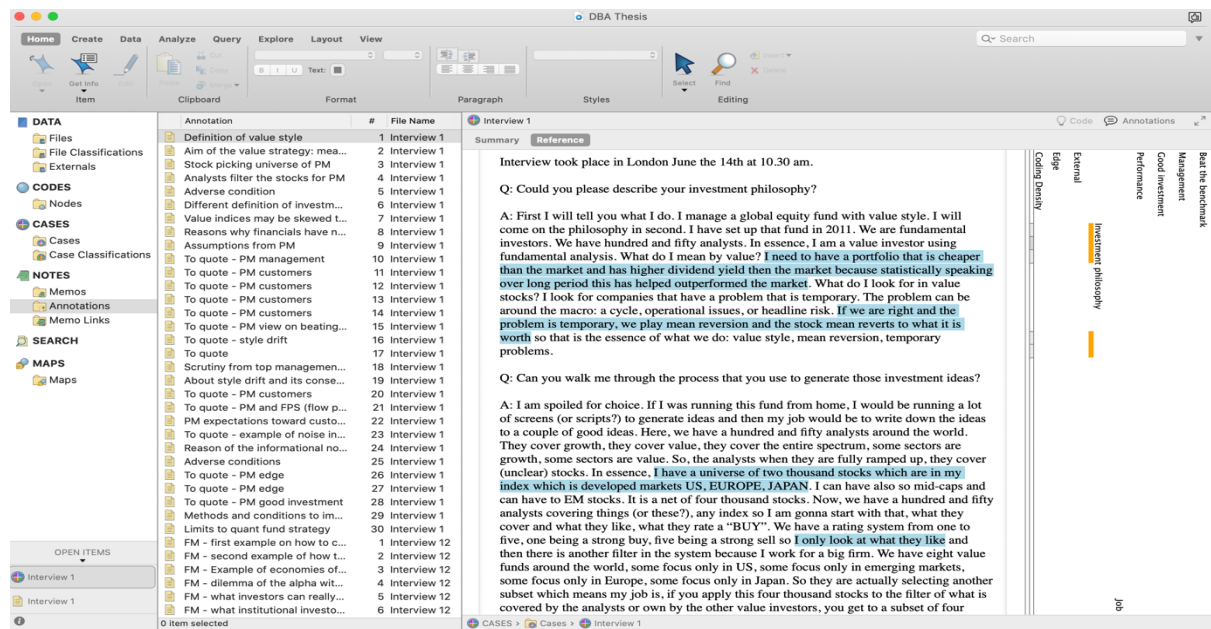


Figure 4-5 - In Vivo coding example

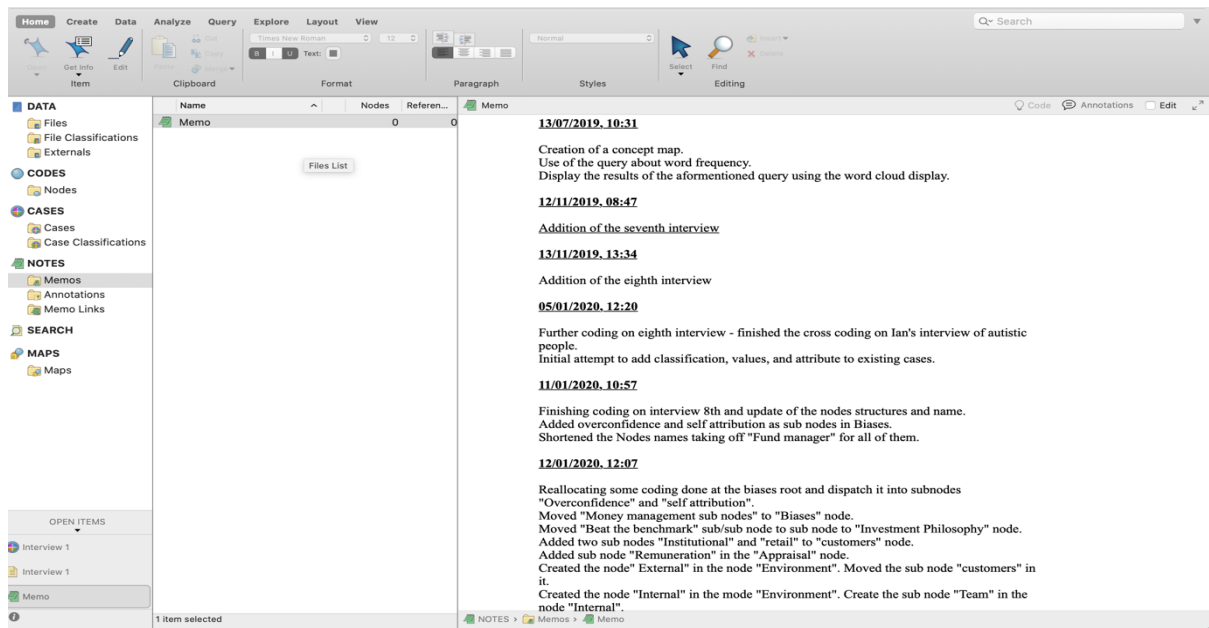


Figure 4-6 - Memo example



Figure 4-7 - Node structure

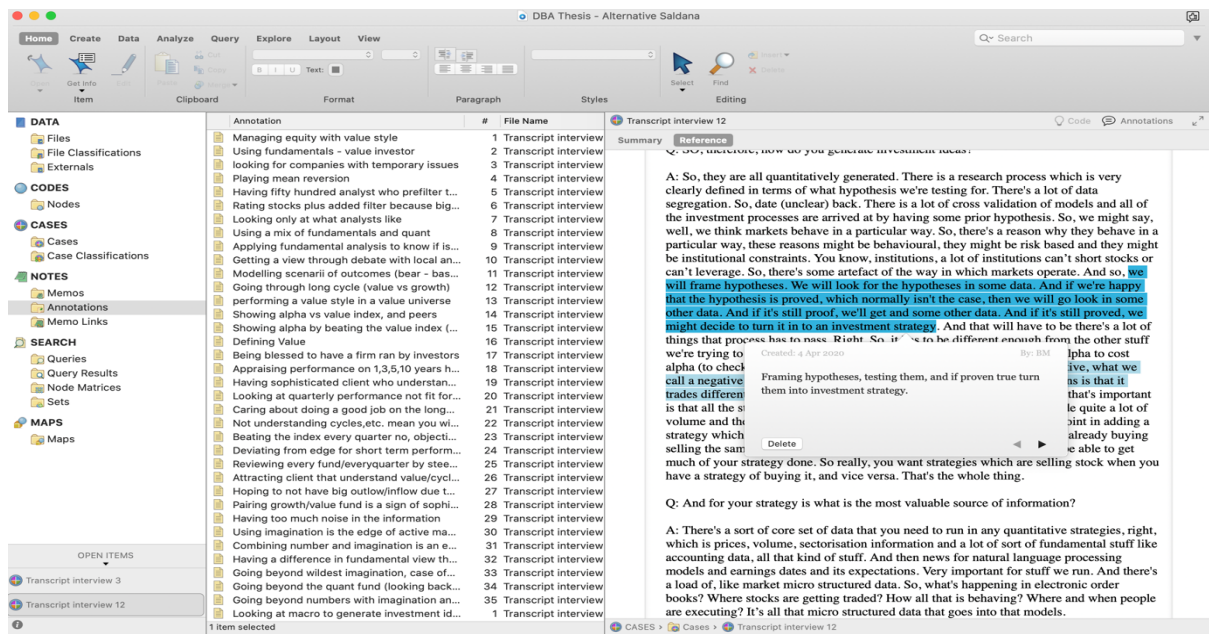


Figure 4-8 - Process coding

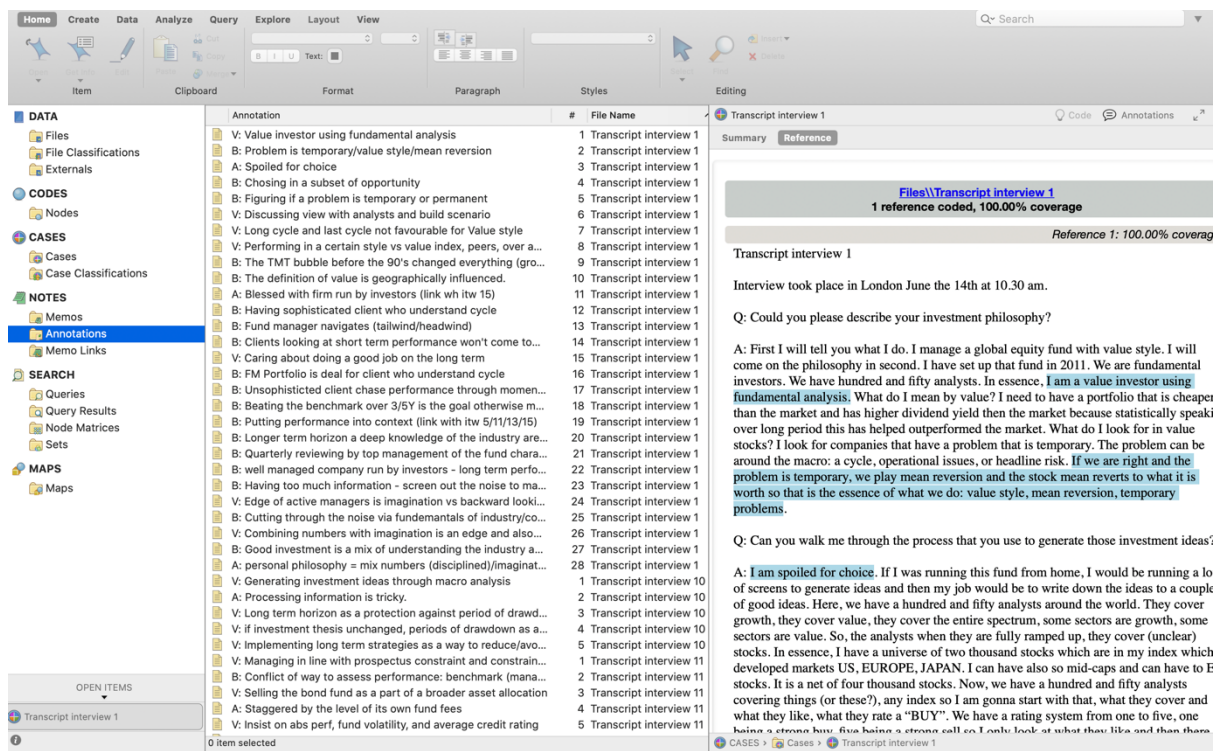


Figure 4-9 - Values coding

“A belief is part of a system that includes our values and attitudes, plus our personal knowledge, experiences, opinions, prejudices, morals, and other interpretative

perceptions of the social world” (ibid., p. 132). An example of Values coding (Figure 4-9) displays how the annotations are divided between attitudes, beliefs, and values.

4.4.2 In between cycle: Code mapping

In the post-coding transition, there are several possible ways to organise and assemble the code developed through the first cycle of coding, such as code mapping, code landscaping, and code charting. I use code mapping as its iterative process empowers me to go from initial categorization to concepts phrased in versus terms. The first iteration of this process (Figure 4-10) includes 37 versus codes which stem from a first try at encompassing the recurring themes across the several codings of the 20 interviews. A second iteration (Figure 4-11) of the versus coding classifies the 34 versus codes with initial categories to improve the clarity of the figure while delineating a better picture of the background. The result is four new categories: investment philosophy, performance, customer, and environment.

4.4.3 Second coding cycle

After reorganising the code developed in the first cycle of coding through the code mapping, I then proceed to move on to the second cycle of coding. As per Saldaña (2014, p. 234) the goal of second cycle methods is to “to develop a coherent metasynthesis of the data corpus”. More pragmatically, the second level of coding is about reorganising the first cycle codes into a smaller and more select lists of themes and/or concepts. There are various options for the second cycle of coding: pattern coding, focused coding, axial coding, theoretical coding, elaborative coding, and longitudinal coding. As a matter of consistency, I chose focused coding as the second level of coding as it is the logical follow-up from in vivo/process coding as the first level of coding. Relevant categories were developed through three iterations of reorganising codes developed for each interview during the first cycles of coding (Figure 4-12) then the codes were reorganised into categories (such as captain, boat, sea, wind, map, passenger) (Figure 4-13), and finally the third iteration merges similar codes within categories (Figure 4-14). The second level of coding allowed me to find/create the comparison between fund manager and boat captain which will later translate into the fund managers’ odyssey.

Code mapping: Initial versus

- active vs. passive
- asset allocator vs. end user
- beating the benchmark vs. index tracking
- before vs. now (environment)
- boutique vs. big brand asset management firm
- collaborative vs. toxic environment
- disciplined vs. emotional
- economy vs. diseconomy of scale
- external (client) vs. internal point of view (assessing performance)
- fund manager vs. management
- good vs. bad investment
- human vs. machine
- long term vs. short term
- lucky vs. unlucky
- macro vs. stock picking
- management vs. customer
- mutual fund manager vs. hedge fund manager vs. wealth fund manager
- marketing vs. investor-run asset management firm
- mature vs. emerging market (alpha/beta)
- narrow vs. wide focus of performance (context or not)
- outperformance vs. tilt factor
- paying at discount vs. paying fair price/premium
- perfect vs. imperfect market
- performance vs. relationship
- playing the thesis vs. risk shifting
- retail vs. institutional investors
- relative vs. absolute performance (hedge fund vs. mutual fund)
- skill vs. luck
- size vs. alpha
- sophisticated vs. unsophisticated
- stock picking vs. macro allocation
- structured vs. unstructured information
- temporary vs. permanent / structural vs. cyclical
- too much vs. not enough information
- valuation vs. opportunistic trade
- winning vs. losing (money management)
- with vs. without benchmark

Figure 4-10 - Code mapping - versus coding - first iteration

Code mapping: Second try

Category 1: Investment philosophy

Related codes

- active vs. passive
- stock picking vs. macro allocation
- playing the thesis vs. risk shifting
- paying at discount vs. paying fair price/premium
- temporary vs. permanent/structural vs. temporary
- winning vs. losing (money management)
- valuation vs. opportunistic trade
- too much vs. not enough information
- perfect vs. imperfect market
- human vs. machine
- disciplined vs. emotional
- good vs. bad investment
- beat vs. can't beat the benchmark

Category 2: Performance

Related codes

- relative vs. absolute (hedge fund vs. mutual fund)
- with vs. without benchmark
- outperformance vs. tilt factor
- narrow vs. wide focus of performance (context or not)
- skill vs. luck
- external (client) vs. internal point of view (assessing performance)

Category 3: Customer

Related codes

- sophisticated vs. unsophisticated
- retail vs. institutional investors
- performance vs. relationship

Category 4: Environment (industry)

Related codes

- Size vs. alpha
- long term vs. short term (fund manager vs. customer expectation)
- mature vs. emerging market (alpha/beta)
- collaborative vs. toxic environment
- economy vs. diseconomy of scale

- unstructured/structure data
 - before vs. now (environment)
 - boutique vs. big brand asset management firm
 - marketing vs. investor-run asset management firm
 - management vs. customer
 - fund manager vs. management
 - lucky vs. unlucky
-

Figure 4-11- Code mapping - versus coding - second iteration

Second level of coding – First iteration

Interview 1

- The captain:
 - Using fundamental to cut through the noise (Value investor) and estimate if issues are temporary or permanent (belief)
 - Cares about doing a good job on the long term (3/5/10Y) (Value)
 - Looking for companies with temporary issues -playing mean reversion
 - Going beyond quant fund through imagination
- The boat:
 - Value investor with mix quant/fundamental – edge is imagination
- The sea:
 - Being blessed to have a firm run by investors
- The wind:
 - Tailwind for Value investor (should look at long cycle). Should be assessed against Value Index.
 - Putting performance into context (cycle etc.)
- The passenger:
 - Not understanding cycles means they will chase performance
 - Customers who understand cycle are an asset for the firm (belief)
- The map:
 - Too much noise in information
 - Shift was internet

