

Waterford Institute of Technology



What is the prevalence of overconfidence and herding in the decision making process of fund managers?

Presented to

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13th August 2010

This dissertation is submitted in partial fulfilment of the requirements for the degree of
Masters in Business Studies

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Abstract

Behavioural Finance is an ever evolving field and has opened an alternative to the traditional theory of finance in that of the Efficient Market Hypothesis (EMH). This study aims to address the research gap by conducting an analysis into the behavioural tendencies that affect the decision making process for fund managers. It will examine two particular behavioural factors; herding and overconfidence. These factors will be examined in relation to the gender, age/ experience and the size of the fund managed by the fund manager.

A gap was identified in the literature to carry out research from a qualitative point of view which was the motivation for this study. This qualitative research was constructed using semi-structured interviews to ensure a greater understanding of the mind-set of the investor was gained.

The findings of this study largely support the behavioural finance proposition in that the rationality of the market participants is somewhat of a discerning matter. This study reinforces the findings of previous academics in most cases however there are a few notable findings that do not confer with those of previous research. This is in relation to the fact that herding behaviour is expected to increase with experience (Prendergast and Stole 1996) however the findings of this study prove that herding behaviour decreases with experience. It was also found that overconfidence is expected to be highest in the younger participants however, the opposite was found in this study in that overconfidence is exuberantly higher in the more experienced fund managers.

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Introduction

Chapter One

Introduction

1.0 Chapter Overview

The purpose of this chapter is to provide the reader with an overview of this dissertation. This chapter will firstly introduce the focus of this study and then outline the theory of the efficient market hypothesis (EMH) followed by behavioural finance. These areas are crucial to the understanding of this study. The author will then provide a basis to the understanding of the role behavioural finance plays in the decision making process for a fund manager with particular reference to the overconfidence and herding phenomenon. Following on, the rationale for the study will be presented. There will then be a brief discussion on the contribution that this study makes. The final section will then preview the structure of the dissertation.

1.1 Fund Management Industry

Thus far, global assets under management have amounted to \$74.3 trillion with the Irish fund industry accounting for €1.6 trillion euro in 10,500 funds (IFIA 2010). Fund managers provide services to a number of individuals and groups ranging from the individual investor to governments to banks and many more. They provide a vital link between individual investors on one hand and financial markets and companies on the other. With the growth of securities markets, asset management has become of critical importance in the functioning of modern financial markets especially given today's volatile and unpredictable economic climate. Without the inherent skills and knowledge of fund managers there may be no recovery on the horizon for the hard stricken investors and financial institutions of this recessionary period.

Active fund management can provide excellent value. According to Fama and French (2009), the number of fund managers outperforming the market is so small, it is more than likely due to luck. Investors use a number of techniques that will separate skilled managers from lucky ones. Often this can involve analysing a funds published portfolio holdings. However, there is more at play in making an investment decision than basing it on a quantitative finding, allowing a considerable gap in the research for qualitative studies. Academic James Montier stated, 'Frankly the three blind mice have more credibility than any macro-forecaster at seeing what is coming' (Montier cited by Davis 2010). The unpredictability along with the

importance of this industry leads the author to further discussion on the area of behavioural finance.

1.2 The Efficient Market Hypothesis

An efficient market is one where current market prices fully reflect available information. There are three types of EMH, weak EMH, semi-strong EMH and strong EMH.

Therefore, with all new information being quickly and accurately reflected in asset prices, future prices of the assets are unpredictable which forms the groundwork for EMH. Many academics have claimed that EMH is an accurate measurement of the financial markets (Fama 1970 and Malkiel 2003). Academics such as Brown and Reilly (2003) have deviated away from this theory and opened a more modern perspective through behavioural finance providing a challenge to the concept of EMH. Therefore, if market inefficiencies do exist, suggests that fund managers may make irrational investment decisions or judgements that do not comply with the assumption of rationality.

1.3 Behavioural Finance

Behavioural finance challenges the traditional theory of finance in capital markets. Shleifer (2000) defines behavioural finance as the study of human fallibility in competitive markets. Olsen (1998) points out that behavioural finance recognises that the traditional theory of finance of rational behaviour and profit maximisation can be true within certain areas. However, the behaviourists view asserts that this model is incomplete given the fact it does not account for individual behaviour. Therefore, the behaviourists view determines that the financial market is burdened with market anomalies such as the weekend effect, the January effect, the December effect, the short term price drift and the momentum effect among industry portfolios. Studies carried out within this area of behavioural finance have been focused on identifying these anomalies which can be explained by various psychological tendencies of individuals such as overconfidence and the tendency to herd. Along with these behavioural biases, there has been studies on the impact the age, experience and gender of the fund manager could have on the decision making process (Ricciardi 2008).

1.4 Overconfidence and Herding in fund managers

There are two areas which are recurring themes in relation to studies regarding fund managers in their decision making process and therefore merit further analysis in this particular study.

The first aspect within this area is overconfidence. According to Daniel and Titman (cited in Ricciardi 2008) overconfidence is one the most discussed biases in behavioural finance. Studies have shown that a bias such as overconfidence can cause fund managers to interpret information incorrectly, which in turn may lead to inaccurate decisions and judgements being made (Tversky and Kahneman 1974). In relation to financial markets, overconfidence can be largely attributed to the overtrading phenomenon as it is seen that overconfident fund managers tend to trade or invest in excess which coincides with greater risk taking (Venter and Michayluk 2008).

Herding behaviour is another aspect of the behavioural finance field that merits further investigation. According to Liao et al (2010), behaviour among fund managers often influences one another. Therefore, fund managers may deviate away from their own rational analysis and adopt behaviour that is similar to the group. Herding behaviour occurs when fund managers base their decisions on an already observed market activity which led to a major shift in a particular asset causing significant volatility (Menkhoff et al 2006).

The behavioural tendencies of fund managers is interesting and given the recent focus on this area, the author feels it should be studied and analysed more closely. Therefore herding and overconfidence are the focus of this study.

1.5 Rationale for this study

Behavioural finance has opened up an alternative to traditional finance in that it provides challenges regarding the efficiency of the market. Academics in support of the behavioural finance theory find it difficult to believe that people in general and financial market participants in particular are fully rational. It is the evolution of this field of behavioural finance and a rather daunting seminar discussion with one of the leading theorists within this area, Professor William Forbes that has provided the author with the rationale for this study. For the purposes of this study, the author has chosen to focus on the two most recurring themes; overconfidence and herding.

1.6 Contribution of the study

The author reasons that this study contributes to academic literature. From research carried out, theoretical underpinnings of behavioural finance have mainly been carried out in a quantitative manner with reference to stock price movements. The author has deviated away from this method and carried out a qualitative analysis where semi structured interviews with eight different fund managers were carried out with particular focus on the behavioural tendencies of fund managers. The aim of this study is to provide the author and the reader with a greater understanding and to be able to come to a definitive conclusion regarding overconfidence and herding in the decision making process for fund managers.