Interview 2

- The captain:
 - Analytical for capital allocation
 - Automating capital allocation as a protection against bias(es)
 - Mix fundamentals/quant
 - Having a thesis about default probabilities
 - Contrarian for portfolio management (itw 5)
 - Having thesis about fundamental driver of value (Value)
 - Difficulty to beat developed market. Alpha is a function of imperfection
- The boat:
 - Credit Hedge fund
- The sea:
 - Ability to invest in period of illiquidity thanks to absence of capital drawdown limit.
- The wind:
 - Beating the benchmark as a function of market imperfection (itw 14)
 - Judging performance on a relative basis (itw 20 etc)
- The passenger:

Figure 4-12 - Second cycle of coding – first iteration

Second level – second iteration

The Captain

- Look for good quality firm with temporary issue (mean reversion)
- Mix fundamental quant/fundamental
- Cares about doing long term performance (3-5-10Y)
- Value imagination through alternative scenario
- Physically feel the pain of losing position (scar/injuries)
- Add to losing position (contrarian)
- Play the thesis – surprised investment thesis plays out so well (Kering – interview 9)
- Being in the market for 15-20Y is a sign of skill
- Surviving on the LT is a function of constant review/improvement of investment process
- Can't explain everything, there is luck in investment process (humble - interview 20)
- Competing mano a mano – survival of the fittest
- Fortunate not to be limited to one asset class (vs. interview 18 – multi asset = loss of specialisation)
- Being distracted by calls/meetings
- Being human driven by mood/hormones/feelings
- Present performance in context (interview 4 – 11 etc.)
- Losses hurt more than gain
- Multi asset vs. equity fund manager (asset allocation vs. stock picking)
- Influenced by the investor's biases (avoid losses) – risk shifting/index tracking as a way to avoid conflict with investors
- Market tests PM – tough world but good teacher
- Active asset management about translating convictions into values (performance)
- PM worry inverse function of size of customer base
- PM can break down skill vs. luck (not possible for customers) – easier to do it on medium/long term horizon
- Can't consistently beat the benchmark but can beat it more often than not

The Boat

- Conflict of interest (size vs. alpha)
- Boutique asset management premium vs. incubator bias
- Performance submitted to cycle (equity fund manager)
- Specialisation vs. multi asset

The Sea

- Being blessed to have a firm ran by investors (LT horizon)
- Ability to invest in period of illiquidity thanks to absence of capital drawdown limit
- Challenging each other (competitive advantage)
- Aligning compensation, culture on LT investment horizon
- Yearly performance assessment

Figure 4-13 - Second cycle of coding – second iteration

Second level coding third iteration

What is literature saying about the horizon? What is the appropriate horizon for performance measurement? What is the literature saying about this? Here is what we find

Skill and luck – literature tried to break down performance vs. skill and luck – what does literature says? - we find PM believe it can be done but not by outsiders, why the outsiders can't do it.

The Captain

- Odysseus
- Looking for LT performance (sign of skill)
- They can break down their performance between skill and luck
- Counteract biases through collaborative structure and upfront targets
- Can't consistently beat the benchmark but more often than not
- Present performance in context
- Influence by their investors (human too) through index tracking/risk shifting
- Disciplined and constant review/improvement of their investment processes
- Humble attitude as cornerstone of their behaviour, they can't know everything

The Boat

- Conflict of interest (size vs. alpha)
- Boutique asset management premium vs. incubator bias
- Performance submitted to cycle (equity fund manager)
- Specialisation vs. multi asset

The Sea

- Being blessed by firm run by investors.
- Being blessed by investors who understand their strategy
- Too many layers in the industry (layer of an onion)
- Best way to align interest is performance fee + skin in the game
- Long term is a theoretical concept – it is about 3-5Y
- Asymmetry in inflow/outflow (gain/loss)
- Existence of a critical mass (AUM size) due to product capacity – this dictates capacity for return
- AUM size not so detrimental to multi asset/total return as bread and butter is asset allocation
- Boutique premium may be due to incubation bias
- Team is crucial to manage PM internal bias
- Running a fund/team is very different when outperforming/underperforming
- Call pay off structure for bonus shape PM behaviour.

Figure 4-14 - Second cycle of coding – third iteration

4.5 Ethical and practical considerations

4.5.1 Ethical Considerations

The depth and scale of the proposed qualitative research imply that participant(s) share information about their professional life and expect/trust the researcher to handle those data with respect and confidentiality. Prior to the interview, the participants were fully informed about the goal of the research, the nature of the interview process and its structures. They were made aware as to how the data would be used and how those data fitted within the researcher's thesis.

I have read and familiarized myself with the Cranfield Ethics Policy and Ethics Code and my thesis agrees with the Cranfield approach to uphold the highest standards regarding research practices.

4.5.2 Practical considerations

Interviewee Confidentiality and Anonymity: the recorded data were backed up and kept in storage. This was performed in accordance with Cranfield's data privacy requirements.

Another practical consideration concerns the concept of reflexivity, meaning that "no enquiry can be objective" as per Van de Ven (2007, p. 64). Considering the factors that could influence my choice (Table 4-2), my aim is to be aware of potential biases and minimize them to choose an appropriate method to answer my research question.

Table 4-2 - Factors influencing methods choice

- *Organizational*: this includes factors such as organizational size and pace of change. For example, Buchanan describes a situation where the question 'What is your job title?' produced a bemused response from managers whose roles were shifting every few weeks.
- *Historical*: this relates to previous studies of the topic.
- *Political*: this type of influence includes negotiating research objectives, obtaining permission to access respondents, aligning with groups of stakeholders, and the way that different methods are perceived by journals, which affects researchers' ability to publish their findings.
- *Ethical*: this relates to the increased ethical scrutiny that is faced by researchers and the role of ethical review in regulating their conduct (see Chapter 6).
- *Evidential*: this relates to the different expectations that academic and managerial audiences have of business research; the former expect knowledge and insight and the latter want practical recommendations. The rise of evidence-based management, which will be discussed in Chapter 4 (see also Key concept 1.1), has only amplified these tensions and debates.
- *Personal*: researchers are also influenced in their choice of methods by such factors as the extent to which they enjoy face-to-face contact, some researchers opting for methods that rely heavily on interpersonal interaction and others choosing methods that confine them to the computer screen.

Reproduced from Bryman and Bell (2015, p. 41)

5 FINDINGS

Throughout the 20 interviews of fund managers, I find different types of results in relation to existing academic research. My findings can broadly be classified into those that: (1) confirm former academic results that use secondary data, (2) contradict past results that use secondary data, (3) extend/complement previous academic results that use secondary data, and (4) are unique/new to academic research. This taxonomy is a helpful tool to put my research's findings into perspective with those existing in this area.

I first develop a holistic framework through the coding and analysis of the transcripts of the interviews of the fund managers. On several occasions, fund managers use seafaring words such as “tail wind”, “head wind”, “navigate”, “port of call” to describe their work and the challenges they face on a day-to-day basis to achieve their goal through their investment philosophy. In Figure 5-1, I introduce the character mapping from the initial Odyssey to describe how fund managers picture their work and the related challenges, and then present the translation of the character mapping into the fund manager's world in Figure 5-2.

The Odyssey is Homer's tale of the ten-year struggle Odysseus faces to join his wife Penelope and his son Telemachus and reclaim the throne of Ithaca. Odysseus is met with many challenges during his travels, including the wrath of the Gods such as Poseidon, or fantastic creatures such as Siren, Charybdis, Scylla, and sorceresses/Goddesses such as Circe or Calypso. Transposing this story to the fund managers' world, I have used the following mapping: Odysseus (fund manager) sails on the sea (universe of investment) in his Homeric galley (funds/internal environment) to join his wife Penelope (relative/absolute performance) before her suitors (competitors) manage to claim her hand. During this ten-year trip, Odysseus faces external danger such as Poseidon's wrath (external environment), Circe and Calypso (heuristic and biases), King Alcinous and Polyphemus (retail/institutional client), Siren (misclassification/index tracking) and external help from the God of wind Aeolus (portfolio management), or the help from Hermes and Tiresias (information/compass). Similar to the Odyssey's story, fund managers have a definite goal (creating long-term wealth for investors). They are met with a variety of opportunities (patient, long-term investment strategy) and threats (investor's short termism, structural incentives to deviate from their original long horizon

investment philosophy), which they address by nurturing their strength (long-term investment strategy made possible through in-depth knowledge of the industry and ability to construct alternative scenarios) and by lessening their weaknesses (collaborative team structure, formulaic capital allocation etc.)

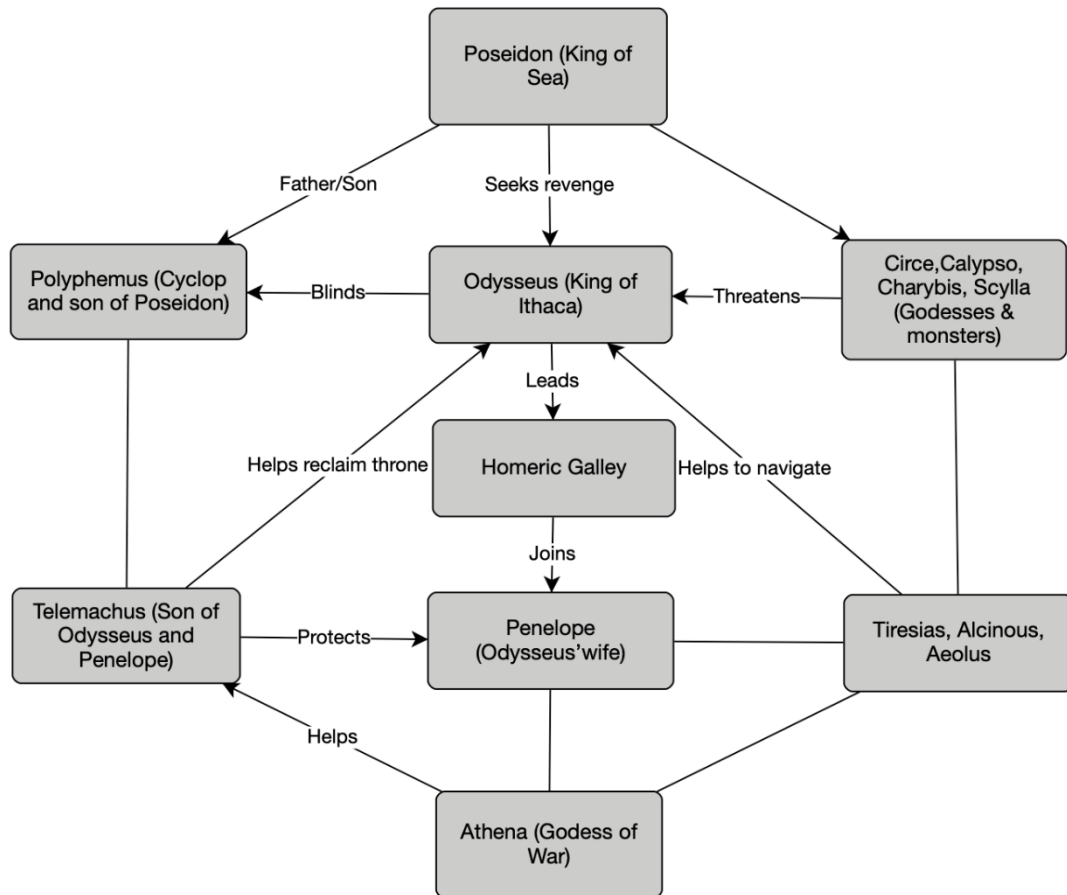


Figure 5-1- Character mapping of the original Odyssey

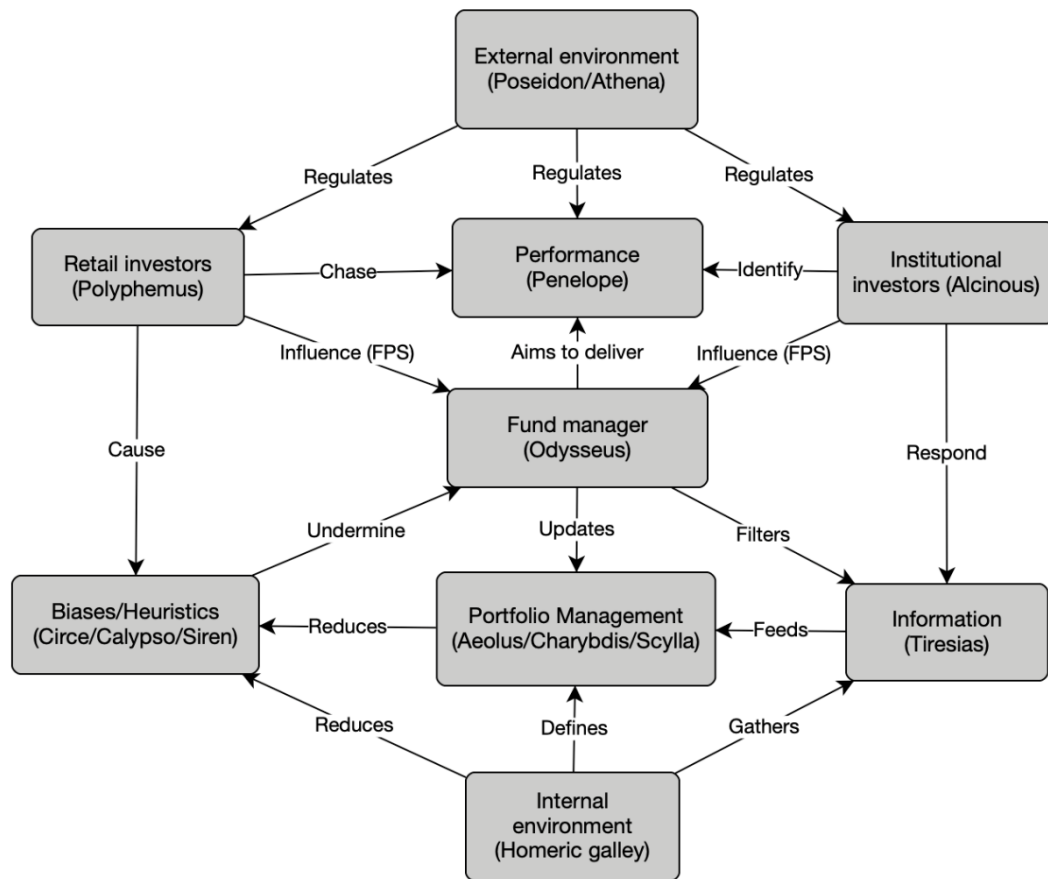


Figure 5-2 - Fund managers' Odyssey

This tale echoes the description of the challenges fund managers describe during their interviews. They paint themselves as a boat captain either facing head winds or helped by tail winds. They believe they can achieve their goal to beat their benchmark if they are assessed against a long-time horizon (at least over a three-year performance and ideally over five or ten years). They also acknowledge that they can be prone to biases and experience psychological pain due to bad performance. They equally admit that their behaviour can be influenced both by their internal environment (organisational structure of their firm, culture, team structure) and their external environment (regulation, retail, or institutional investor's expectations). In the following sections, I delve further into the different characters of the Odyssey and relate each of these to my findings. Furthermore, I demonstrate how my findings either confirm, contradict, or complement the existing academic literature, and open new fields of research.