1.7 Dissertation Structure

This dissertation consists of six chapters. Chapter one provides a general introduction to the study.

Chapter two presents a review on the existing literature pertinent to this study. This chapter provides an extensive review of the literature in the area of behavioural finance with particular reference to overconfidence and herding in the decision making process for fund managers,

Chapter three gives a detailed account of the methodology and the primary research undertaken for this study.

Chapter four provides the findings of the primary research carried out.

Chapter five presents a discussion of the findings with regard to similar studies carried out in the area.

Chapter six concludes the overall study with recommendations for future research.

Literature Review

Chapter Two

Literature Review

2.0 Chapter overview

This chapter provides a review on the existing literature pertinent to this study. A discussion of the traditional finance theory is presented along with the emergence of a significant and of more recently discussed topic within the area of finance – behavioural finance. The purpose of this section is to provide the reader with an examination of literature on the topic of behavioural finance and outline some of the key issues relating to the decision making process for fund managers.

2.1 Introduction

In recent years a large volume of evidence has been established providing conflicting theories to that of the efficient market hypothesis (EMH) (Olsen 1997). Many studies have found evidence that challenges EMH in that not all decisions are based on rational expectations (Lowenstein et al 2001). This is with particular reference to the rational investing expectations of fund managers. Therefore, evidence that market inefficiencies do exist and manager's act irrationally has provided us with a new paradigm of finance titled behavioural finance.

2.2 Theoretical Framework

2.2.1 The Efficient Market Hypothesis

The efficient market hypothesis (EMH) has formed the groundwork for efficient markets throughout the last three to five decades (Shleifer 2000). The efficiency of capital markets was largely based on the idea of a 'random walk hypothesis' which refers to the way in which changes in stock prices occurred randomly. The generalised view was that when information arises, the news spreads very quickly and is incorporated into the prices of securities immediately. Therefore, academics found that neither technical analysis, which studies the movement of past stock prices nor fundamental analysis which examines the analysis of financial information such as a company's earnings would enable investors to earn greater than expected returns than those chosen by holding a randomly held portfolio (Malkiel 2003).

Fama (1969) presented the theory of the efficient market hypothesis (EMH) to the American Finance Association. Within Fama's published papers, it stated that 'in an efficient market, prices fully reflect all available information' (Fama 1970). Therefore, it was widely believed that securities markets were extremely efficient in reflecting information about individual stocks and the stock market as a whole (Malkiel 2003). Over the past thirty years or more, academics have provided us with important research into whether capital markets are efficient. The early academic literature was widely adopted in support of market efficiency (Haugen 2001). It seemed that most academics provided empirical findings in support of this theory (Shleifer 2000). In 1978, Michael Jensen, a Chicago graduate and a major academic in support of EMH stated 'there is no other proposition in economics which has more solid empirical evidence supporting it than the efficient market hypothesis' (Jensen, cited in Palan 2004).

However, despite the fact that these respected academics provided evidence in support of the efficient market hypothesis, many cracks have appeared within the edifice of this theory in recent times (Palan 2004). It appears the issue is not simply black or white. It seems the market is neither strictly efficient nor strictly inefficient. These cracks within the traditional financial theory have opened up the door to behavioural finance and have allowed academics to account for the what, why and how of finance and investing from a human perspective (Ricciardi 2005).

2.2.2 The Behaviourist's view

The efficient market hypothesis was challenged on both theoretical and empirical grounds (Shleifer 2000). Shleifer (2000) found it difficult to ascertain that people in general and investors are fully rational. This approach to market efficiency or there lack of, has found a lot of support in this area given it stands to solve the problem of market indeterminacy issues (Brown and Reilly 2003). Empirical research has found that investors tend to react to irrelevant information when making a demand on a security. 'They trade on noise rather than information (Fischer Black, cited in Shleifer 2000). According to this study, investors follow the advice and patterns of financial gurus, fail to diversify their portfolio, tend to sell a winning stock and buy a losing stock. Basically, investors pursue their own strategies which deviate away from the efficient market hypothesis enabling academics to lean toward the behavioural finance view. This view on academic finance holds that there are many continuing biases motivated by psychological factors that influence the decision making

process of investors and those of fund managers which are the particular focus of this study (Olsen 1997).

Forbes (2009) believes that behavioural economics and finance is one of the most prominent and growing areas within the field of economic research. According to Shefrin (2002), 'behavioural finance is the study of how psychology affects finance. Psychology is the basis for human desires, goals and motivations and it is also the basis for a wide variety of human errors that stem from perceptual illusions, overconfidence, over-reliance on rules of thumb and emotions'. Unfortunately, the behavioural finance literature does not seem to have reached a level of maturity which would allow it to provide a deterministic, unified theory of human behaviour tendencies in capital markets. However, Odean (1998) states that the emphasis in the behavioural finance field thus far has allowed and enabled academics to identify behavioural decision making attributes that are likely to affect the way capital market participants make decisions. Research carried out by Stracca (2002) determines one of the key objectives of behavioural finance is to gauge the effect these psychological traits have on financial markets. Therefore, the behavioural finance literature attempts to provide numerous behavioural factors that can provide reason for deviations from the efficient market hypothesis.

Studies have shown that behavioural finance has two building blocks; cognitive psychology and the limits to arbitrage. Cognitive refers to the way in which people think and limits to arbitrage refers to the ability to be able to capitalise on an opportunity when it arises and when it does not arise. The focus of the behavioural finance field has been to identify portfolio anomalies that can be explained by various psychological traits in individuals (Brown and Reilly 2003). Stracca (2002) defines market anomalies as 'the systematic traits of behaviour of economic agents', which cannot be explained by the traditional view of the finance paradigm.

Ricciardi (2004) has identified a large quantity of cognitive behavioural biases that plague the mindsets of economic and financial agents. Kahneman and Tversky (1979) further reinforce this identification of behavioural biases and refer to them as 'decision heuristics'. Some of the most prominent of these include heuristics, overconfidence, loss aversion, representativeness and herding behaviour (Ricciardi 2004).

Kahneman and Riepe (1998) along with Ricciardi (2004) argue that people deviate from the standard decision making model in a number of fundamental areas. The first one being that of

prospect theory in that individuals do not assess risky gambles. People do not look at the level of wealth they could potentially attain but instead look at the potential losses they could incur. Kahneman and Tversky (1979) refer to this as loss aversion – a loss function which is steeper than a gain function.

The second deviation from the standard decision making model is that of the violation of the Bayes rule in their predictions of uncertain outcomes (Kahneman and Tversky 1979). Bayes' rule relates to a branch of mathematics concerned with the analysis of random phenomena, more commonly known as probability theory. For example, people often predict future uncertain events by taking a short history of data and formulating a broader picture of what this history might represent (Shleifer 2000). Such heuristics are useful in many life situations but often lead investors astray. However, if such patterns do exist, there is scope for investors to exploit the resulting pricing anomalies in order to obtain superior risk adjusted returns (Odean 1998), therefore undermining the credibility of the efficient market hypothesis.

The list of the identified market anomalies in the behavioural finance literature is quite extensive. Therefore, for the purpose of this paper, the author contends that overconfidence and herding are highly applicable to the analysis of the decision making process for fund managers and therefore merits detailed discussion.

2.3 The overconfidence anomaly

Research shows the evidence on decision heuristics and biases provides a challenge to the validity of traditional finance theory which still stands to be the most dominant paradigm in modern finance (Dittrich et al 2001). One violation repeatedly mentioned is that of overconfidence in the sense of individuals overestimating the accuracy of their decision and the precision of their knowledge (Dittrich et al 2001).

According to many studies overconfidence has been observed in many professionals. Most relevant to this study, overconfidence has been found in investment bankers and fund managers (Dittrich et al 2001, Brenner and Koehler 1996). These studies were carried out in Germany (2001) and the USA (1996) respectively. These studies showed individuals were found to overestimate the precision of their knowledge therefore exceeding the accuracy of the decision at hand (Fischhoff et al 1997). Brenner and Koehler (1996) discuss how overconfidence is common but not universal, it seems overconfidence is eliminated and reversed for easy questions. This phenomenon which they refer to is called the difficulty

effect. This phenomenon is further reinforced by Griffin and Tversky (1992) where they found confidence to be highest for moderate to extremely difficult questions and also found that confidence tends to increase depending on the level of personal importance of the task. It also seems that people are more confident of their predictions in fields where they have self-declared expertise. Studies have shown that this has repeatedly been the case in relation to fund managers and investment managers in the finance domain (Odean 1998).

This particular study was set out to determine whether the securities investors buy outperform those they sell by enough to cover transaction costs. This study demonstrates that the overall trading in the equity market is excessive for the particular group of fund managers tested, i.e. those with discount brokerage accounts. Odean (1998) tests whether this is due to overconfidence and finds a more extreme result than was expected. It seems overconfident fund managers trade in excess even when their expected gains are not enough to offset trading costs. This is a sure sign of irrational behaviour among fund managers.

Even with the accuracy and estimations of overconfidence in experts, other studies have been carried out that challenge the claim that people within their field of expertise are generally overconfident (Erev et al 2001). Maciejovsky and Kirchler (forthcoming 2002) found that overconfidence depends on how it is operationalized, e.g. by comparing subjective confidence intervals to objective accuracy. In a study carried out by Klayman et al (1999), the authors conclude that overconfidence depends on (1) how the question is asked (2) what question is asked, and (3) who is asked given the fact that individuals tend to vary in the level of biased responses. Alerting investors to the basis of the study, i.e. overconfidence, could eliminate their tendency to exhibit overconfident traits (Bloomfield et al cited in Dittrich et al 2001).

There are situations where exceptions to overconfidence are reported. These situations occur where (1) predictability is high, (2) swift and precise feedback about the accuracy of the judgements is provided and for (3) highly repetitive tasks (Kahneman and Riepe 1998). These exceptions apply to experts such as bridge players, race track betters and meteorologists where the accuracy of their prediction is more reliable than not.

With reference to financial decisions overconfidence was analytically and experimentally studied and confirmed for field data (Barber and Odean 2000). Overconfident investors were found to trade too much and overreact to private and under-react to public signals (Daniel et al 1998). Why does it matter if investors behave differently from traditional finance says they

should? According to Shefrin (2000) investors tend to make recurring errors some of which are minor and some of which are fatal. It is these psychological biases and heuristics that affect their investment decisions which in turn can seriously affect the wealth of the investor's portfolio. Kahneman and Riepe (1998, p. 53) explain how "Investors who are prone to these biases will take risks that they do not acknowledge, experience outcomes that they did not anticipate, will be prone to unjustified trading and may end up blaming themselves or others when outcomes are bad".

According to Menkhoff et al (2006) overconfidence is a major contributing factor in the psychology of judgement. Overconfidence is a miscalibration of one's knowledge regarding a particular subject area. Another form of overconfidence is given by unrealistically positive self evaluations (Menkhoff et al 2006). A well known example of this is in a study carried out by Svenson (1981) who asked a sample of students to assess their own driving safety finding that 82% of the students placed themselves in the top 30% of the group. A third factor is that of the illusion of control. People often believe that they have influence over the outcome of uncontrollable events. Menkhoff et al (2006) attribute overconfidence as the most prominent explanation for the excess trading volume since overconfident investors tend to trade too much. There are a number of factors which affect the overconfidence phenomenon, e.g. gender, experience or a particular fund which will all be examined in the findings chapter of this dissertation.

Barber and Odean (2001a) examine the trading behaviour of nearly 38,000 households through a large discount brokerage firm between 1991 and 1997. Their study examines the level of trading in brokerage accounts owned by single and married men and women. Psychologists have found that men tend to be more overconfident than women in tasks that are considered to be masculine (Beyer and Bowden 1997). According to Barber and Odean (2001a), investing has traditionally been a masculine duty and predicts that men will therefore be more overconfident than women in investing. According to this study, single men trade the most with an equivalent of an 85% annual turnover. In comparison to this, single men make an annual turnover of 73%. Married and single women make an annual turnover of 53% and 51% respectively. These findings are consistent with overconfidence. Along with the fact that male investors are more confident, this study also reported that single men have the highest risk portfolios following by married men, married women and single women.

According to research carried out by Baker (2002) shows that overconfidence not only leads to trading too often but also to buying the wrong stock or making the incorrect investment too often. Odean (1999) found the stocks that investors sold earned 2.6% during the following four months in comparison to the stocks investors replaced them with which earned only 0.11%. In the year following these trades, the stocks that had been sold outperformed those stocks purchased by 5.8% (Baker and Nofsinger 2002).

In a study carried out by Glaser et al (2005) testing whether financial market professionals (traders and investment bankers) who work for a large German bank and a large international bank are subject to judgement biases to the same degree as a population of biases of students. They are particularly examining the prevalence of overconfidence in both these categories. The results of this study were particularly interesting. Unsurprisingly, the overconfidence in the professional i.e. the traders and investment bankers is higher than in that of the student. However, the level of confidence does not deviate too far from the mean determining that maybe the human population tends to be overconfident in general when confronted with a task. This higher level of confidence might be attributed to the higher degree of experience these experts have in this field.

More recently Menkhoff et al (2006) finds overconfidence within fund managers is decreasing with experience for some tasks while it is increasing for others. However, if overconfidence is defined as a miscalibration as it was previously in this literature and is often defined as in the finance literature, overconfidence is decreasing with experience. Though this may seem odd that a more experienced fund manager is less confident than a more inexperienced fund manager, Menkhoff et al (2006) makes it rational. Experienced fund managers are more aware of the true volatility of asset prices which could lead to better investment decisions. Therefore, if the investment decisions experienced fund managers make are better than those of their less experienced colleagues, the more positive self evaluations of experienced fund managers might not actually be interpreted as overconfidence but just sense. The issue of whether experienced versus less experienced are more or less confident is an interesting comparison and merits further study.