5.1 Odysseus/Penelope – Fund managers objectives and performance

5.1.1 Fund managers' objectives

In Homer's novel, Odysseus' goal is to join his wife Penelope (before the suitors claim her hand) and his son Telemachus, and subsequently to get back on the throne of Ithaca. Similarly, the fund manager's goal is to claim the throne of alpha before any suitors (competitors), and despite several external/internal pressures. In so doing, the fund manager defines an investment philosophy which drives his/her capital allocation and investment decisions through information processing. As mentioned previously in the literature review, there is a paucity of articles using primary data to describe the challenges fund managers face when they try to achieve their goal. My findings allow me to address this gap and help synthesise several topics that were previously considered in isolation rather than as a dynamic, interrelated environment.

The first finding relates to how the fund managers describe what they think their job is. Since Jensen (1968), and until Gennaioli et al. (2015) and their description of trust in the relationship between fund managers and their investors, it was generally assumed that fund managers' objective was to deliver outperformance. The fund managers' comments shed some light on their view as to what they think their job is:

"My job is to apply fundamental analysis to know if those problems are temporary or permanent" – UK equity fund manager

"That's our job, to understand how much of those improved returns, margins are structural as opposed to cyclical" – UK equity fund manager

"The job of an asset manager is to make money for its client and when that happens both managers and clients are happy" – UK bond fund manager

"What we're here to do, as day-to-day fund managers, is to create that wealth, and we can make a substantial difference to an individual wealth by doing that" – UK equity fund manager

Thus, fund managers believe their job is to create wealth through the ability to distinguish short-term momentum strategies (backward looking quant) from sound long-term investment strategies (full economic cycle) which combine a disciplined capital allocation

with investment process. Contrary to the popular perception in the media as well as in the literature (e.g., Jin, 2005) where the market is criticised for being short-termist, the fund managers have a long-term horizon. Also, they believe identifying the long-term prospects of their investments is integral to their job.

My findings are in line with the literature that finds long-term, patient investment strategy delivers outperformance and is indicative of a skilled manager (see Bøhren and Priestley, 2009; Lan et al., 2014). However, the fund manager's job is not without hurdles and their ability to implement long-term strategy may be made difficult due to structural pressures that may incentivize them to do otherwise (Jin, 2005).

5.1.2 Do fund managers believe they have the skills?

The response of the fund managers is unequivocal: yes, they do have the skills to deliver outperformance. In an industry where it is all about the survival of the fittest, the fact that some of them have a 20-year track record is a testament to their skill as less than 20% of fund managers can sustain a 10-year track record²⁶.

“I have been a portfolio manager for 19 years and XXX who you are about to meet has been in the market 27 years. I think the fact that we've been here that long suggests we are able; we have been able to (beat the benchmark)” – UK equity fund manager

My interviews also show that the fund managers believe they have the potential edge that enables them to achieve their objectives. This is a new area for academic research as I am not aware of any previous literature where fund managers thoroughly describe their edge.

“Using numbers is important but using imagination, i.e., going beyond just the near term, beyond what is just conventional wisdom and being right about it, is where we can make a lot of money for our clients... We can make money for our client if we have a long term, longer term than the market, screen out the noise, focus on the fundamentals i.e., fundamentals of the industry, what will drive the industry” – UK equity fund manager

²⁶ <https://citywire.co.uk/funds-insider/news/perfect-10-a-dozen-top-fund-managers-over-the-last-decade/a1200496>

“What makes a good analyst and even more so what makes a good portfolio manager is understanding, stepping away from the noise and understanding what’s really important for the business, and depending on the business, depending on what it’s doing, what segment it’s in, there’s probably only three things that really matter. And, so, you’re gonna be able to see the forest for the trees, and it’s cutting out the noise and understanding that “ok for this business, what are the three things that really matter? Has this changed?” and I think that’s a skill” – UK equity fund manager

Consequently, the fund manager’s edge is the ability to flawlessly articulate a recursive two-step process whereby the first step is to filter out the noise from the data to be able to extract the alpha out of it. Once the alpha is extracted, in the second step, it is critically important to go beyond the conventional wisdom and widespread consensus. This requires considering detailed alternative scenarios through in-depth knowledge of the industry and regular meetings with top management.

5.1.3 Can they beat the benchmark?

However, almost all agree that it is impossible to consistently beat their benchmark on a short-term basis (monthly or quarterly) due to noise. They argue they should be assessed over at least a three-year horizon.

“Every quarter no, every year not easy, over three years it should be yes, and over five years for sure and if personally I don’t beat the index or don’t do my job over five years, I would be fired, and I won’t be around, and they find someone who can” – UK equity fund manager

“Quarters are largely irrelevant, one year is, you know, influenced by significant shifts in what type of stocks, what type of factors are working. One year is again largely, largely irrelevant. Three to five years, you should be able to see whether the investment philosophy or process is working, longer term timeframes, longer timeframes, you take out some off the luck that can be involved in fund management” – UK equity fund manager

“I’d say first of all you need realistic time horizons, and you can’t say you’re up for every single month because obviously there are events. But I’d be more confident in saying that

I think we could outperform it on a three-year rolling basis” – UK macro hedge fund manager.

“It is not scientific to assume that one strategy, no matter what the strategy is, how concentrated it is, or wide it is, will beat its specific or wider benchmark in the long run consistently; you might outperform on a long period of time, but I am yet to see a manager that outperforms in every 12-month rolling period” – Dubai equity fund manager

Thus, my findings outline a definite meaningful condition to measure this performance (e.g., minimum 3-year horizon). The academic literature that uses secondary data tends to use much longer time frames to assess performance; however, it usually assesses a fund’s performance, not that of the fund manager, and therefore it is difficult to draw conclusions about the skills of managers.

5.1.4 What is the appropriate benchmark?

The fund managers further highlight that the interpretation of performance varies depending on the funds’ nature and philosophy. For instance, they argue that assessing them against an index benchmark is unfair because they experience transaction and rebalancing costs whilst, by definition, the index does not.

“I think it is very difficult to beat a benchmark like this because the benchmark has some tricky parts: transactions costs when you need to clean one position, you can’t do it in one rebalance, one quarterly rebalancing, I think it is difficult to do it. Maybe you have a good source alpha, but it will decrease over time so maybe it not impossible, but this is very difficult to beat” – Chilean equity fund manager/CIO

Fund managers would rather be assessed against their peers who must face the same hurdles. Similarly, managers of absolute returns funds underline that, unlike their peers who deliver relative performance, there is a constant pressure to deliver positive returns. They cannot justify negative performance even if they are ahead of their benchmark.

“I am not sure if you’ve spoken to the guys across the road or not but there is, they’re living in a different world to where we are, where they can underperform when their style underperforms, they can underperform the market by 30%” – UK macro hedge fund manager

“The net alpha for benchmark relative portfolio, hmm, yes for benchmark relative portfolio, yes, I agree, but coming back to the total return space I am not sure how you really define alpha in total return terms to be very honest with you, I think that’s the tricky bit” – UK macro hedge fund manager

Berk and Green (2004) propose a simple model whereby the net alpha generated by skilled fund managers will be wiped out by their fees. They show that in a market where the investors compete to hire skilled fund managers, funds will flow to such managers till, in equilibrium, the fees will be equal to the gross alpha. In addition, even skilled managers will not be able to generate similar levels of gross alpha as the size of the fund increases. Hence they argue the literature that uses net alpha as an indicator of skill (e.g., BSW, 2010), is based on an incorrect premise. The opinion of the fund managers I interviewed is consistent with this view.

“So, um, do I think that I can predict who's going to continue to beat that benchmark? Yes, but it's a very, very narrow set of people and those people will charge fees equal to their edge because if they don't, how can it be any other way? Nobody leaves a 20-pound note on the floor. So, if you know, you've got a verifiable edge and external parties can verify that you have an edge. In fact, edge is 4% a year over your benchmark. What can I charge in fees? Well, that'll be 4% a year, won't it?” – UK quantitative hedge fund manager

“There are people who have alpha, they either consume it all in fees or they're cheating, and if they're not consuming it all in fees, you have to ask the question, why am I being invited to invest in this thing? If they've really got sustainable and definable, quantifiable, certain alpha, why is he giving this to me? Because he could just keep it himself, right? That's a question you're always gonna ask. That's a really awkward question. Nobody wants to talk about that” – UK high frequency hedge fund manager

Therefore, fund managers believe they can sustainably deliver outperformance, but this alpha may be wiped out by fees set by the PLC or by the effect of the decreasing return to scale once inflows increase.

The extant literature identifies a potential problem with net alpha as a measure of performance. Brown and Pomerantz (2015) highlight that the overall fee consists of three

subcomponents: administrative fee, distribution fee, and management fees. The fund manager does not have a say on the level of the fees for his fund, therefore there may be instances where he generates a positive gross alpha, but the net alpha available to the investors is negative due to the substantial fees set by his management. For instance, Wermers (2000) shows that while the stocks bought by the fund managers outperform the market by 1.3%, their net return underperforms by 1%, and 1.6% of this difference stems from fees. Ibert et al., (2018) also find there is a concave relationship between revenue and fund managers' remuneration as they only get a fraction of the extra fee they generate, even though the fees grow linearly with the fund size. There is even a compounding effect whereby the fund with the worst gross alpha charge the highest fees (Gil-Bazo and Ruiz-Verdú, 2009).

Thus, a fund manager's skill is more accurately reflected by his/her average abnormal return before fees (gross alpha). Berk and van Binsbergen (2015) go a step further and advocate to take into account the decreasing return to scale by multiplying the gross alpha by the size of the fund (value extracted from the market).

The fund managers also make similar observations about the relationship between fees and performance.

"If you were close to your benchmark and don't wander far from it, which is what my management would like me to do, sticking close to my benchmark; however, I have 1.25% management fees, so it is impossible with the management fees we have, even on the aggregate, to beat the benchmark without having an alpha management, a bit of conviction management" – Monaco bond fund manager

"On the euro part, it was more complicated, I beat it before fees but not after fees. We have management fees which are quite staggering, 1% on rate, and my competitors are usually around 0.4%, I am twice that. Our management to assess our performance will include fees, that is what you show to the customer, it is not ideal" – Monaco bond fund manager

These findings raise the question, if investors should not expect to receive excess risk-adjusted returns from their investments with active managers, why should they not simply invest with passive funds. I explore this in the next subsection.

5.1.5 Fund managers as money doctors

A potential explanation as to why investors favour active fund managers in spite of lack of net alpha is that they may value more than merely the financial performance. Gennaioli et al. (2015) introduce the idea of active fund managers as money doctors and argue they provide the investors peace of mind and help reduce anxiety associated with making risky investments. They also argue that the investors value their ability to offer advice and investment ideas, and there is a degree of trust that is valued by the investors. Further, since this trust is not transferable, the investors face high switching costs.

The fund managers I interviewed were of the same view. They said that there a substantial investment towards building the trust, and they view their role as that of a trusted friend. Further, the managers also believe the investors are not solely focused on the returns and value this relationship.

“A big reason why our clients really like us, and I think we've got, sort of, a bunch of surveys which we do with our clients once a year and always come back very positive, and it's not, performance isn't there only, the headline performance isn't their only focus”
– UK macro hedge fund manager

“It's interesting when you already invested time in something, in their case, its relationship with me. You have a high switching cost. You value your relationship because you spend a lot of time with that person already” – UK wealth fund manager

“I'm positioning myself as their friend or someone who can recommend them to navigate in this world of investments” – UK wealth fund manager

“I think primarily most people who are investing into funds either they are not sophisticated enough that they don't realize that they could buy an ETF to just diversify market exposure and as such they buy a fund, which is the more, kind of, retail clientele. Because they then feel like they, that the money is protected, or whatever” – Swiss fund of funds manager

While Dorn and Weber (2015) and Germann et al. (2018) provide evidence of the money doctor concept through experimental study and samples of customers, this is the first study to provide direct evidence through fund managers' interviews.

In this part, I have outlined the necessary conditions, as per the fund managers, to deliver a sustainable outperformance to their investors.

5.1.6 Skill versus Luck

Can investors break down the performance and understand whether they are investing (or have invested) in the fund of a skilled fund manager or simply a lucky one? I also explore whether the fund managers themselves can do this breakdown. Do they have better ability or knowledge than their customers?

My findings are unequivocal on this subject; the fund managers do not believe that their customers can break down their performance between skill and luck. They offer three explanations as to why this is difficult for investors, and for studies that use secondary data.

First, fund managers who possess an edge that translates into sustained alpha will either want to keep that a secret so that they can sustain a longer streak of good performance, or they do not wish to divulge the source of their alpha as it may be morally disputable or potentially illegal. Second, distinguishing between skill and luck requires an in-depth knowledge of the investment process. This information is unlikely to be available to the retail investors though some institutional investors may be privy to it. Third, assessing the skill requires knowledge of the degree of conviction behind every trade, again something that outside investors are unlikely to have. Other fund managers may be able to distinguish between skill and luck because they have an intimate knowledge of every trade.

My findings clearly show the limit of the literature that relies on quantitative models and secondary data as they cannot analyse the investment philosophy behind every trade, nor can they measure the fund manager's conviction in their investment decisions.

Furthermore, fund managers offer a taxonomy of skill and luck as an intersection of performance and process (

Table 5-1). In parallel, they outline and express the belief that it is easier to break down performance between skill and luck components when the performance is sustained over a long period of time rather than a short one.

Table 5-1 - Fund manager taxonomy Process/Outcome

	<u>Good outcome</u>	<u>Bad outcome</u>
<u>Good process</u>	Sustainable result	Bad Luck
<u>Bad process</u>	Good luck	Natural Justice

“And this is a big advantage for us, to select funds when we are managing live on the side. When I buy a fund and the fund manager comes and explains his bets, I can deeply challenge him, for instance, on the market, the stocks he has etc.” – French equity fund manager

“I think for us it is much easier because if I put on a trade, I know exactly what levels I got it at and I know exactly the levels I was getting out of it when I sell” – UK macro hedge fund manager

“And that's really, really, really difficult because the people who really have an edge in that space are reluctant to talk about it. And there's two reasons why they're reluctant to talk about it. One, maybe they have really got something that works, and two, they don't want to tell everyone about it because it's secret. So, ok, or what they're doing is, that's challenging from a regulatory point of view” – UK high frequency hedge fund manager.

“You could depending if once you place a bet, or at the time you place a bet, you rate your conviction and if you're, if you are highly convinced under your thesis and it goes well then it was not luck. But if you are not that well convinced and it goes well, then you've had a bit of luck” – Mexican equity fund manager

“When I was doing my MBA and it was process versus outcome, and it's, the good process/good outcome is a sustainable result, good process/bad outcome is bad luck, bad process/good outcome is good luck and bad process/bad outcome is natural justice” – Dubai equity fund manager.

“I don’t know, compute what percentage is luck and skill in the short term. In the medium term, I think the skill is more important, because from my experience as I mentioned, I successfully faced different situations at different times and made different decisions but as a result of that the performance for different reasons is positive in all of these events, so I would like to say that this is part of the skill that I produced for the team but maybe I am just a lucky guy” – Chilean equity fund manager/CIO

In Sub section 5.1.3, I find that fund managers wish to be assessed over a minimum horizon of three years and if possible, over a complete economic cycle to avoid short-term noise and possible adverse events. Do the investors also have a similar long horizon, or do they evaluate the fund managers over shorter periods? This potential mismatch between fund managers and investors about the period over which performance should be measured is an important issue that has been outlined by practitioners themselves²⁷. Further analysis of my findings sheds some light on what the fund managers perceive to be the investor’s time horizon and underlines their expected timing to withdraw their money when they are experiencing underperformance over a given period.