More recently again Deaves et al (2010) carried out a study on the dynamics of overconfidence within stock market forecasters. The survey instrument used is the ZEW Finanzmarkttest which is a monthly survey of financial market practitioners in Germany. Within this study respondents were asked for a 90% Confidence Interval for the level of the

DAX in six months time. The use of both point estimates along with confidence intervals allows for an accurate analysis of overconfidence in both its static and dynamic forms. Though this study does not relate directly to fund managers, it is still useful to gauge the mindsets of these financial experts. This study found that the respondent group as a whole are outrageously overconfident and any success made in the sense of a correct prediction leads to an increase in overconfidence. Market experience which has resulted in past experience is also highly correlated with high levels of overconfidence. However, market participants do not learn from past successes and failures or from experience. This flaw is also present at the level of the market as we see that high past returns induce increased aggregate overconfidence. All of this further reinforces the idea that overconfidence is not only a pervasive phenomenon but also one that is exceedingly difficult to eliminate (Deaves et al 2010).

Overconfidence causes investors to trade too often and to take too much risk. Resulting from this, investors pay too much in commission, pay too much in taxes and are very susceptible to big losses. They also get surprised more often than they anticipate, these surprises can be both positive and negative. Studies have shown that overconfidence increases trading and investing as it causes investors to be too certain about their opinions, in that they believe they will have all positive outcomes. It appears investors derive their opinions based on their beliefs about the accuracy of the information they have obtained and their ability to interpret it.

2.4 Herding Behaviour

“Let them alone: they be blind leaders of the blind. And if the blind lead the blind, both shall fall into the ditch” (Matthew 15: 14)

It is in the aftermath of another financial crises, that “herd” has once again become a word that we are all too familiar with. Investors and fund managers are seen as herds that rush into risky ventures without the necessary information and appreciation of the risk – reward trade – offs and at the first sign of trouble tend to flee to safer havens (Bikhchandani and Sharma 2001). There are many concerns that herding by market participants heightens volatility, destabilizes markets and increases the fragility of the financial system as a whole. This leads one to ask, why do profit maximising investors, increasingly with similar information sets, react similarly at more or less the same time? It must also be asked whether this behaviour is part of the market discipline or whether there are other factors at play?

For an investor to be seen to be herding, they must be aware of and be influenced by others actions. According to Bikhchandani and Sharma (2001), an individual can be said to herd if they would have made an investment without knowing the other investors' decisions, but does not make that investment when it is found out that others have not decided to do so. On the other hand, an individual can be seen to herd if the actions of others in making investments changes her mindset from not investing to investing. Bikhchandani et al (1992) describe this herding behaviour as an 'informational cascade'. This is described as when it is optimal for an individual to follow the actions of those ahead of him/her without considering the information which he/she holds. According to this study, informational cascades can help explain why society on the basis of very little information will seem to land close to the borderline, causing fragility.

According to Bikhchandani and Sharma (2001) there are several reasons why a profit seeking investor would be influenced into reversing a planned decision or strategy after observing others. The first reason explained is that others may know something about the return on the investment and their actions reveal this information. The second reason is the possibility that for money managers who invest on behalf of others, the incentives provided by the compensation scheme and terms and conditions of employment may be such that imitation is rewarded. A third reason for this herding behaviour may be that individuals have an intrinsic preference for conformity.

Liao et al (2010) also makes a similar statement while adding in order to build a reputation when markets are imperfectly informed, managers may ignore their private information and hide in the herd. Managers may infer private information from the prior actions of agents and optimally decide to act alike. Similarly, the institutional investors may receive the same private information from analysing the same indicators or favouring securities with similar and specific characteristics. These are a number of reasons as to why herding behaviour may occur.

There are many factors at play in the mindset in fund managers when making an investment decision. It is seen from studies carried out by Avery and Chevalier (1999) that herding tendencies can go so far as to take into consideration whether you are single or married or possibly have children. Avery and Chevalier (1999) note that more times than not women fall into the herding trap given they are usually more affected by responsibilities they may have and so avoid risk at all costs. It is their male counterparts who exhibit less herding tendencies

in particular the single, younger and less experienced fund managers. This is attributed to the fact that they have no fear. They have nothing to lose and so their ego takes precedence and determines the riskiness of their portfolio.

Many academic studies have put considerable effort into understanding the investment behaviour of market participants. The behavioural tendencies of market participants has been linked to factors such as investment horizons, benchmarks used to measure performance, the behaviour of other market participants, the degree of underlying market volatility and the presence of fads and speculative trading activity in the financial markets (Chang et al 1999). It is the focus of this paper to investigate the behavioural tendencies of market participants, in particular to their tendency to mimic the actions of their colleagues and peers, i.e. reveal herding behaviour (Chang et al 1999). According to this study, herding can be either rational or irrational in terms of investor behaviour. According to Devenow and Welch (1996), the irrational view focuses on investor psychology where investors disregard their prior beliefs and follow other investors blindly. On the other hand, the rational view focuses on the principal agent problem in which managers mimic the actions of others completely ignoring their own private information to maintain their reputational capital in the market. As mentioned earlier in relation to Bikhchandani et al (1992), this is referred to as an informational cascade. Herd behaviour can become increasingly important when the market is dominated by large institutional investors. Since institutional investors are evaluated with respect to their peers, it is of vital importance that they remain cautious about basing their decisions on their own findings and beliefs and ignoring the decisions of other managers in the same industry. In a study carried out by Schiller (1989), research shows that institutional investors place significantly more weight on the advice of other professionals outside their own company than they do on information provided by their colleagues within the same company.

Another contributing factor to fund managers tendency to herd is the level of experience they have in the industry. Menkhoff et al (2006) addresses the issue of herding in a questionnaire through two questions relating to the importance of their colleagues and other market participants. The results of this questionnaire signal that these are important sources of information. However, both sources of information decrease as a level of importance as experience is gained. Therefore, herding seems to decrease with experience. This finding contradicts that of Prendergast and Stole (1996) where it is implied that herding will increase

with experience given the reputational risk associated with older more experienced fund managers.

Chang et al (1999) carried out a study testing the investment behaviour of market participants within different international markets (U.S., Hong Kong, South Korea and Taiwan) with specific regard to their tendency to reveal herding tendencies. This study revealed interesting results in the way that during times of extreme volatility and market pressure, equity return dispersions for the U.S., Hong Kong and Japan actually increases rather than decreases therefore providing evidence against the presence of herding behaviour. These results are consistent with the findings by Christie and Huang (1995) in relation to the U.S. markets however deviate away from the expectations of South Korea and Taiwan. The presence of smaller equity return dispersions during periods of volatility reveals herding behaviours in these markets. A possible contributing factor to the presence of herding behaviour in emerging economies and its lack of presence in developed economies may be attributed to the fact that there may be incomplete information disclosure in emerging markets. This is attributed to the fact that these economies tend to place more mass in macroeconomic information when making investment decisions.

With particular relevance to the authors own research, Agudo et al (2008) carried out a study on fund managers merely mimicking the investment allocations of others. There have been many studies carried out within this area by academics such as Grinblatt et al (1995), Oehler (1998), Wermers (1999), Jones et al (1999), Borensztein and Gelos (2003) testing for the presence of herding behaviour in buying and selling stock and all studies provide evidence in favour of the presence of herding. However, Agudo et al (2008) deviated away from the norm of testing portfolio stocks but to analyse strategic management styles of Spanish equity funds. According to previous studies by Brinson et al (cited in Agudo 2008) and Ibbotson and Kaplan (cited in Agudo 2008) more than 90% of the variability in investment fund performance over time is as a result of the style allocation policy (Agudo et al 2008). They test for the herding phenomenon using three investment styles; value style, growth style and cash style. This is tested during a period of growth and development in the Spanish investment fund industry: July 1994 – June 2002. The results exhibit a significantly high proportion of herding behaviour at an aggregate level of 13.26%. The selling herding figure is higher than the buying one, basically due to Cash style (Agudo et al 2008). Value style appears to be the most imitated with levels higher than 16% for both buying and selling. This

study provides significant evidence for herding behaviour in value stocks, growth stocks and cash for the time horizon stated.

Another interesting facet to the herding tendencies of fund managers is whether they react differently on days when the market is up vis-a-vis when the market is down. Chiang and Zheng (2010) carry out a study testing for this using a dummy variable. Results show a stronger tendency for herding behaviour in times of an up market than in times of a down market especially in China, Japan and Hong Kong. The author agrees with this and was not surprised by this finding given the fact it is very hard to take a contrarian perspective in times of an up-turn in the market and would make no – sense to go against the general consensus when it is going well.

Christie and Huang (1995) further tests for herding behaviour. However, they do this by examining the impact of recent financial crises on herding behaviour. Christie and Huang (1995) suggest that herding will be more prevalent during periods of market stress. During the Asian crisis (1997) evidence suggests that the neighbouring markets were highly influenced by the crisis in Thailand. This is consistent with the notion that stock market contagion operates through a domino effect eventually weakening all markets. Results of this study show that investors in the Mexican and Argentine markets show significant herding behaviour as the crisis hits their own markets. The knock – on effect to the U.S. market may be attributable to contagion or to the close interactions of these markets. It appears the contagion effect is present in neighbouring countries: Argentina herds with Mexico in the 1994-1995 crisis and Brazil herds with Argentina during the Argentine crisis. The 2008 credit crisis revealed interesting results in the sense one would expect to find herding prevailing in the neighbouring countries to the U.S. however, the opposite is the case and this may be attributed to the fact that the 2008 credit crisis was worldwide and the blame could not be attributed to one economy failing but to the failure of the worlds economy's (Chiang and Zheng 2010). The author recognises that this is an interesting find and merits further discussion in relation to the research on fund managers herding habits and their impressions of their investment styles and actions during this credit crisis.

Schiller (1995) finds an important reason why people herd is because they assume that the other person or people have information that justifies their actions. Bikhchandani et al (1992) provides an interesting model on informational cascades showing some general equilibrium and welfare effects of such rational and imitative behaviour. However, the reliability of the

model is questionable given the fact that herding behaviour across groups can be attributed to the decisions of the first mover which may be random. It is nothing new to realise people who regularly interact with each other tend to think and behave similarly. It is very interesting to study and can seem puzzling in many cases. Schiller (2000) provides an excellent example in that of political beliefs or opinions on policy issues such as gun control tend to be so geographically and socially divided. It is assumed that the facts that should inform beliefs are the same everywhere. In relation to this study, why is it the case that at certain times consumer and investor confidence is high and at other times at an all time low. The tendency for people in groups to think and behave similarly would suggest some form of irrationality. This could be some form of a loyalty induced psychological motivation to be in accord with the group. However, it must be noted that there has to be more at work than just an act of loyalty. Within financial circles, people are struck by some form of information, whether it is from a newspaper article or their work colleague's that make them act in a certain way. It is therefore the purpose of this study to further this research around herding with the intent of determining the pervasive factors in the mindset of a fund manager.

2.5 Conclusion

This chapter initially provided an introduction into the traditional theory of finance and was followed by an in-depth discussion on a new paradigm of finance, behavioural finance. Within this new paradigm, it has been established that behavioural finance is the study of how psychological and sociological factors influence financial decision making.

From the studies examined for the purpose of this study, it has been theoretically and empirically acknowledged that overconfidence is prevalent in financial markets. Studies show that men exhibit greater overconfidence than their female counterparts. It is also evident that herding behaviour is a regular occurrence within financial markets and its occurrence can destabilise the financial stability of the world as it has done in numerous financial crises in the past. In summary, it has been identified that herding and overconfident behaviour tends to have an adverse effect on the outcome of a fund managers decision. The behavioural tendencies of these financial 'experts' effects the lives of everyone and therefore merits further study.

The following chapter examines the research methodology applied in undertaking the research for this study.

Methodology

Chapter Three

Methodology

3.0 Chapter Overview

The purpose of this chapter is to endeavour to provide a thorough analysis of the way in which the research was collected and analysed in order to fulfil the research objectives. The research question is presented first along with the research objectives. The type of research methodology will then be discussed along with the type of data collection used. Details of the interview process then follows and its applicability to this particular study a description of the interviewees. The research design and the questionnaire design are then documented followed by the limitations of this research and then the conclusion.

3.1 Research Question

This study will test whether overconfidence and herding is present in the investment decision making process of fund managers. As such, the author's derived research question is as follows:

“What is the prevalence of overconfidence and herding in the decision making process of fund managers?”

This question came to the fore due to a perceived gap in the literature surrounding this area. Many of the previous studies carried out in this area have been the focus of quantitative methods. These methods include using cross – sectional data on stock returns testing for the cross sectional standard deviation (CSSD) (Chiang and Zheng 2010), surveys using five different time series indicators (Schiller 2000), measuring the average proximity of individual returns to the realised average (Chang et al 1999) and the testing of confidence intervals at a 90% level (Glaser et al 2005). The area of behavioural finance is a continually growing field and given recent financial crisis around the world, merits an analysis thereby contributing to the findings regarding overconfidence and herding in financial markets using qualitative techniques. Further, in view of the current volatility of financial markets, the stability of the future global financial will require a better understanding of human behaviour. Therefore, academics within the behavioural finance field may need to develop relevant new theory to add to the existing literature in order to come to more definitive findings and conclusions (Healy and Perry 2000).