“I think if you were to ask me “over what time frame are they assessing us?”, that kind of tends to drive the inflow and outflows, on average, it is probably three years” – UK equity fund manager

“They normally give you a three-year period, at least, of underperformance before they exit, or clear evidence that you’re not doing what you said you were doing” – UK equity fund manager

“We tend to think that they have a very long horizon but actually this is not the case, typically their horizon is around three to five years” – UK global macro hedge fund manager

Thus, while fund managers believe they should be assessed over at least a 3-year period, they are acutely aware that investors would generally allow, at most, that long before

²⁷ http://uucef.org/files/2018/03/mfse_align_wp.pdf

deciding to pull the plug. I explore the consequences of this conflict and fund managers' views on it further in the next sub-section.

5.1.7 The ability to sustain performance: aligning investment horizons by building trust with investors

Fund managers are aware that regardless of their style or investment philosophy, there will be times when they fall behind their benchmark.

“However, we know it is a long road, sometimes difficult and non-linear: at times, we will necessarily underperform. The important part is to limit that underperformance in its amplitude and duration, and therefore knowing how to be agile and flexible” – French equity fund manager.

How do they deal with the investors when their short-term performance is below the benchmark? They try to risk manage the downside in such cases so that their investors understand this is within the expected magnitude of losses of their strategy.

Several fund managers believe it is necessary to clearly articulate their investment strategy to the investors. They believe it is important to explain their investment style, the volatility (with measures such as the Sharpe ratio), or, if investing in bonds, their average credit risk and duration. This helps present their performance in context, i.e., from a multivariate point of view. They also convey the message that abnormal return after fees is not all there is to their performance.

“I will insist on the volatility, on the average rating of the fund, therefore the limited risk and beside that the absolute performance” – Monaco bond fund manager

“I think we’re reasonably clear, articulating what we stand for, our philosophy and process, and I know my strategies, they’re very clearly positioned, in terms of style biases” – UK equity fund manager

“So, now you need to understand the context, so performance has to be in terms of context, which is why understanding the process is important for us, i.e., do you have the right value philosophy, do you have the right implementation, do you buy actually the stocks that are consistent with your philosophy?” – UK equity fund manager

Notwithstanding the need for clear exposition of their investment philosophy, fund managers also admit they need to avoid a situation where they are massively lagging behind their benchmark as this attracts greater scrutiny and request for explanations from their top management and/or investors. Thus, this diversion from their core tasks can create a vicious circle by further diminishing their ability to outperform. They insist that the nature of their work dramatically changes when they experience severe losses that will attract thorough scrutiny from the top management. They say that there is an asymmetry between the carrot they receive when they outperform and the stick they feel when they underperform. This is consistent with the non-linear shape of the Prospect theory value curve. Thus, our findings offer a structural explanation as to why fund managers may behave sub optimally.

“So, it is not symmetric the risk that you face. And also, in a very practical way, when you are in the first quartile, upper part of the second quartile, no one asks you questions, the CEO, the board of directors, no one is concerned, so you can focus on investment, you can invest money and that’s it” – Chilean equity manager/CIO

“When your performance is not good, people start to calculate the next (unclear) and start to think “maybe it’s good idea to change to a different job” so it’s a problem, to run a fund in the first quartile is completely different from running a fund or a team, all the package when you are in a bad performance. So, to answer your question, if your underperformance is one basis point, no one cares about that; if your underperformance is 10 basis points, maybe but not very much, but if 150 basis points or lower, it is a completely different situation” – Chilean equity manager/CIO

Table 5-2 - Gain/Loss magnitude and portfolio management

	<u>Gain</u>	<u>Loss</u>
<u>Moderate</u>	Nobody cares	Nobody cares
<u>Heavy</u>	Index Tracking	Risk Shifting

5.2 Fund managers' constraint on their performance

Due to nature of the fund management industry, there exist several conflicts of interest (see Brown et al., 1996; Chevalier and Ellison, 1997) whereby the fund manager's goal may not be aligned with investor's goal (external environment) or with its management (internal environment). My findings also allow me to offer a potential explanation as to why there may be a misalignment between the fund manager and the final investors.

5.2.1 Regulations – Poseidon

In the Odyssey, Poseidon is the God of the sea and the father of Polyphemus. He unleashes his wrath upon Odysseus in various forms so that he cannot go back to Ithaca. In my framework, Poseidon represents the external world which the fund managers cannot control but nonetheless must deal with. Fund managers evoke the role of regulations in limiting their ability to navigate their fund as they deem fit. They called the effect of regulations as a head wind.

“But if you think regulation comes along, and, you know, top down, kind of, protection of investors, and often be, some profound unforeseen consequences of that, so, there is a requirement for more balance” – UK equity fund manager

“I think some of the regulation that people are now saying might be brought in to combat that are over the top the other way” – UK global macro hedge fund manager

“There are huge costs in regulatory pressures which had come ... obviously the regulator got behind the curve with the banking crisis, you know, the banking crisis occurred and then, they had to catch up with more regulations in the banks, but they've now, really, they're, slowly but surely, waking up to the fact that there is huge risk in the asset management industry... I guess what I am saying is, in terms of the flows on the fund, you've got to understand there is this enormous structural head wind that's been there the whole time that you're up against” – UK equity fund manager

To summarise, fund managers think that regulations are a headwind to their ability to generate outperformance and attract inflow from investors. The fund managers describe a whipsaw effect from regulation which is either lagging behind or over the top.

5.2.2 Internal Pressure – Homeric Galley

The Homeric galley refers to the boat that Odysseus and his sailing crew used to navigate in their journey to get from Troy to Ithaca. In the framework of my study, this refers to the fund's characteristics (size of the fund/firm, nature of the asset, etc.). During the interviews several fund managers outlined that the nature of the fund management industry is like a multi-layered onion, so that the initial message from a fund manager has to go through middlemen to finally reach the final investor. During this journey, the quality and accuracy of the information given initially by the fund manager may decrease.

“All that clarity that we’ve given to the first layer has been completely diluted to a point where they, really, don’t, actually, have much of a clue how the money is being run” – UK equity fund manager

This loss of information could lead to misalignment between investor expectations and the investment philosophy of the fund. Investors' ignorance as to when they can expect a given investment philosophy to under/outperform can be detrimental in the long run. For instance, these incorrect expectations from investors can force fund managers to deviate from their initial investment philosophy.

“Clients looking for quarterly performance probably won’t come to us, they go to hedge funds where if you have long/short, you focus on not losing money, absolute money, then maybe you can engineer good short-term performance. We care about doing a good job for the long term” – UK equity fund manager

Moreover, my findings indicate that investors do not react equally to gains/losses and that this asymmetry influences the fund manager's ability to manage their funds according to a specific investment philosophy.

“You do have to have the right clients, otherwise if your clients are too short term, you’re gonna get forced into a more short-term cycle yourself” – UK equity fund manager

The difference in appraisal and payoff structure influences the way a fund manager pilots his/her fund in terms of risk, depending as to where he/she is compared to his/her competitors.

“I don't want to print a return of 12%, if I get up to 9%, I'll turn the dial down to minimum risk and just do nothing for the rest of the month and the month is up 9%...But yes, there's the emotional aspect and there's the fact that people game the risk profile” – UK quantitative hedge fund manager

“There's a lot of managers who are ... say they're cautious and are just really defensive. So, they give up a return and they just always trail the market, won't lose much money but won't really participate” – UK macro hedge fund manager

My findings confirm the extant academic literature regarding index tracking and shift in the risk profile (see Huang et al., 2011; Cremers et al., 2016). However, through my use of primary data, I can provide insights into when and for what reasons these sub-optimal behaviours happen.

Potential explanations for risk shifting and/or index tracking can either be conflict with investors and/or the emotional impact to be measured against an index and the derived pleasure/sadness as to whether one fund manager is ahead/behind their benchmark.

“In answer to your question, you don't manage the conflict. You just give up and then do what must be done to keep the client. If he is happy, you follow the index, you build the product to follow the index” – Brazilian equity fund manager

“As soon as you measure something when you are behind, you have to justify that. It's kind of, its sort of, I would say it's probably inducing some level of pain because it just feels better to be ahead of whatever you're measured against” – Swiss fund of funds manager

Furthermore, fund managers must deal with their appraisal's structure, and how their investors respond, in terms of inflow/outflow, to their performance. My findings echo/complement the extant academic literature regarding the tournament structure industry (Chevalier and Ellison, 1997) where the winner takes it all (Nanda et al., 2004) and the call option payoff of their remuneration structure.

“The monthly reappraisal did impact and did cause me to take actions that I, otherwise, would not have taken in the absence of that reappraisal every month” – UK distressed debt hedge fund manager

“Internally of the portfolio, managers are looking at, basically refreshing, our Bloomberg every hour at least. Every day, they are monitoring our P&L, every month there is a formal risk, the risk team assess our performance across desk, and we have little details across the different kind of portfolios that we run. And then for our clients, it is typically a quarterly meeting where we discuss performance and explain what we have been doing” – UK macro hedge fund manager

The findings add further delineation to the payoff structure of the fund manager whilst confirming that hedge fund managers enjoy a true call option payoff with unlimited upside when they deliver absolute returns; however, the call option payoff for benchmarked hedge/mutual fund managers whose upside is limited is disconfirmed, hence their payoff is closer to a collar where both upside/downside are limited (Table 5-3). It is striking to see the similarity between the fund manager value curve and the one from the Prospect Theory. Thus, we can posit that the fund manager value curve is influenced by the investor’s short termism, their appraisal structure, and the FPS shape.

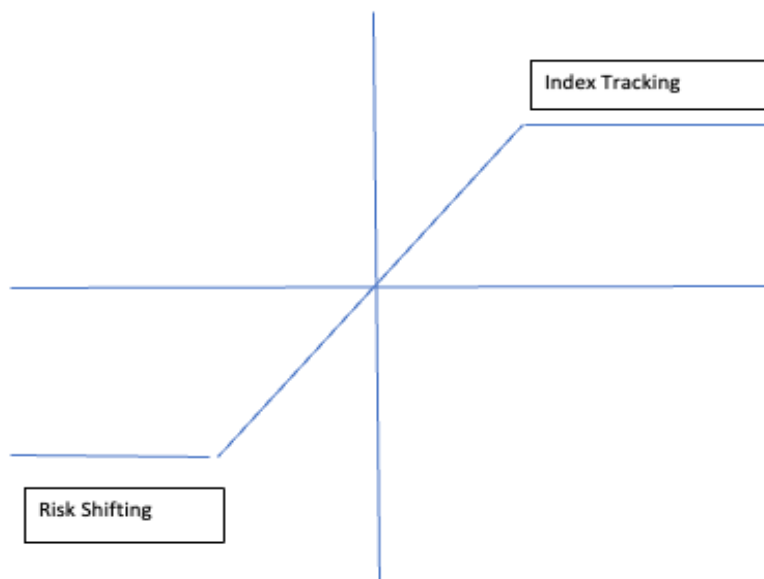


Figure 5-3 - Fund manager value curve and portfolio strategy

Prospect Theory investors			
Loss	Risk Taker (loss aversion)	Risk Averse (profit locking)	Gain



Figure 5-4 - Similarity in the risk profile/value curve of investors and fund managers

“You have a call option on the fund performance, right, because if the fund does really, really well, you will get paid a ton of money. If the fund blows up, you'll get fired” – UK quantitative hedge fund manager

“You can reach 100% of your bonus but if you get more return, you are not going to have 200% because your bonus is 100%. But if you have an underperformance, you can get zero bonus for one year, and two years, they may find someone else for the job” – Chilean equity fund manager/CIO

“If we were in a position where we had had a phenomenal year and performed very well then we would absolutely take some risk off the table because our clients are paying us for that, clients are paying us to get cash plus four, they are not paying us, you know, to get cash plus ten” – UK macro hedge fund manager

Fund managers adopt suboptimal investment strategy whenever they are either far ahead or far behind their benchmark. They can shift their portfolio's risk when far behind the competitors or track their benchmark index when way ahead of their peers. This seemingly counter-intuitive decision making of the fund managers is consistent with the predictions of the Prospect theory: investors become risk averse when they experience gain and become risk takers after suffering substantial losses as they try to get even. My findings offer potential explanation for these suboptimal behaviours such as the non-linear shape of FPS toward star fund (see Nanda, Wang and Zheng, 2004) or the conflicting requests from top management who advise Fund managers not to deviate far from their benchmark while still expecting them to outperform.

5.2.3 External Pressure – Polyphemus/Alcinous

The passenger in the fund managers' Odyssey refers to the investor. I explain the dichotomy previously described in the academic literature (retail vs. institutional

investor) through the two characters of Polyphemus (Son of Zeus) and Alcinous (King of the Phaeacians). This translates into a definite difference in behaviour and financial literacy toward the ability to understand a fund manager's philosophy and its related performance. Whilst in the Odyssey, Polyphemus is trying to kill Odysseus, Alcinous is helping Odysseus in his journey. The extant academic literature (see Capon et al., 1996; Del Guercio and Reuter, 2014) underlines that retail and institutional investors do not experience the same performance from their investment in active fund management. Furthermore, their response to performance through inflow/outflow is different. On the one hand, my findings confirm the previous taxonomy between retail and institutional investors, on the other hand they extend/complement the extant academic literature as fund managers describe to what extent it is important for them to attract customers who are financially literate enough to understand what their investment philosophy entails in terms of risk and reward.

Retail Investors

"I would say that the retail investors probably have very little insight really into our investment philosophy" – UK equity fund manager

"Because some people, they're unrealistic with their expectations and they say, for example, "I want 40% per annum return" – UK wealth fund manager

Institutional Investors

"We believe that with these kinds of clients we can sustain long partnerships but clients that do not have these qualities and have less understanding in how these products are positioned are clients that will eventually go over from you" – Dubai equity fund manager

"Now my fund is an institutional fund, so I have sophisticated clients in front of me and they understand those value cycles. They will understand if I can't show alpha versus core index if I have huge head winds" – UK equity fund manager

Consequently, the alignment between the investor's financial literacy and a given fund manager's investment philosophy is a prerequisite for a fund manager to be able to peacefully develop a long-term investment approach.

“That’s why we have sophisticated clients, if you are not sophisticated then you don’t understand all of that and you just chase the last performance and you go with momentum funds, and you look at who has made the most money the last quarter, over the last couple of quarters and you won’t buy my fund” – UK equity fund manager

In summary, fund managers confirm the dichotomy between retail and institutional investors. They further insist on the importance of attracting investors who are sophisticated enough to understand their investment strategies.

5.2.4 Other findings

My findings depict a reality where the size of the fund’s team determines the fund manager’s universe of investment size as the analysts operate a first filter on the initial universe of investment.

“Now, we have 150 analysts covering things in any index, so I am gonna start with that, what they cover and what they like, what they rate a “BUY” ... You get to a subset of 400 stocks, and I am going to own about 80 stocks, so my job is to choose from 400 stocks to 80 stocks” – UK equity fund manager

In the absence of a fund of a big size, the fund manager therefore has to do everything by himself, which means that he has limited time and skill to screen the market, and this limits considerably his ability to encompass the whole universe of investment.

“It’s not feasible for a human being to assess those things, there’s too many dimensions when you get a model with so many variables, the human being can’t assess so many dimensions, so many variables, so many things changing” – Brazilian equity fund manager

“You need to know that we are a small boutique in asset management, we are on our own in the sense that the fund manager is on his own to do all the work... I am on my own to deal with the market’s information for my four funds” – Monaco bond fund manager

Another important angle to consider when taking into account the nature of a fund is whether it is a boutique asset management fund or a fund that is part of a big brand with an extensive track record. Our findings corroborate the boutique asset management

premium (Clare, 2020) and the existence of a reputational risk, which makes fund of funds managers reluctant to invest in young and unknown outperforming boutiques.