3.2 Research Objectives

The research objectives of this dissertation are as follows:

Objective one:

1. To investigate the key factors that appear to influence the decision making process of fund managers

Within this objective, there are a number key aspects in relation to the decision making process of fund managers to be unravelled. The factors to consider are the introductory questions to the interview; age, experience, size of fund, investment style and gender, therefore providing detailed insights into the individual's background as documented by Masood (2008) and Menkhoff et al (2006).

Objective two:

2. To evaluate the presence of overconfidence and herding in the decision making process of fund managers

This is the central focus of the thesis. Within this, the effect overconfidence and herding plays in the decision making process will be examined in two separate categories through grouped questions for Confidence and Herding. These questions will be based on research already carried out (Menkhoff et al 2006), (Forbes 2009), (Arnsward 2001) and (Masood 2008) (Appendix B). The use of previous literature is adopted in order to gain an insight into the depths of behavioural tendencies of fund managers in relation to overconfidence and herding.

3.3 Research Methodology – Quantitative versus Qualitative

Bulmers (1984) defines methodology as simply a process in which research is carried out in order to answer the research question. The research process can be split into two group's namely quantitative research and qualitative research. Research can also be an amalgamation of the two types. Quantitative methods are based around numerical data and research while qualitative research deals with psychology and schools of thought. Quantitative research was established in natural sciences to study ordinary incidents. Types of quantitative methods include survey methods, laboratory experiments and mathematical modelling. On the other hand, qualitative methods were developed by the social sciences to enable researchers to

examine social and cultural phenomena. Types of qualitative methods of research include observation, interviews and focus groups. The choice that the researcher makes depends on their objectives (Singleton cited in Wolcott 2002). According to Lee (1999) the main focus of the researcher should be to avail of the most appropriate method for the study and not to be influenced by the debate of whether one method is more superior to the other.

Quantitative research methods imply the application of a measurement type approach to research through mathematical findings however according to Sarantakos (1994) qualitative research is describing “reality as described by respondents”. It was considered to carry out a quantitative analysis through the use of surveys by carrying out a statistical analysis of the results. However, given the fact that this study focuses on insights into human behaviour a qualitative analysis has been chosen as this type of research will be most suitable in order to coincide with the research question.

There are many advantages and disadvantages to carrying out this type of research with the main advantage being that it provides a more realistic feel of the world that cannot be experienced through quantitative analysis given it is mainly based on numerical and statistical data. Patton (2002, pg.11) reinforces the reliability of qualitative research in that “qualitative inquiry is especially powerful as a source of grounded theory... theory that emerges from the researchers observations and interviews out in the real world rather than in the laboratory or the academy”. Strauss and Corbin (1998, pg.11) reveal that qualitative research can “refer to research about persons’ lives, lived experiences, behaviours, emotions and feelings as well as about organisational functioning, social movements, cultural phenomena and interaction between nations”.

3.4 Data Collection Methods

Data collection is about using a specific method in the search for the necessary data. In order to meet the researcher’s objectives, it must be done in a systematic way. The data collected for the purposes of the literature review consisted of secondary data whilst primary data is the data that has been collected in order to address the research question pertinent to this study.

3.4.1 Secondary Data

All secondary data was collected through the use of books, newspaper articles and online Journals. One of the advantages associated with secondary sources of information is the saving of both time and cost. Also, given the level of technology available to academics

today, the ease of access to data online is also a huge benefit of using secondary data. However, there is one major disadvantage associated with this type of data and that is the frequent complexity of the studies already carried out. Some studies are difficult to understand given the researcher might have no experience in that particular area. The researcher also has no control over data quality and the accuracy of its findings. The data used in previous research may be lacking certain variables that would benefit the research.

3.4.2 Primary data

This data is collected by the researcher who has a particular set of goals or objectives that need to be met. Primary data can be collected in various ways. Interviews, questionnaires, focus group interviews and observations are the most common type of primary data used. One major advantage to this type of research is that it is very focused on the research issue, and gives greater control over the data collected. For the purposes of this study, the researcher has chosen to use telephone interviews given they are most feasible to the researcher and the participants. This is due to the fact that the researcher is based in Cork whereas the interviewees are based largely in Dublin with two of them based in Geneva.

3.5 Interviews

This approach shall be satisfied through the use of telephone interviews. Interviews are one of the most powerful methods of all qualitative techniques. Interviews give the opportunity to step into the mind of another person and get an understanding of what they experience on a daily basis. Interviews have several advantages and disadvantages. Some of the advantages that Colin (2002) states include having the opportunity to change the direction of the questions, to follow up on interesting responses, and an ability to investigate underlying motives in a way questionnaires cannot. The interview method is helpful because non verbal clues can be picked up from the interviewee. However, it must also be noted that interviews are open to bias. Klayman et al (1999) asserts that it all depends on “how, what and whom” is asked as the interviewer has the power to influence the interviewees answer. Colin (2002) also finds that interviews can be time consuming and the fact that some of the interviews lack standardisation tends to raise concerns about their reliability.

When conducting an interview there are a number of requirements that have been identified to ensure the most is made of the interview (Cooper and Emory 1995).

It includes the understanding of the respondents of the importance of their role in the study. The availability of the information which is required from the respondent; the information that is required from an organisation is required to support the findings of the respondents.

The interviewee needs to be adequately motivated to co-operate with the researcher, it is vital that all respondents are willing to provide verbal, written and numerical information if required. Any lack of enthusiasm or negativity by the interviewees could cause the research findings to be misleading.

There are steps which can be taken to avoid these issues. Prior to the interview it is recommended that the overall objectives of the study are revealed. It is the interviewer's duty to ensure the interview is carried out in a pleasant manner and if any misunderstandings occur, that they are cleared up immediately.

3.6 Operational Details of Interviews

The table below highlights the dates and times that the interviews were held. Each interview was carried out over the telephone and lasted an adequate length of time to address all questions. The participants were very forthcoming in their responses and provided adequate detail to form the basis of this study.

<u>Interviewed</u>	<u>Company</u>	<u>Number</u>	<u>Date</u>	<u>Length of Interview</u>
Adrian Doyle	Pioneer Alternative Investment	1	Wednesday 7 th of July	40 minutes
Simon Gordon	Pioneer Alternative Investment	1	Monday 12 th of July	15 minutes
Marie Simpson	Fideuram Asset Management	2	Wednesday 14 th July	20 minutes
Helen Dodd	Fideuram Asset Management	2	Friday 16 th of July	35 minutes
Harold White	KBC Asset Management	3	Monday 19 th of July	20 minutes
Fund Manager A	Company A	4	Monday 12 th of July	25 minutes
Fund Manager B	Company B	5	Monday 12 th of July	35 minutes
Fund Manager C	Company C	6	Friday 9 th of July	40 minutes

3.7 Research Design

In order to get the most from this type of research, individuals from a number of banks and financial institutions were chosen (Appendix C). The individuals chosen were all of the fund management profession operating in equity markets, bond portfolios and fixed income investments. The author's main point of contact was initially set up via a number of WIT graduates and my Thesis supervisor. A senior figure from the chartered financial analysts of Ireland also helped in securing more interviews. The participants themselves then played a rather large role in setting up interviews with colleagues of their own or fund managers in different companies who would be willing to participate in such a study.