“There is also a behavioural bias of the fund of funds manager who will not take the risk to select a not well-known asset management firm because if he were wrong, this could hurt his career, therefore it is in his interest to retain only big investment firms that have built through their marketing a good brand. Unfortunately, when you are a young and small asset management firm, we do not have this branding power and even if we outperform, certain investors hesitate” – French equity fund manager/CIO

“If I say, oh, we should invest a hundred million dollars in this tiny little three hundred-million-dollar AUM hedge fund and it blows up, then I’m going to be fired, and if I invest a hundred million dollars in this thing and it’s like up 40%, well, who cares? Really?” – UK quantitative hedge fund manager

Throughout my findings, I also corroborate the existence of an incubation bias (Evans, 2010) whereby a fund manager is quite aggressive during the first years of the fund’s existence knowing that if he/she fails his/her track record will not be published, whereas if he/she is successful he/she can provide a flattering 3-year minimum track record.

“Let’s say for a manager, it’s also, well, seductive to kind of risk something or have kind of strong bets in the first one or two years on a low asset base, because if it doesn’t work out the track record is just never shown” – Swiss fund of funds manager

It is also worth noting that the portfolio management can be influenced by a firm’s size and its number of funds (family funds). In a small structure with a limited number of funds, fund managers can easily guess what the overall performance of the firm is. Thus, there is a “look for a Porsche or look for a job” dilemma in the case of heavy gains or heavy losses whereby the whole team is either looking to spend their bonuses in advance or they try to jump ship before the fund is closed due to its underperformance (Table 5-3). This source of distraction can be reduced in big firms whereby it is much harder for a person to know what the aggregate performance is (Table 5-4).

Table 5-3 - Relationship Performance/team management – Small structure

<u>Gain</u>	<u>Loss</u>
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<u>Moderate</u>	Nobody cares	Nobody cares
<u>Heavy</u>	Look for a Porsche	Look for a Job

“And everybody's panicking about, you know, the client's gonna take the money away and we won't have a job next month. Everybody's fairly, you know, it's not just the guys on the trading desk. Everybody's freaking out. Same when you are up 9% in a month. Everybody is thinking about, you know, they're on a Porsche website thinking like, you know, shall I order it now or shall I wait till, you know, we get to the end of the quarter? So those distractions, these things are ... they are big, big distractions to thinking clearly”
– UK quantitative hedge fund manager

Table 5-4 - Relationship Performance/team management – Big structure

	<u>Gain</u>	<u>Loss</u>
<u>Moderate</u>	Nobody cares	Nobody cares
<u>Heavy</u>	Nobody knows	Nobody knows

“Big, mature investment management organizations, one, they tend to run stuff with much lower volatility. And that's another reason for running stuff at lower volatility because it is just less scary. Right. So that's one aspect of it. And the other is that they try and segregate that out a bit so that, you know, there's lots of funds, they are all doing slightly different things” – UK quantitative hedge fund manager

5.3 Fund managers' reaction to their environment

5.3.1 Biases/Heuristics – Siren/Calypso/Circe

In the Odyssey, there are several instances where Odysseus and his crew are victims of Goddesses/creatures that either hold them captive (Circe/Calypso) and/or deceive them through their cognitive skills (Siren). Furthermore, Odysseus' crew can be tempted by hubris when killing Helios' cattle. The extant academic literature has usually proxied fund managers' biases through mathematical models, be it the Overconfidence index from Adebambo and Yan (2016) or the correlation between high levels of AS and the subsequent overconfidence, as per Jin et al. (2016). My findings corroborate the existence

of the aforementioned biases such as overconfidence and self-attribution bias. However, I do confirm these biases through primary data.

“If they’re successful, the danger is after four or five years, you, genuinely, think you are great, and you make a mistake, by then, taking too much risk, you back yourself too much, and then you have a bad year, and you blow all your performance out of the water and the stress is enormous for people to deal with” – UK equity fund manager

“Quite often, I think, if a stock does well, the portfolio manager will attribute that to them, investment genius, and if a stock does badly, they often attribute that to bad luck” – UK equity fund manager

The fund managers further acknowledge that their human nature might get in the way of a disciplined and optimal way of managing their funds. They also mention that the quantitative funds are not immune to these biases.

“And we are people, you see, and that's the problem. If I was a machine, I would be more disciplined” – UK wealth fund manager

“You have the biases of the individual people and as such, this is kind of persuasive throughout the investment world... And as such, it's not that easy to simply, kind of, get rid of those emotional and cognitive biases in the investment world I would say” – Swiss fund of funds manager

*“I believe that you observe this in the returns of certain discretionary managers and quant managers, who claim to exercise no discretion on their funds, are full of sh*t because they do exercise discretion”* – UK quantitative hedge fund manager

Thus, not only do they plead guilty of such biases, but they offer potential organisational solutions to lessen their effects. Fund managers underline that a shared decision structure within the team, amongst them, incentivises accountability and therefore lessens the potential for rushed decisions. They also try to write their thesis on paper to filter out emotions and/or specific biases.

“I think it makes it a lot easier in our set-up in that where a committee structure, so a group structure, so no one person can just control something completely, because it's a

good environment and everyone's challenging each other a lot” – UK macro hedge fund manager

“If someone wanted to go overweight or underweight any stock, he would have to convince the other two to do it. And the other two were not experts on that company but were able to really question and to really make that person think about their thesis and to relax” – Mexican equity fund manager

“We try to write our thesis on paper, we try to write the rational argument and try to define our intuition, our feelings, to put them apart” – Chilean equity fund manager

Thus, fund managers recognise that their ability to make sound investment decision may be hampered by biases such as overconfidence and self-attribution. They further mention that these biases are also pervasive for quantitative funds. This is consistent with the Prospect theory whereby non-optimal investment decision derives from either cognitive or motivational biases. Fund managers argue that one way to reduce the effect of biases during the decision-making process is to have a collaborative structure whereby they must explain beforehand their investment ideas to their team. This structure encourages accountability.

5.3.2 Portfolio management – Aeolus/Charybdis/Scylla

I highlight that fund managers also handle randomness through their portfolio management/investment process which is mainly of a quantitative nature whilst they look for information of a qualitative nature. They constantly review/improve these processes to get an edge over their competitors. The extant literature, so far, barely addresses this topic, as if nothing happens between the initial investment and the realisation of the losses/gains and how fund managers cope with it to sustain their performance. I am only aware of Arnswald (2001) and Drachter, Kempf and Wagner (2007) having delved into this topic either through questionnaires or telephone surveys of German equity fund managers. My findings further extend previous academic research dealing with the tools (narratives conviction) fund managers create/use to handle randomness (see Eshraghi and Taffler, 2015; Tuckett and Nikolic, 2016).

“Another important point, we deeply go over the ideas on a monthly basis to see if we do not have better ideas etc. The idea is to challenge continually our position and always be curious to find new ones” – French equity fund manager

“We tend to, we have that framework running in the background which we're constantly improving, evolving but that's also of course starting point for any investment decision will have that considered at some point” – UK macro hedge fund manager.

Throughout our interviews fund managers conveyed a few stories of good and bad investment they had experienced and how they deal with diverse turns of event.

“My philosophy, the way I allocate capital, the way I do credit rating, react to credit rating changes, the frequency with which I react to those credit ratings allowed me to really navigate XXX well. It was a highly profitable experience” – UK distress debt hedge fund manager

“Our reasons for investing were valid, we felt there was a gap in performance between XXX and XXX; we would never, in our wildest dreams, have imagined that XXX would have quite the success it has become” UK equity fund manager

“We allocated some capital to that, built up our position, as the timing improved, they started to deliver improved profits and cash flow, and the share went on to do very well, it has actually gone up three to four times from the low point” – UK equity fund manager

“The bank, that bank example was one where everything sort of aligned, and I think over the course of six to nine months it was up sort of 80% or something relative, with the broad market being up about 15 or 20%” – UK macro hedge fund manager

An analysis of the fund managers' tales of their investments reveals three common points: (1) the fund managers have a clear scenario/mosaic picture through an intimate knowledge of the business and industry, (2) they believe they can identify a temporary valuation gap between market price and their scenario, and (3) they invest in the hope that this gap will close (mean-reverting process).

Paradoxically, fund managers highlight the fact that an initial successful investment can give them headaches when the stock becomes an issue for their portfolio structure.

“In our mind actually, it has become a lot more risky than it was, despite the fact they had this huge success and, actually, we have been cutting it back” – UK equity fund manager

Regarding the bad investment stories, the fund managers mentioned a few but surprisingly mentioned stories of good investment they had missed for various reasons. Therefore, fund managers seem to equate the loss on a bad investment to the missed gain on a good one. Thus, fund managers seem to experience a missed opportunity the same way they experience a loss. However, I cannot confirm if a missed loss is perceived by fund managers as a gain (Table 5-5).

Table 5-5 - Fund managers Loss/Gain taxonomy

	<u>Gain</u>	<u>Loss</u>
<u>Realised</u>	Gain	Loss
<u>Missed</u>	Loss	Gain (?)

Another interesting point that echoes a further part on information and the academic literature as well, is the importance for fund managers to be able to assess the quality of the management. It is also worth noting that fund managers take their bad investment very personally so that their vocabulary alludes to physical/mental distress when they describe their misfortune.

“Yes, this is an easy question, I can show you all my scars, injuries on all my body” – Chilean Equity fund manager/CIO

“Because we take that much psychological pain, and if it’s fallen 50%, we’ve got obviously something wrong, maybe we’re missing something, and at that point, we really, either just leave it because we think that there’s still upside there, but our confidence is shattered” – UK equity fund manager

“You know, I think there was a misjudgement on my part for not understanding well enough the operational risks in the company; that was one. The second one, there have been distressed cases where investors acted in ways that I thought were irrational” – UK distressed debt hedge fund manager

“I was bearish on XXX for a long time. And, you know, it's now like growing. It grew two times since I sold it. And I am regretting the decision because it's my area of expertise, this tech business, and I should have made the right decision. So, I made a mistake. That's why I carry on. But this one I took personally because it was like a big personal issue for me” – UK wealth fund manager

Beyond these unsuccessful investment stories, the fund managers shared their mindset about how they approach their portfolio management when their initial investment thesis is disconfirmed by the financial markets. I witnessed a variety of approaches from a portfolio management perspective (gradualist/contrarian etc.) when fund managers experience losses. However, one key element is whether their initial investment thesis is still valid or not. Fund managers will only sell their losing position if they deem their investment thesis to be broken.

“So, there were many times, and probably more times when I lost money on positions and I actually added to those positions, and when I made money on positions, I took the size of the positions down. So, the active, being mechanical about the decision making made me somewhat of a contrarian investor” – UK distressed debt hedge fund manager

“I am slightly more conservative in my approach and if I think I got the wrong side of the market, I'll sometimes de-risk a bit until I know what's going on, and then I'll put the risk back on again” – UK equity fund manager

“I can either leave the position as is, or increase it if there is panic selling in the market and I can buy stuff on the cheap, or I can decrease my position when I realise, oh there are, actually, flaws in my investment thesis” – UK distressed debt hedge fund manager

“I decided the level at which I sell, my own perception of making one and a half times profit is good enough. Making two, three times profits is too good to be true” – UK wealth fund manager

Fund managers delineate a clear frontier between the role of those who experience a good performance and the ones experiencing a bad performance. To confront this reality, they outline the role of a disciplined mindset and the required values to cope with the randomness of their performance. They further describe how portfolio management and portfolio structure can address these emotional challenges. They illustrate how their

portfolio management made a difference during examples of good/bad investment. In so doing, they give a clear definition as to what they consider a winning/losing investment and what they feel is the appropriate way to handle it. They insist on the necessity to review and update their portfolio management process on a regular basis.

“When everything blows up. Nobody can confidently say, you know, the thing’s down 4, 5, 6, 7% in a day. And nobody can concentrate, the research people can’t concentrate. And everybody’s panicking about, you know, the client’s gonna take the money away and we won’t have a job next month” – UK high frequency hedge fund manager

5.3.3 Information (compass) – Tiresias

In the Odyssey, Odysseus meets the blind seer Tiresias in the underworld. As a prophet, he warns Odysseus of the various conditions he must meet to be able to reach Ithaca. The extant academic literature describes fund managers looking for qualitative information through meetings with the top management. They collect this qualitative information to either confirm/disconfirm the mosaic picture they have previously built to assess whether it is worth investing in the company. Equally they try to assess the part of the stock valuation which derives from IC. The extant literature further posits that fund managers selecting the information they need is a function of three different fields and that the fund manager is a node between them. Through our interview with fund managers, we can confirm that fund managers do value qualitative data as they can highlight the skill/flip of company’s top management. However, my findings allow me to complement this analysis as fund managers also build alternative scenarios through a blend of the qualitative data they gathered and their in-depth knowledge of the industry they invest in.

“I am a credit manager, and the primary source of information is physical face meetings with companies. I enforce a rule in which we do two meetings per year, of which one has to be onsite” – UK distress debt hedge fund manager

“You might get management access, you might get a site visit, but you will never get as good information as the private equity guys” – UK distress debt hedge fund manager

“It is a succession of understanding what the market is saying and then having a difference in fundamental view inferred by a very strong fundamental team and imagining that into alternative scenario” – UK equity fund manager

My findings also clearly document a dramatic change in the relationship between information/data and the fund managers, with the introduction of the Internet. Prior to the Internet, the possession of information was in itself an advantage; this information was gathered either through networks or face to face meetings.

“You know, you used to get alpha by going out for lunch with the guy you went to school with, who is on the board, right? Well, you can't really do that anymore” – UK quantitative hedge fund manager

Thus, the fund managers describe a clear change with the arrival of the Internet whereby fund managers now have too much information. Therefore, they need the technical capacity and/or team that can handle quantitatively the sheer load of data.

“Definitely enough, sometimes it feels like we have too much, but I think that's a better position to be in. I think, I think one of the really important things of my role and anyone that you would meet in our research team, is the ability to take loads of information to distil down what is important. That's really a key thing” – UK global macro hedge fund manager

“In my opinion, it is not whether you have the information, it is “are you prepared to manage a lot of information?” for me it is a given, it is not a question. I believe that the trend for investment is more computational system and probably less people and making less analysis” – Chilean Equity fund manager/CIO

In parallel to the increasing amount of data available, the technical knowledge needed to transform it from unstructured to structured data creates (dis)economies of scale which in turns shape the fund management industry between the big players, who can afford an army of quants, and the little players whose universe of investment is limited by their reduced ability to filter the noise out of data.

“Turning the unstructured data into structured data that you can use in your investment process is really expensive in terms of people power because you've got to have like a load of quants” – UK quantitative hedge fund manager

“We are on our own in the sense that the fund manager is on his own to do all the work. I do not have an analyst. I have a middle or risk manager who will check the

administrative stuff, fund limit, the stocks that move a lot, the ratings etc. However, after that I am on my own to deal with the market's information for my four funds, and as I said, with the bond asset class, there are convertibles, subordinated debt, hybrid debt, sovereign debt, IG debt, high yield, and I am the only one to process that information therefore it's not easy" – Monaco bond fund manager

"So, I talk about those first because access to information comes down to economies of scale; diseconomies of scale are that eventually you kind of eat your own alpha. So, there are two things you can do to deal with that: one is not worry about it and you just grow and grow and grow and then you become absolutely enormous, your returns are crap but it doesn't really matter because you're running fifty billion dollars ...Or you take the poster child of this would-be Renaissance Technologies approach, which is to say we're capping this fund at five billion and it's always that, only ever five billion" - UK quantitative hedge fund manager

These findings about the relationship between information and fund managers highlight a definite shift with the disruption caused by the emergence of the Internet; the gathering and filtering of the ever-increasing available information has enhanced the focus/need of quantitative skills to handle big sets of data. There is an increasing fixed cost to extract the alpha out of unstructured quantitative data. In parallel, fund managers favour/value qualitative data to inform/confirm the investment thesis coming out of their quantitative investment process. Thus, my findings delineate the role of information in the fund managers' investment process and expand the existing academic literature (see e.g., Henningsson, 2009; Holland, 2006 & 2016).

In summary, fund managers describe their relationship with information as a two-step process: first, they insist on the subtle shift of skill needed post-Internet. They argue that they have too much information and that the goal is to filter out the noise through quantitative algorithms. This ability to extract alpha out of big data set has an important fixed cost which only big players can afford. Two, fund managers value qualitative data gathered through meeting with top management to continually update their investment thesis.

6 RESEARCH IMPACT

6.1 Contribution

Parallel to Research Councils UK's (2012) "Pathways to Impact", this research makes several contributions both academically and practically. First, academically, it addresses the paucity of academic articles using primary data to describe the challenges fund managers face in their daily work. It embraces several topics about fund managers' environment, such as their investors, their internal/external management, their portfolio management, their information, various topics which are usually studied in isolation in the academic literature.

This study's research provides a holistic metaphor of the fund managers' world, namely the metaphor of sailing (coined as the fund manager's Odyssey). Therefore, I echo gestalt psychology and Aristotle's belief that "the whole is greater than the sum of its part". Moreover, this research helps to improve the delineation of the fund managers' perception as to what the main issues are that they face when they try to deliver performance, whether these challenges are regulatory, environmental, or personal (biases). Secondly, practically, this research allows the building of a bridge between academic knowledge and practice as the data gathered to build this thesis comes from the practitioners themselves through semi-structured interviews. The interview guide used during these interviews elicits their feedback about topics they deem important but are not studied enough by the academic literature. The interaction with the fund managers was reciprocal as the researcher provided a document summarising the major findings once the interviews/NVivo coding were completed. Further to the reception of the findings' document, several fund managers kindly shared their feedback/appraisal, and a few quotes related to the engagement with the practitioners are provided in Chapter 7. Through their comments/appraisal they acknowledge the potential/actual research's impact on several topics relevant to their practice/industry.

To summarise, my research confirms by using primary data:

- The dichotomy of the fund managers' clientele between retail and institutional investors and their different degrees of understanding of fund managers' strategy.
- The existence of cognitive/motivational biases for fund managers, such as overconfidence and self-attribution. The potential effect of the team structure (collaborative) to lessen these biases.
- The conflict of interest between generating long-term alpha (performance) and size (increasing the AUM size to increase profit through fees).
- The call option payoff structure of fund managers' remuneration structure and its subsequent impact, such as risk shifting and/or index tracking.

My research further sheds light on new topics such as:

- The role of information in the fund managers' investment decision making process and how this role has changed over the last couple of decades with the rise of the Internet. The shift in skills went from having information to the ability to filter out the noise from big data through complex algorithms. The role of (dis)economies of scale related to information and how this shapes the asset management industry.
- The perception of fund managers regarding their role, their mission, their ability to beat their benchmark, and how they handle their portfolio management.
- The ability for fund managers (not their customers) to break down their performance between skill and luck, given a certain set of conditions.

6.2 Learning from research

6.2.1 Doctoral Research as new birth

After 15 years in the corporate world in commodities trading houses and top tier banks, the journey through the academic world was quite disturbing at first, and indeed still is sometimes. There is no title, no hierarchy as such; it is a reset process where every student starts at the bottom, naked as a newborn baby. The DBA experience happens on a different dimension of knowledge from an MBA experience; one must operate a definite shift from living with the knowledge developed by others to creating one's own

knowledge, in other words the shift is from a passive to an active mindset to create/extend knowledge.

6.2.2 Critique as the cornerstone of improvement

It is an understatement to say that panel reviews can sometimes be a gruelling experience and unfavourable outcomes can be a blow to the researcher's ego after months of working and polishing a deliverable document. I remember my first panel review ending up with major reservations. I was fuming; however, the further I delved into the programme the more I looked forward the panel meetings as way to present and motivate my research's progress, and I then enjoyed the feedback from my panel rather than feeling I was putting my head on the chopping block.

6.2.3 Consistency is key

The sheer amount of reading and writing may seem like climbing Mount Everest at the start of the Doctorate. However, through consistent efforts, the doctoral researcher can cope with the workload and develop new skills to embrace new academic concepts that he/she has to master to face the various deliverables. I had to reorganise my daily life to meet the tight deadlines and juggle my professional life with the DBA. Consistency is about developing a thick skin coupled with resilience to cope with any obstacles in the researcher's way.

6.2.4 Doctoral Researcher and Supervisor as co-writers of the thesis

I underestimated the thesis supervisor's importance when starting the journey. Whilst the Doctorate seems at times a lonely road where the doctoral researcher feels like a wanderer in a stormy desert, it took me several months to realise that doctoral research is teamwork (supervisor, cohort, academic community) rather than a bookworm, solitary experience.

6.2.5 Doctorate as the beginning of a journey

During the whole doctoral experience, I realised that the Doctorate was a lot more than a title but a mindset as to how one approaches knowledge. Throughout this journey, I realised how little I knew and the sheer amount of work necessary to expand the existing knowledge about a specific topic. Learning is the first step and teaching the next one, therefore I now consider juggling between my planned own consultancy and the academic

world in the future. I also now plan to do a second Doctorate (possibly in critical discourse analysis) to further delineate the extent of my ignorance. To quote one of my dear friends who has two PhDs “the first doctorate finishes when the second one begins”.

6.3 Engagement with practitioners

The design of my research is such that engagement with practitioners is at its heart as I used semi-structured interviews of fund managers to gather their views/opinions. Whilst this in itself is not a proof of impact; I have engaged with fund managers in a reciprocal way as I have provided them with a document summarising the findings once all the interviews and the coding in NVivo were completed. Below is a sample of fund managers’ quotes that underline the definite potential impact of my research, whether it be to increase retail investors’ awareness or correct investors’ misbehaviours and promote sound investment decision making processes:

“I think that Mr. Benjamin Monin's research is successful because it allows us to question subjects that interest us all, such as investment processes, alpha vs. luck, behavioural biases, information processing etc. while providing the beginning of an explanation. The combination of academic knowledge and empirical experience (thanks to the globally very relevant and sincere testimonies of managers with different profiles) are also very enriching because it allows the reader to build a global and solid vision of the management of portfolios without naivety and with great sagacity” – Anonymous fund manager

“I don’t have any improvements for your text right now and I think it could help investors/clients to have a better understanding of the position that the fund managers they entrust with their money in have” – Anonymous fund manager

“I believe it is essential to understand how the market operates in order to be able to regulate misbehaviours or incentivize the behaviour that improves the well-being of the majority. Economics is neither an exact science nor a purely psychological one. Nonetheless, to explain the latter seems far more difficult and vital to anyone that is just curious about it or wants to pursue a career in investment management. It is clear to me that you need to understand all aspects that influence someone’s investment decision in order to have a long-term career in this market. How a fund manager explains/conveys

their investment philosophy/performance is, for sure, part of this process of understanding the market and its participants – Anonymous fund manager

6.3.1 Dissemination

Dissemination is a way of interacting with the potential beneficiaries of this research to diffuse concepts and obtain their feedback. In addition to direct engagement with the beneficiaries, dissemination may include having a blog, consulting, publishing in professional/academic journals, and sharing academic findings at professional events. Exploitation is a way of converting research findings into actionable tools, concepts, and theories for the corporate world.

I plan to disseminate/have disseminated my research findings in three specific ways:

6.3.1.1 Social media – LinkedIn articles

The research's findings have been disseminated through LinkedIn social media. Over a month, I have published five articles ranging from 500 to 600 words. Overall, these five articles summarise key concepts coming from my positioning study, literature review, and research's findings. The first three articles set the background of the research namely Behavioural Finance/Prospect Theory/Biases/Heuristics. The two final articles set the foreground, namely two overarching themes coming from the findings (multivariate nature of performance and the holistic metaphor of the Odyssey to picture the way fund managers apprehend their world). The cumulated number of post views is above 1,700 (at the time of writing this thesis) whilst the number of posts read is almost 200 (Table 6-1). Therefore, over a month period I have been able to gain traction through the publication of five articles mirroring my research structure and offering the simplified core of the findings.

Table 6-1 - Metrics for the LinkedIn articles

Article #	Publication Date	Title	# of post view	# of article views
1	10/08/2020	Behavioural Finance: Genesis – A story of dating and investment	>800	75
2	12/08/2020	Behavioural Finance: birth of a new theory	>800	38
3	27/08/2020	Behavioural Finance: Biases and heuristics, is it right to be wrong or wrong to be right?	>700	42
4	09/09/2020	The nature of performance for fund managers: a multi-faceted concept.	>600	67
5	11/09/2020	The odyssey of fund managers: sailing on the sea of randomness and performance	>900	115
Total			>3600	337

(As of the 18th of June 2021)

6.3.1.2 Website dedicated to the doctoral journey and in-depth articles on the academic topic

In addition, I also aim to publish my findings in more rigorous and extensive articles (target is to publish articles of 1500 – 2000 words) via a website with an indicative start date of October/November 2021. The website would be converging with the LinkedIn articles as it would also cover the researcher’s reflection on the Doctoral Journey in addition to publishing articles related to Behavioural Finance’s topics.

6.3.1.3 Seminar and publishing the thesis/article

In order to further disseminate/exploit my findings, I aim to prepare an article for the conference season (Mar-Jul 2022). The deadline for this article is December 2021 for conferences such as European Financial Management Association Annual Meeting, European Finance Association Annual Meeting, Financial Management Association European conference, and the Behavioural Finance Research Group, INFINITY conference.

I have also targeted more practitioner-oriented journals such as Financial Analysts Journal and Journal of Portfolio Management in addition to the mainstream academic journals.

6.3.2 Impact from Research

As per the DBA guidelines, instrumental impact refers to “influencing the development of policy, practice or service provision, shaping strategy/legislation, altering behaviour etc.” The potential impact of my research has been outlined above in the quotes from fund

managers who reviewed the findings document that I provided. This research has the potential to be useful for:

- (1) - any policy aiming to regulate misbehaviours and incentivize decisions that promote the public interest. My research provides crucial fund managers' testimonies on this topic. For instance, the research could help a European policy which aims to incentivize pension funds/fund of funds/retail investors to invest in boutique asset management funds as they deliver superior performance (Clare, 2020).

"There is also a behavioural bias of the fund of funds manager who will not take the risk of selecting a not well-known asset management firm because if he were wrong, this could hurt his career, therefore it is in his interest to retain only big investment firms that have built, through their marketing, a good brand. Unfortunately, when you are a young and small asset management firm, we do not have this branding power and even if we outperform, certain investors hesitate." – French equity fund manager

- (2) – any retail investors who wishes to understand further the fund manager's strategy he/she invest his/her money in. The fund manager's testimony offers sound advice to avoid fraud and/or not mistake a style bias for alpha.

"By definition, you can't actually know what someone's alpha really is if they've actually really gotten it because it has to be either secret or a bit dodgy or outright illegal by construction" – UK high frequency hedge fund manager

"All of Warren Buffet's alpha is ... at the beginning of his career was a value factor tilt" – French Equity fund manager

"What I think is, most managers beat the benchmark because they have a bias which, in the past, worked well. For instance, these last 10 years a growth fund manager necessarily beat a value fund manager. But does that make him a genius?" – UK equity fund manager

- (3) – to alter fund managers’ biases by offering their testimonies which underscore organisational strategy to lessen these biases (e.g., collaborative team set-up where any decision is collegial, or the alignment between remuneration structure and investment horizon).

“I think it makes it a lot easier in our set-up in that where a committee structure, so a group structure, so no one person can just control something completely, because it's a good environment and everyone's challenging each other a lot.” – UK macro hedge fund manager

6.3.3 Contributions of the research

My research has five distinguishing features. First, it provides a clear statement from the fund managers themselves as to what they think their job/mission is and what are the key conditions to assess if they have successfully/consistently beaten their benchmark. This is a new addition compared to the extant literature.

Second, I show that the seemingly sub-optimal behaviour of the fund managers is consistent with the Prospect theory value curve and its inherent biases. This behaviour could be driven by external or internal factors, and could translate into the fund manager being risk adverse (track the index) or risk taker (shifting risk) (see e.g., Huang, Sialm and Zhang, 2011; Cremers and Curtis, 2015).

Third, my work provides confirmation through primary data that the fund managers’ performance is multi-dimensional and much more than merely the returns generated by them. For instance, the fund managers agree that their investors also value their ability to offer sound investment ideas. Likewise, they argue that for them to be able to focus on long-term strategy, it is essential that the investors’ horizon matches that of the manager. They reckon that one way to align their relative interest is through trust. (see e.g., Gennaioli, Shleifer and Vishny, 2015; Linnainmaa et al., 2017).

Fourth, I present two ways by which fund managers try to handle the randomness of their environment. The first is through portfolio management and more precisely through a recursive process where investment ideas are reassessed and so is the investment

decision-making process. The second is through information (qualitative and quantitative) to update their investment thesis with up-to-date data (see e.g., Taffler, Spence and Eshraghi, 2017; Barker et al., 2012).

Finally, my work also provides a holistic framework that offers in a single/story picture, a quick and simple way to understand the various relationships between the different stakeholders of the asset management industry (see Holland, 2016).

6.3.4 Implications of the research

My research also has several implications for the stakeholders of the investment industry. First, the fund managers' performance should be assessed over longer periods (at least 3 years). Moreover, the ability of a fund manager to produce a sustainable performance is a function of his ability to build trust with investors and align with their investment horizon. A misalignment between a fund manager's and its customers' horizons can lead to liquidity issues if there are sudden outflows (cf. Neil Woodford).

Second, it is important to recognise that it is difficult for investors to breakdown a fund manager's performance between skill and luck. This is equally true for research using secondary data because outsiders lack the knowledge of the investment process and the degree of conviction behind each trade. One potential collateral element is that fund managers are unlikely to disclose the source of their alpha to their investors, one reason being that this may jeopardize their edge, and the second reason is that maybe their edge is borderline legal (cf. Madoff).

Third, there is a similarity between investors' sub-optimal behaviours and that of the fund managers. They are both risk averse when they experience profit or are ahead of benchmark, and risk takers when they experience loss or are way behind their benchmark. The sub-optimal behaviours from the fund manager can potentially stem from either internal (collar pay off remuneration structure) or external (capturing most of the inflow when having a star fund) factors.

Fourth, there is the distinct shift in the relationship of fund manager to information. Pre-internet, there was a definite informational advantage (say through alumni network for

instance), post-internet and with the development of algorithms, the advantage comes from the ability to extract the alpha out of big data set. The corollary impact is that this translates into substantial fixed cost to hire the people with quantitative skill set. Consequently, there are substantial economies of scale within the asset management industry.

Fifth, the asset management industry should be evaluated taking a holistic view, the dynamic of the inter-relationships between the different stakeholders needs to be considered. There is a great need for further academic research using primary data in Behavioural Finance as these relationships are unlikely to be captured by secondary data.

Finally, the aspirants need to understand the fund managers' description of a successful fund managers and the mindset required to achieve success in this industry.

7 CONCLUSIONS, LIMITATIONS AND FURTHER STUDY

Until recently the Financial Theory and, to a lesser extent, Behavioural Finance have been prone to a research bias whereby the vast majority of the research uses the same methodology (positivist) and the same data input (secondary data). The lack of any cross check with the reality perceived by practitioners has created a gap between academics and professionals. In so doing, the academic tools are deemed impractical by fund managers who have developed their own tools to handle the randomness they face when trying to apply their skill through their investment philosophy. This research provides evidence that fund managers are worried about the lack of new ground-breaking financial theory compared to other industries experiencing disruptive innovation far more often.