The interview questions were e-mailed two days in advance of conducting the interview. It was found from corresponding with these fund managers that people in their profession have a very busy calendar and an inherent amount of stress in their duties and so appreciated being able to examine the questions prior to the interview. This worked for both the interviewer and the respondent given the respondent knew what type of questions the author was posing and so were more comfortable with the questions and it also enabled the interview to be conducted more efficiently.

3.8 Semi – Structured Interview Questions

Burgess (2001) advocates that a crucial part of a good research design involves making sure that the interview questions address the needs of the research. Therefore, it must be noted that quite a degree of contemplation took place when the author was deciding what questions to include in the interview.

To begin with the author incorporated a total of twenty two questions into the questionnaire (Appendix D). Every one of these questions were formulated from past studies carried out in the various subject areas to ensure the questions were as applicable as possible and to ensure the most could be extracted from each question asked (Appendix B). The first group of questions were designed to elicit some personal information on the respondent. These questions include age, education to date, years of experience in the fund management industry and the particular type of fund managed. This section also asked the respondent to describe their investment style in order to gauge their first impressions of themselves.

The following eighteen questions were divided into three categories. The first category being grouped herding questions in order to establish whether the interviewee reveals herding traits

in times of market turmoil. The wording of these questions was given careful consideration to ensure the interviewee did not know exactly what was being examined. According to Dittrich et al (2001) alerting interviewees to the details of the study could cause a bias in the results given the respondents might be tending to protect themselves from revealing anything negative about themselves.

The second category of questions being grouped overconfidence questions tests whether fund managers tend to be overconfident or alternatively under confident. Similar to the herding questions, the wording of these questions was given careful thought to ensure the underlying nature of the study was protected. A set pattern to these questions to ensure a conversational nature to the interview was followed. Mixing the questions up could lead to a yes and no type response which would have been of no use to the researcher.

The final section to the questionnaire is based on a more general consensus of their opinion on fund managers. This section was set out with the intent of getting the respondent to reveal any other information about themselves or the fund management industry which they feel is important but were not given the opportunity to discuss within the constraints of the interview questions.

A considerable amount of time formulating the questions was applied to ensure it would apply to all types of fund managers and allow for a conversational type interview where the interviewer will reach their research objectives. This set of interview questions was piloted on a W.I.T graduate who is currently working in the fund management industry.

3.9 Limitations

From the author's perspective, one of the difficulties in trying to conduct this research was ensuring that those being interviewed were the correct candidates for this particular study. The author encountered minor problems early on in the research where those participants who had seemed to be categorised as fund managers actually belonged more to the lending and had to be excluded. Much was learned resulting in ensuring all participants were categorised under the correct title of investment fund managers for the rest of the primary research.

Another issue which is worthy of note is that of the reactions of the interviewees. Each interview took place over the phone and so the author felt this may have been a protection mechanism for some of the participants in that their full and honest reaction was difficult to

gauge in comparison to a face to face interview where the body language of an interviewee might have contributed more to the findings.

It must also be noted that these interviews are being carried out at one point in time and it could be useful to do longitudinal research.

Due to the sensitivity of the economic climate today and the sensitivity of some of the interview questions, the author must allow for the possibility that interviewees are going to want to appear as rational and efficient as possible. From the research carried out, it must be noted that all participants were all willing participants and answered every question without hesitation. One must also consider the application of the interview questions prior to the interview. This may have given the interviewees insights in they knew what to expect and may have been met with no surprises.

Another limitation to this research is the sample group. The author interviewed eight people which given the amount of participants in the fund management industry is a relatively small number to be basing research on. The author tried to interview as many people as possible from as many financial institutions as possible. However, given the time frame for this study and the busy schedules of the interviewees along with the limited resources available to interviewer, the author managed to interview eight people from six different institutions, five of which are male and three of which are female. The fund management industry is male dominated and so the author found it difficult to attain an exact gender balance for the purposes of this study.

3.10 Conclusion

The purpose of this chapter is to outline the research methodology that will be utilised when collecting and analysing the primary research. The first section outlines the research question which is followed by the research objectives. The differences between quantitative and qualitative research is discussed followed by a reasoning for the use of Interviews. The operational details of the interviews are given. The research design is then put forward along with the analysis of the semi – structured interviews. The final section outlines the limitations in this method of research.

Findings

Chapter Four

Research Findings

4.0 Chapter Overview

The purpose of this chapter is to present the findings from the primary research. It is the aim of these findings to contribute to existing literature in the area of behavioural finance. The data was collected from eight individuals who are actively engaging in fund management. The first section of this chapter will provide the reader with the particulars of each participant in relation to the fund management industry. The following sections will then detail the impact these factors have on their tendency to herd and their tendency to exhibit overconfident behaviour. The purpose of the primary research is to help meet the objectives identified in the methodology.

4.1 Particulars of each participant

The first five questions in the interview were designed to elicit some personal information on the fund managers in an attempt to gauge whether these details cause variance throughout each individual in the decision making process. In order to test this, it is necessary to categorise the participants. The results are as follows;

Categorisation of Participants (Appendix E)

<u>Name</u>	<u>Company</u>	<u>Gender</u>	<u>Industry Experience</u>	<u>Fund Management experience</u>	<u>Age Category</u>	<u>Size of Fund</u>
Fund Manager C	Company C	M	10 years	8 years	25 - 35	1 billion
Adrian Doyle	Pioneer Alternative Investment	M	10 years	8 years	25 - 35	100 million
Helen Dodd	Fideuram Asset Management	F	10 years	8 years	25 - 35	3 billion
Marie Simpson	Fideuram Asset Management	F	10 years	4 years	25 - 35	280 million
Fund Manager A	Company A	F	7 years	4 years	25 - 35	Active fixed income bonds
Simon Gordon	Pioneer Alternative Investments	M	12 years	10 years	36 - 44	40 million
Fund Manager B	Company B	M	20 years	16 years	45 - 55	1 billion
Harold White	KBC Asset Management	M	30 years	30 years	56 +	1.5 billion

It is with all of this data, the findings in relation to the decision making process for fund managers will be discussed with particular reference to the impact these factors have on a fund managers tendency to exhibit overconfident behaviour and the tendency to herd.

4.2 Herding Behaviour Findings

As previously mentioned in Chapter Three, eight questions (Q6, Q7, Q8, Q9, Q10, Q11, Q12 and Q13) in the interview were inserted to examine whether respondents have a tendency to herd when it comes to making an investment decision. This test is carried out in conjunction with research objective number one in relation to age, experience, size of funds, and gender.