‘I would say that what is striking about portfolio construction research, it’s that it is difficult to find true innovations whereas we see that in most other sectors, things are evolving very quickly. Finally, to compensate, we see a lot of marketing, meaning that they are trying to make us believe that there is innovation when we are told about themed management’ – French equity fund manager

Thus, the gap between academic research in Finance (and to a lesser extent Behavioural Finance) and fund managers has resulted in the active fund management puzzle, which may, in fact, be an optical illusion driven by the limitations of the performance measures used to assess fund managers’ skill (average net alpha across all funds regardless of the investor’s nature), and the debatable use of methods (e.g., FDR) that are very sensitive to assumptions. This has led to a large variance in the results reported by studies that assess the proportion of skilled fund managers, i.e. ranging from 0.6% (BSW, 2010) to 13% (Andrikogiannopoulou and Papakonstantinou, 2016).

My research addresses the paucity of academic literature using primary data to understand the fundamental question about the fund management industry: Are the fund managers skilled?

I present clear evidence, through the framework of the fund managers' Odyssey, that fund managers firmly believe they are skilled enough to meet their objectives if assessed over an appropriate time horizon (at least three years). They are acutely aware of the potential misalignment of interest from their investors who are prone to withdraw their money after three years of underperformance. Thus, they are keen on building trust with investors who can understand their investment philosophy to allow them to put in place a long-term strategy. I also describe the external/internal pressure the fund managers face due to the industry structure (tournament structure/FPS), and how this induces them to adopt non-optimal behaviours such as risk-shifting or index tracking. In so doing, they mirror the investors' biases (loss aversion etc.) as described by the Prospect Theory's value curve. Finally, I show how fund managers handle the randomness caused by external/internal pressures through portfolio management and information gathering and analysis.

Finally, I bring forth what the fund managers think are essential qualities to be a consistently skilled fund manager.

7.1 Advice to newcomers in the profession

Fund managers describe the adequate mindset as a blend of modesty and humility towards the difficulty of their task. They face their challenge through constant self-improvement and personal self-assessment.

*"I think one thing you've got to be really careful of is knowing that even when you've been on a really great streak of outperformance, know that the market is gonna come back and kick your *ss at any moment, and know that and manage your risk accordingly. That's the discipline"* – UK equity asset manager

"The market tests you and your convictions and the reality is very simplistic, the market can become unreasonable longer than you can stay solvent... We have a disciplined portfolio approach, with active monitoring and robust risk management" – Dubai equity fund manager/CIO

"Part of being a survivor in the long run as a fund manager is having a very disciplined investment process that you follow through thick and thin" – UK equity fund manager

“I think as a fund manager it is very important to be humble in order to realise that we don’t have all of the answer, but you are willing to find it, we try to find it. When you are wrong, because you have to know that you will be wrong a lot of the time, this could be a problem to go on and keep investing money and find the answer that you need. That attitude is very important to hear not only what you want to hear from the market but what is really here” – Chilean equity fund manager/CIO

7.2 Limitations

This research has several limitations pertaining to the methodology used to collect information. First, the semi-structured interview format involves a degree of freedom for the interviewee to go off track, on the one hand it is a helpful tool to elicit original findings however on the other hand this means this is hardly possible to ask the same questions for each interview. Thus, the comparison between interviews is not straightforward.

Second, although the size of my sample is sufficient as there was certain originality exhaustion in the answers during the latest interview. An extra five interviews would have allowed to confirm this decreasing originality for every extra interview however the COVID 19 made it impossible to set up extra interviews.

Third, the sample of fund managers is skewed in several ways. First, as most fund managers were from the LBS, they had at least a Master’s. Second, whilst the active fund management is predominantly a male industry, the sample used for this research was even more skewed with just one female fund manager out of 20 interviewees, hence a 5% representation. As per Morningstar, at the end of 2019, female fund managers represented 14% of the fund manager population²⁸. Finally, the fund managers sample is skewed towards the UK, Europe, and South America.

7.3 Further research

This research’s findings point towards a few directions that are worthy of further investigation.

²⁸ <https://www.morningstar.co.uk/uk/news/210150/diversity-best-practices-in-the-asset-management-industry.aspx>

The sample used in this research, as previously mentioned, was skewed in several aspects (gender, geographical locations). It would be interesting to pursue research with a balanced sample gender-wise and location-wise so that research could explore a cross-sectional (location – gender) perspective with the diversity or similarity of fund managers’ points of view regarding the challenges they face.

Another interesting topic worthy of investigation is how the increased complexity of alpha extraction out of the data shapes the fund industry management (increased fixed costs with an army of PhD/quants) and what the shift in skill set is for fund managers. This could be from gathering information through their network at lunch to the ability to blend quantitative skills with the skill to gather valuable information from meetings with top management.

A penultimate topic worthy of further research would be the process as to how fund managers effectively build trust with their investors. It would be interesting to have fund managers’ point of view as to how they assess whether the investor understands their investment strategy and if they can evaluate their investment philosophy pros and cons.

During the research, the interview guide allowed for a last question where fund managers could bring forth a topic, they felt was important whilst staying under the radar of academic research. Several fund managers mentioned that the next trouble within the fund management industry would be liquidity related. They highlighted that they were aware of occurrences where the money from investors was allocated into assets with a lower liquidity than the one associated with the investment strategy advertised. This could translate into a major issue if several investors want to exit at the same time as this would be hardly possible due to liquidity constraints.

“I would say that area that is a bit orthogonal to others is liquidity. Investors’ appetite for liquidity, how much liquidity risk they are willing to take, I think that’s an interesting topic area.” – UK credit hedge fund manager

“My fund, our funds are more liquid than the benchmark and their large cap; we’ve got spare liquidity, we’re ready but we know lots of our peers are in pretty illiquid stuff and if you get a market drawdown, if people are running for exits and trying to sell, there are

going to be more accidents out there without a doubt, and I think it won't be the first gating of a fund, it would be my guess” – UK equity fund manager

“That said there are elements of investment, that I think lots of people don't understand very well, they don't understand a lot of the risks. One of the most recent examples, high profile example, is year-end liquidity; we've seen what's happened with Neil Woodford, a high-profile UK fund manager, and when you start getting stuck in illiquid stocks when you have a large fund and you've got redemptions, it is a massive, massive issue. And that is, without a doubt, a risk that people haven't taken seriously enough” – UK equity fund manager

“For that reason, so that, because you don't want to be in a position where you have to sell everything down and you can't. So, liquidity is very important for us, so we report on liquidity, we're very transparent” – UK macro hedge fund manager

REFERENCES

- Adebambo, B.N. and Yan, X.S. (2016) 'Momentum, Reversals, and Fund Manager Overconfidence', *Financial Management*, 45(3), pp. 609–639.
- Alvesson, M. and Ashcraft, K.L. (2012) 'Interviews', in *Qualitative Organizational Research: Core Methods and Current Challenges*, pp. 239–257.
- Anadu, K., Kruttli, M.S., McCabe, P.E., Osambela, E. (2020) 'The Shift From Active to Passive Investing: Potential Risks to Financial Stability?'. Available at SSRN 3244467
- Andrikogiannopoulou, A. and Papakonstantinou, F. (2016) 'Estimating Mutual Fund Skill: A New Approach', *Swiss Finance Institute Research Paper*, (14-42).
- Andrikogiannopoulou, A. and Papakonstantinou, F. (2019) 'Reassessing False Discoveries in Mutual Fund Performance: Skill, Luck, or Lack of Power?', *Journal of Finance*, 74(5), pp. 2667–2688.
- Arnsward, T. (2001) *Investment Behaviour of German Equity Fund Managers - an Exploratory Analysis of Survey Data*.
- Bams, D., Otten, R. and Ramezanifar, E. (2017, March) 'Investment Style Misclassification and Mutual Fund Performance', In *28th Australasian Finance and Banking Conference*.
- Barber, B.M. and Odean, T. (2001) 'Boys will be Boys: Gender, Overconfidence, and Common Stock Investment', *The Quarterly Journal of Economics*, 116(1), pp. 261–292.
- Barker, R., Hendry, J., Roberts, J. and Sanderson, P. (2012) 'Can company-fund manager meetings convey informational benefits? Exploring the rationalisation of equity investment decision making by UK fund managers', *Accounting, Organizations and Society*, 37(4), pp. 207–222.
- Barker, R.G. (1998) 'The market for information - Evidence from finance directors, analysts and fund managers', *Accounting and Business Research*, 29(1), pp. 3–20.
- Barras, L., Scaillet, O. and Wermers, R. (2010) 'False discoveries in mutual fund performance: Measuring luck in estimated alphas', *Journal of Finance*, 65(1), pp. 179–

Bergstresser, D., Chalmers, J.M.R. and Tufano, P. (2009) 'Assessing the costs and benefits of brokers in the mutual fund industry', *Review of Financial Studies*, 22(10), 4129-4156.

Berk, J.B. and van Binsbergen, J.H. (2015) 'Measuring skill in the mutual fund industry', *Journal of Financial Economics*, 118(1), 1–20

Berk, J.B. and Green, R.C. (2004) 'Mutual Fund Flows and Performance in Rational Markets', *Journal of Political Economy*, 112(6), pp. 1269–1295.

Bhootra, A., Drezner, Z., Schwarz, C. and Stohs, M.H. (2015) 'Mutual fund performance: Luck or skill?', *International Journal of Business*, 20(1), pp. 52–63.

Blaikie, N. (2007) *Approaches to social enquiry: Advancing knowledge*. Polity

Böhren, Ø. and Priestley, R. (2009) 'Investor Short-Termism and Firm Value', *Research paper, Norwegian Business School BI, Norway*.

Bollen, N.P. and Busse, J.A. (2005) 'Short-term persistence in mutual fund performance', *Review of Financial Studies*, 18(2), pp. 569–597.

Borochin, P. and Yang, J. (2017) 'The effects of institutional investor objectives on firm valuation and governance', *Journal of Financial Economics*, 126(1), pp. 171–199.

Brown, D.P. and Wu, Y. (2016) 'Mutual Fund Flows and Cross-Fund Learning within Families', *Journal of Finance*, 71(1), pp. 383–424.

Brown, K.C., Harlow, W. V. and Starks, L.T. (1996) 'Of tournaments and temptations: An analysis of managerial incentives in the mutual fund industry', *Journal of Finance*, 51(1), pp. 85–110.

Brown, S. and Pomerantz, S. (2018) 'Some Clarity on Mutual Fund Fees'. *University of Pennsylvania Journal of Business Law*, 20(4), 767.

Bryman, A. and Bell, E. (2015) *Business Research Methods*. Oxford university press.

Capon, N., Fitzsimons, G.J. and Prince, R.A. (1996) 'An individual level analysis of the mutual fund investment decision', *Journal of Financial Services Research*, 10(1), 59-82.

- Carhart, M.M. (1997) 'On Persistence in Mutual Fund Performance', *The Journal of Finance*, 52(1), pp. 57–82
- Carlin, B.I. (2009) 'Strategic price complexity in retail financial markets', *Journal of Financial Economics*, 91(3), pp. 278–287.
- Chang, T.Y., Solomon, D.H. and Westerfield, M.M. (2016) 'Looking for Someone to Blame: Delegation, Cognitive Dissonance, and the Disposition Effect', *Journal of Finance*, 71(1), pp. 267–302.
- Chen, L.-W., Adams, A.T. and Taffler, R.J. (2009) 'What Skills Do Star Fund Managers Possess?', *Available at SSRN 1362086*.
- Chevalier, J. and Ellison, G. (1997) 'Risk Taking by Mutual Funds as a Response to Incentives', *Journal of Political Economy*, 105(6), pp. 1167–1200.
- Choi, D., Kahraman, B. and Mukherjee, A. (2016) 'Learning about Mutual Fund Managers', *Journal of Finance*, 71(6), pp. 2809–2860.
- Choi, D. and Lou, D. (2010) 'A Test of the Self-Serving Attribution Bias : Evidence from Mutual Funds', *Fourth Singapore International Conference on Finance*, (December), pp. 1–48.
- Choi, N. and Skiba, H. (2015) 'Institutional herding in international markets', *Journal of Banking and Finance*, 55, pp. 246–259.
- Cici, G. (2012) 'The Prevalence of the Disposition Effect in Mutual Funds' Trades', *Journal of Financial and Quantitative Analysis*, 47(04), pp. 795–820.
- Clare, A. (2020) 'Is there a Boutique Asset Management Evidence from the European Fund Management Industry', *Available at SSRN*
- Cohen, R.B., Coval, J.D. and Pástor, L. (2005) 'Judging fund managers by the company they keep', *Journal of Finance*, 60(3), 1057–1096.
- Coleman, L. (2014) 'Why finance theory fails to survive contact with the real world: A fund manager perspective', *Critical Perspectives on Accounting*, 25(3), pp. 226–236.
- Coleman, L. (2015) 'Facing up to fund managers: An exploratory field study of how

institutional investors make decisions’, *Qualitative Research in Financial Markets*, 7(2), pp. 111–135.

Cornell, B. (2009) ‘Luck, skill, and investment performance’, *Journal of Portfolio Management*, 35(2), pp. 131–134.

Cremers, K.J.M. and Petajisto, A. (2009) ‘How Active Is Your Fund Manager A New Measure That Predicts Performance’, *Review of Financial Studies*, 22(9), pp. 3329–3365.

Cremers, M. and Curtis, Q. (2015) ‘Do Mutual Fund Investors Get What They Pay For? The Legal Consequence of Closet Index Funds’, *Lastet ned fra <https://papers.ssrn.com/sol3/papers.cfm>*.

Cremers, M., Ferreira, M.A., Matos, P. and Starks, L. (2016) ‘Indexing and active fund management: International evidence’, *Journal of Financial Economics*, 120(3), pp. 539–560.

Cuthbertson, K., Nitzsche, D. and O’Sullivan, N. (2008) ‘UK mutual fund performance: Skill or luck?’, *Journal of Empirical Finance*, 15(4), 613–634.

DiBartolomeo, D. and Witkowski, E. (1997) ‘Mutual fund misclassification: Evidence based on style analysis’, *Financial Analysts Journal*, 53(5), pp. 32–43.

Dorn, D. and Weber, M. (2015) ‘Losing Trust in Money Doctors’, *Available at SSRN 2705435*.

Doshi, H., Elkamhi, R. and Simutin, M. (2014) ‘Managerial Activeness and Mutual Fund Performance’, *The Review of Asset Pricing Studies*, 5(2), 156–184.

Drachter, K., Kempf, A. and Wagner, M. (2007) ‘Decision processes in German mutual fund companies: Evidence from a telephone survey’, *International Journal of Managerial Finance*, 3(1), 49–69.

Duberley, J., Johnson, P. and Cassell, C. (2012) ‘Philosophies underpinning qualitative research’, in *Qualitative organizational research: Core methods and current challenges*, pp. 15–34.

- Dyakov, T. and Verbeek, M. (2018) Can Mutual Fund Investors Distinguish Good from Bad Managers?, *International Review of Finance*, 19(3), 505-540
- Ekholm, A. and Pasternack, D. (2008) 'Overconfidence and investor size', *European Financial Management*, 14(1), pp. 82–98.
- Eshraghi, A. and Taffler, R. (2012) 'Fund manager overconfidence and investment performance: evidence from mutual funds', *Available at SSRN 2146864*
- Eshraghi, A. and Taffler, R. (2015) 'Heroes and victims: fund manager sensemaking, self-legitimation and storytelling', *Accounting and Business Research*, 45(6–7), pp. 691–714.
- Evans, R.B. (2010) 'Mutual fund incubation', *Journal of Finance*, 65(4), pp. 1581–1611.
- Fama, E.F. and French, K.R. (2009) 'Luck versus Skill in the Cross Section of Mutual Fund α Estimates', *Journal of Finance*, 65(5), pp. 1915–1947.
- Ferson, W.E. and Chen, Y. (2018) 'How Many Good and Bad Funds Are There, Really?', In *Handbook of Financial Econometrics, Mathematics, Statistics, and Machine Learning* (pp. 3753-3827).
- Festinger, L. (1957) '*A theory of cognitive dissonance*', (Vol. 2). Stanford university press.
- Fischhoff, B., Slovic, P. and Lichtenstein, S. (1977) 'Knowing with certainty: The appropriateness of extreme confidence.', *Journal of Experimental Psychology: Human Perception and Performance*, 3(4), pp. 552–564.
- Frankfurter, G.M. (1994) 'The nature of man: II', *International Review of Financial Analysis*, 3(3), 225-234.
- Frankfurter, G.M. and McGoun, E.G. (2002) 'Resistance is futile: The assimilation of behavioral finance', *Journal of Economic Behavior and Organization*, 48(4), pp. 375–389.
- Franzoni, F. and Schmalz, M.C. (2017) 'Fund flows and market states', *Review of Financial Studies*, 30(8), pp. 2621–2673.
- French, K.R. and Poterba, J.M. (1991) Investor diversification and international equity

markets *The American Economic Review*, 81(2), 222-226.

Galletta, A. (2013) *Mastering the semi-structured interview and beyond: From research design to analysis and publication* (Vol. 18). NYU press.

Gennaioli, N., Shleifer, A. and Vishny, R. (2015) 'Money doctors', *Journal of Finance*, 70(1), pp. 91–114.

Gerakos, J.J., Linnainmaa, J.T. and Morse, A. (2016) 'Asset Managers: Institutional Performance and Smart Betas' (No. w22982). National Bureau of Economic Research.

Germann, M., Loos, B. and Weber, M. (2018) 'Trust and Delegated Investing: A Money Doctors Experiment', *Available at SSRN 3187189*.

Gervais, S., Lynch, A.W. and Musto, D.K. (2005) Fund families as delegated monitors of money managers. *The Review of Financial Studies*, 18(4), 1139-1169

Gigerenzer, G. and Gaissmaier, W. (2011) 'Heuristic decision making', *Annual Review of Psychology*, 62, pp. 451–482.

Gil-Bazo, J. and Ruiz-Verdú, P. (2009) 'The relation between price and performance in the mutual fund industry', *Journal of Finance*, 64(5), pp. 2153–2183.

Globe, V. (2011) 'Why mutual funds “underperform”'. *Journal of Financial Economics*, 99(3), 546-559

Goetzmann, W.N. and Peles, N. (1997) 'Cognitive dissonance and mutual fund investors', *Journal of Financial Research*, 20(2), pp. 145–158.

Goriaev, A., Nijman, T.E. and Werker, B.J. (2008) 'Performance information dissemination in the mutual fund industry'. *Journal of Financial Markets*, 11(2), 144-159

Grinblatt, B.M., Titman, S. and Wermers, R. (1995) 'Momentum Investment Strategies, Portfolio Performance, and Herding: A Study of Mutual Fund Behavior'. *The American Economic Review*, 85(5), pp. 1088–1105.

Grinblatt, M. and Keloharju, M. (2001) 'How distance, language, and culture influence stockholdings and trades', *Journal of Finance*, 56(3), pp. 1053–1073.

Grønborg, N.S., Lunde, A., Timmermann, A. and Wermers, R. (2020) 'Picking funds

with confidence', *Journal of Financial Economics*, 139(1), 1-28.

Gruber, M.J. (1996) 'Another Puzzle: The Growth in Actively Managed Mutual Funds', *The Journal of Finance*, 51(3), pp. 783–810.

Del Guercio, D., Genç, E. and Tran, H. (2018) 'Playing favorites: Conflicts of interest in mutual fund management', *Journal of Financial Economics*, 128(3), pp. 535–557.

Guercio, D. Del and Reuter, J. (2014) 'Mutual fund performance and the incentive to generate alpha', *Journal of Finance*, 69(4), pp. 1673–1704.

Harvey, C.R. and Liu, Y. (2018) 'Detecting repeatable performance', *Review of Financial Studies*, 31(7), pp. 2499–2552.

Henningsson, J. (2009) 'Fund managers as cultured observers', *Qualitative Research in Financial Markets*, 1(1), pp. 27–45.

Heuer, J., Merkle, C. and Weber, M. (2017). 'Fooled by randomness: Investor perception of fund manager skill', *Review of Finance*, 21(2), 605-635.

Hilbert, M. (2012) 'Toward a synthesis of cognitive biases: How noisy information processing can bias human decision making', *Psychological Bulletin*, 138(2), pp. 211–237.

Hoberg, G., Kumar, N. and Prabhala, N. (2018). 'Mutual fund competition, managerial skill, and alpha persistence', *Review of Financial Studies*, 31(5), 1896-1929.

Holland, J. (2016) 'A behavioural theory of the fund management firm', *European Journal of Finance*, 22(11), pp. 1004–1039.

Holland, J. (2006) 'Fund management, intellectual capital, intangibles and private disclosure', *Managerial Finance*, 32(4), pp. 277–316.

Holland, J.B. and Doran, P. (1998) 'Financial institutions, private acquisition of corporate information, and fund management', *The European Journal of Finance*, 4(2), 129-155.

Huang, J., Sialm, C. and Zhang, H. (2011) 'Risk shifting and mutual fund performance', *Review of Financial Studies*, 24(8), 2575-2616.

Hunter, D., Kandel, E., Kandel, S. and Wermers, R. (2014) 'Mutual fund performance

evaluation with active peer benchmarks', *Journal of Financial Economics*, 112(1), pp. 1–29.

Ibert, M., Kaniel, R., Van Nieuwerburgh, S. and Vestman, R. (2018) 'Are mutual fund managers paid for investment skill?', *Review of Financial Studies*, 31(2), pp. 715–772.

Javadekar, A. (2017) '*Inattentive Investors and Mutual Fund-Flows*'.

Chen, H. L., Jegadeesh, N., & Wermers, R. (2000) 'The Value of Active Mutual Fund Management: An Examination of the Stockholdings and Trades of Fund Managers', *Journal of Financial and quantitative Analysis*, 343-368.

Jensen, M.C. (1968) 'The Performance of Mutual Funds in the Period 1945-1964', *The Journal of Finance*, 23(2), p. 389–416.

Jin, L. (2005) How does investor short-termism affect mutual fund manager short-termism. In *EFA 2005 Moscow Meetings Paper*.

Jin, L., Eshraghi, A., Taffler, R. and Goyal, A. (2015) '*Fund Manager Active Share , Overconfidence and Investment Performance*'. Working Paper, Warwick University, University of Edinburgh, and University of Lausanne.

Jordan, B.D. and Riley, T.B. (2015) 'Volatility and mutual fund manager skill', *Journal of Financial Economics*, 118(2), 289-298.

Kacperczyk, M., Nieuwerburgh, S. Van and Veldkamp, L. (2014) 'Time-varying fund manager skill', *Journal of Finance*, 69(4), pp. 1455–1484.

Kacperczyk, M., Sialm, C. and Zheng, L. (2008) 'Unobserved actions of mutual funds', *Review of Financial Studies*, 21(6), pp. 2379–2416.

Kahneman, D. (2003) 'Maps of bounded rationality: Psychology for behavioral economics'. *The American economic review*, 93(5), 1449-1475.

Kahneman, D. and Tversky, A. (1979). 'Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), pp. 263–292.

Keasey, K. and Hudson, R. (2007) 'Finance theory: A house without windows', *Critical Perspectives on Accounting*, 18(8), pp. 932–951.

Khorana, A. and Servaes, H. (2000) 'Conflicts of Interest and Competition in the Mutual Fund Industry', *Available at SSRN 240596*.

Kosowski, R. (2006) 'Do Mutual Funds Perform When it Matters Most to Investors? US Mutual Fund Performance and Risk in Recessions and Expansions', *The Quarterly Journal of Finance*, 1(03), 607-664.

Kosowski, R., Timmermann, A., Wermers, R. and White, H. (2006) 'Can mutual fund "stars" really pick stocks? New evidence from a bootstrap analysis', *Journal of Finance*, 61(6), pp. 2551–2595.

Kostovetsky, L. (2016). 'Whom Do You Trust?: Investor-Advisor Relationships and Mutual Fund Flows', *Review of Financial Studies*, 29(4), pp. 898–936.

Lan, C., Moneta, F. and Wermers, R. (2014) 'Mutual Fund Investment Horizon and Performance', Centre for Financial Research.

Lindlof, T.R. and Taylor, B.C. (2002) *Qualitative communication research methods*. Sage publications.

Linnainmaa, J., Melzer, B.T., Previtero, A. and Foerster, S. (2017) 'Financial Advisors and Risk-Taking', *Unpublished manuscript*.

Malkiel, B.G. (1995) 'Returns from Investing in Equity Mutual Funds 1971 to 1991', *The Journal of Finance*, 50(2), pp. 549–572.

Massa, M. (2003) 'How do family strategies affect fund performance? When performance-maximization is not the only game in town', *Journal of Financial Economics*, 67(2), pp. 249–304.

Menkhoff, L., Schmidt, U. and Brozynski, T. (2006) 'The impact of experience on risk taking, overconfidence, and herding of fund managers: Complementary survey evidence', *European Economic Review*, 50(7), pp. 1753–1766.

Mishra, K.C. and Metilda, M.J. (2015) 'A study on the impact of investment experience, gender, and level of education on overconfidence and self-attribution bias', *IIMB Management Review*, 27(4), pp. 228–239.

Nanda, V., Wang, Z.J. and Zheng, L. (2004) 'Family values and the star phenomenon:

Strategies of mutual fund families’, *Review of Financial Studies*

Pareto, V. (1896). *Cours d'économie politique: professé à l'Université de Lausanne* (Vol. 1). F. Rouge.

Pástor, L., Stambaugh, R.F. and Taylor, L.A. (2015) ‘Scale and skill in active management’, *Journal of Financial Economics*, 116(1), pp. 23–45.

Puckett, A. and Yan, X.S. (2011) ‘The Interim Trading Skills of Institutional Investors’, *Journal of Finance*, 66(2), pp. 601–633.

Puetz, A. and Ruenzi, S. (2011) ‘Overconfidence among professional investors: Evidence from mutual fund managers’, *Journal of Business Finance and Accounting*, 38(5–6), pp. 684–712.

Rubinstein, M. (2001) ‘Rational Markets: Yes or No? The Affirmative Case’, *Financial Analysts Journal*, 57(3), pp. 15–29.

Saldaña, J. (2014) *The Coding Manual for Qualitative Researchers*. sage

Sensoy, B.A. (2009) ‘Performance evaluation and self-designated benchmark indexes in the mutual fund industry’, *Journal of Financial Economics*, 92(1), pp. 25–39.

Sharma, V., Hur, J. and Lee, H. (2008) ‘Glamour versus value: Trading behavior of institutions and individual investors’, *Journal of Financial Research*, 31(1), pp. 65–84.

Simon, H.A. (1955) ‘A behavioral model of rational choice’, *Quarterly Journal of Economics*, 69(1), 99–118.

Sirri, E.R. and Tufano, P. (1998) ‘Costly search and mutual fund flows’, *Journal of Finance*, 53(5), pp. 1589–1622.

Stringer, E. (2014). Action research fourth edition. *Sage Publications*.

Taffler, R.J., Spence, C. and Eshraghi, A. (2017) Emotional economic man: Calculation and anxiety in fund management, *Accounting, Organizations and Society*, 61, pp. 53–67.

Tonks, I. (2005) ‘Performance Persistence of Pension Fund Managers’, *The Journal of Business*, 78(5), pp. 1917–1942.

Tuckett, D. and Nikolic, M. (2016) 'The Role of Conviction and Narrative in Decision Making under Radical Uncertainty', *Theory & Psychology*, 27(4), 501-523.

Van de Ven, A.H. (2007) 'Engaged scholarship: A guide for organizational and social research', *Oxford University Press*.

Wermers, R. (2000) 'Mutual fund performance: An empirical decomposition into stock-picking talent, style, transactions costs, and expenses', *Journal of Finance*, 55(4), pp. 1655–1695.

Zhu, M. (2018) 'Informative fund size, managerial skill, and investor rationality', *Journal of Financial Economics*, 130(1), pp. 114–134.

APPENDICES

Appendix 1: Interview guide

1- Could you please describe your investment philosophy?

- a- Are you long or short?
- b- How do you generate investment ideas?
- c- How do you identify under/over-valued assets?
- d- Is your strategy fundamental, momentum or contrarian? If so, why?
- e- What is your most important source of information? (Is it technical or fundamental? Or conference call?)

2- How has your fund performed? (e.g., over the last three years)?

- a- What were the main drivers of that performance?
- b- Is your performance measured against a benchmark? Who chose this benchmark? Do you think it is the right benchmark?
- c- Can you tell me about your best investment in the last three years?
- d- Can you tell me about your worst investment in the last three years?
- e- What is your objective? (e.g., greater market share, long term performance or stable returns)

3- To what extent does the structure of the fund management industry influence your performance?

- a- Is your remuneration structure appropriately rewarding you for achieving the objective?
- b- What is the periodicity of appraisal? Is it appropriate, given your investment objective?
- c- Is the net alpha a good measure of your skills? (Versus value created as per Berk et al. (2015). If not, what would you suggest as a good indicator? (Performance persistence or remuneration)?

- d- Can you scale up your performance as the size of a fund's AUM increases?
- e- Is there any conflict of interest between market share and fund performance?

4- To what extent do the incentive structure and policies of your organisation influence your performance?

- a- Does the way your performance is appraised influence your fund risk profile?
- b- Do you think it is achievable to consistently beat your benchmark?
- c- What is your main risk(s) in so doing? How would you define risk?
- d- What are the boundaries your organisation set to your freedom to go "off track"? (Deviate from benchmark or stock-picking freedom)
- e- Are your organisation's objectives aligned with yours?

5- To what extent is your performance driven by your investors? (Customer Structure)

- a- Are your customers solely interested in your performance? Are they aware of your fees?
- b- Are your customers equally sensitive to your losses/gains? What is the impact on outflow/inflow?
- c- Do your investors understand the risk/return trade-off?
- d- How do you explain your performance to your investors?

6- Overall, do you think you have access to enough information to make informed investment decisions?

- a- When taking an investment decision, do you have all the information and time you need beforehand? If not, what are you most often short of (or overloaded with)?
- b- Do you think you react equally to losses/gains?
- c- After a substantial gain/loss in your NAV, are you most inclined to increase/decrease your position, realise your gain/loss or keep your portfolio as is?

Appendix 2: Letter to request interview with fund managers

Dear Sir or Madam,

As an alumnus of LBS (EMBA 2013), I am reaching out to you as a member of the LBS network and community.

I am in my fourth year of a DBA (Doctorate in Business Administration) at Cranfield School of Management. My thesis focuses on Behavioural Finance and more specifically on how fund managers explain and convey their performance or investment philosophy.

In the pursuit of this research, I wish to interview professionals such as yourself in the investment industry to learn from your experience.

The interview questions will be sent to you prior to the interview for your criticism.

All information from the interviews will be treated with the utmost confidentiality, not to mention that any answer will be anonymous.

Interviews will last for no more than an hour. In order to ensure academic rigour, I would like your permission to record the interview; I will then send a transcript to you for your approval.

The benefits for the interviewees will be threefold:

- The opportunity to discuss the reality in relation to what other practitioners and academics think they know about Behavioural Finance.
- Contribution to defining the most crucial issues in the Asset Management Industry, such as closet indexing, identification of performance (skill or luck), and assessment of customer preferences in active management.
- The opportunity to take part in a unique study and to receive an early summary of its conclusions.

Should you be happy for me to conduct an interview with you, I would telephone you within the next few days to give you any additional information you may wish to know about the interview process.

I look forward to your reply

Yours faithfully,

Benjamin Monin