4.2.1 Herding Behaviour Findings (Q6, Q7, Q8, Q9)

Question six and seven questions the importance of their colleagues (from their own company) and colleagues (not from their own company) respectively as a source of information when making investment decisions. The results are split equally with four of the participants rating it at a level of very high importance while the other four would rate it as fairly unimportant. Simon Gordon and Harold White, two of the more experienced interviewees exhibit very strong feelings on this in that each manager has an area of specialism and so is expected to be able to perform to the best of their abilities without any influence from colleagues. This is also the view of Helen Dodd and Adrian Doyle. However, Adrian does feel that a colleague's intuition should be utilised more but unfortunately this is not the case. He attributes this to the fact that many managers have different investment styles, 'I would look much more at macro top – down whereas the European team would look much more at the micro of the company specific...' The four fund managers who rate it as of very high importance relate it back to the fact that it is always nice to be able to 'bounce' ideas off each other, it might not be the defining factor in the final decision but it is described by all four managers as a 'contributing factor'.

The results show that five of the participants would rate information from people other than their colleagues as very high. According to this majority, the ideas and thoughts of your colleagues (within your own company) are known, it is the outsiders who are operating in the same market are those of the most interest. Adrian Doyle finds 'people in the same profession as me are people who have left this company and gone to other companies and I would always stay in contact with them to see what they are doing in their organisation'. Fund Manager B reinforces this view, 'Talking to other people, all that goes into informing your view and your impression on the market'. It is the general opinion of those five participants that if you do not know what other market participants are doing, it is time to start worrying.

Regarding the participants investment style in times of pre and post recession, the results for this question show a lot of similarities. Six of the participants say they always operate fundamentally in both time periods. Helen Dodd adds 'You have to participate in Momentum trade to a certain extent given the nature of our benchmark, if everyone is on a trade, there is almost a self fulfilling prophesy to that'. Adrian Doyle also maintains the same point of view as Helen in that it is important to participate in momentum but it is as important to know when to take a Contrarian perspective because 'typically a momentum trade will last twelve months until it has become too well known, too well loved and too expensive'. Only three of the participants would say they use Technical Analysis as a strategy. Harold White only uses it as a 'checking mechanism' whereas Adrian Doyle and Fund manager A would use it more often than not. These results contradict Adrian Doyle's view in that 'The reason you have to use Technical Analysis is because all of the other market participants are... it is also more important when you have a shorter time frame like we have. Warren Buffet would not worry about Technical Analysis!'

4.2.2 Summary of Questions 6-9

Results show thus far that in relation to following their own colleague's intuition over their own, the overall findings are divided in that there is an even breakdown of four for and four against. Two of the participants who rely on their colleague's intuition are female participants; Helen and Marie with fund manager C and Paul also relying on insider knowledge. In relation to knowledge from outside the company, the results are more convincing in that five out of the eight interviewees would rate outside information from people not within their company as very important. Three of the names within this question are recurring from the first question and so would indicate strong herding behaviour in basing their investment decisions on other people's knowledge other than their own intuition; fund manager C, fund manager B and Helen. In saying this though, it could be seen as rational herding given the fact that a majority feel outside knowledge is a vital part of the business. In relation to categorising these groups in relation to age, gender and experience, there is not a valid amount of fund managers in any particular area to be able to come to a conclusive decision given fund manager C, fund manager B and Helen all exhibit herding behaviour, yet are all categorised differently through experience, age and gender. The fact that six out of eight participants exhibit similar styles (fundamental), this could be described as herding behaviour, however it is also possible that this is the best type of strategy to take. The fund managers thus far seem to have similar thoughts and feelings regarding the fund management

industry and all participants except one reveal herding behaviour. Harold White who has the most experience in the industry in relation to this study has thus far revealed zero herding biases.

4.2.3 Herding Behaviour Findings (Q10, Q11, Q12, Q13)

Question ten questions whether the decision making process is an individual decision. Each interviewee claims it is a completely sole decision. Helen Dodd provided an excellent summation in her theory regarding this, 'No, I have free reign. You live by it and you die by it'. All of the interviewees accept this responsibility and exhibit no hesitation. However, when further probed and asked if they have any peer they would pass an idea by, five of the participants in fund managers A and B, Adrian Doyle, Simon Gordon and Helen Dodd all claimed they would. In the words of fund manager B, 'There are certain people you trust, their expertise, their objectivity and that is a very useful stroke. It is an obligatory discipline to run an idea by someone else'. Therefore, it can be said that maybe the final decision is on the shoulders of the manager who is handling the fund but many variables are involved in getting to this stage.

Question eleven and twelve can be analysed in conjunction with each other. Six out of the eight participants would recognise that it is an important part of being a fund manager to investigate what the majority are doing and what the general consensus is. Adrian Doyle explains 'If the market is very strong and we are not participating, we get in trouble.' Each participant recognises the fragility of going with a consensus but however, Simon Gordon says the key to going with or against a consensus is, 'you can have a similar stance in terms of sectors, but maybe you have different stocks'. In relation to how these fund managers based their decisions during times of an upturn in the economy and a downturn, there was a unified view that they remain fairly consistent in both markets given the fact that if they are given the money to invest, they have to invest it, if the money is not given to them, it is irrelevant. Another reason they say they are unaffected by the market is in relation to the last question. Most Fund Managers operating equity funds are going to be required to make relative returns. Basically, these fund managers are required to beat the index they are competing in and so if the index goes down by 40% and the specific fund goes down by 30% that is still seen as a success. Adrian Doyle who has to make returns in absolute form would base many decisions on the analyst's predictions during volatile times. In his own words, 'Typically, everyone wants to be safe'.

4.2.4 Summary of Questions 10-13

It is the final decision of the fund manager where to invest however, findings show that there are many factors at play in coming to this decision. Five of the interviewees admit to conferring with someone when making the final decision. Three out of the five resulting participants fall into the 25 – 35 age category, which immediately one would attribute to experience however two of the more experienced participants in fund manager B and Simon Gordon would say it is always good to get a second opinion. Two of the younger interviewees who exhibit this behaviour are female participants. Two of the remaining participants would take a complete contrarian view on consensus views with the final interviewee saying if he ‘had enough conviction in my own strategy and my own rationale then I would adopt contrarian measures, however I would need to be very definite’. All participants are agreeable that in most cases they are operating in relative terms and so are as consistent in times of an up-turn as in a downturn. However, in an extreme case where there has been a lot of money lost through an investment decision, all of the managers perceive that as part and parcel of being involved in an actively involved fund. ‘I think investors when they commit to the product they are fully aware of the potential volatility... so it’s just part of the animal’. Again, the majority of participant’s indicate herding behaviour with Harold White standing out from the crowd revealing no herding traits

4.3 Overconfidence Findings

There are five questions (Q14, Q15, Q16, Q17, Q18) outlined in this interview to test whether fund managers act in an overconfident manner. In relation to the first question in the interview carried out, results immediately show an exuberant amount of overconfidence within the male participants. Each male interviewee claims to be more informed than the majority of his colleagues or that they engage in greater information gathering. Of the three female candidates, all of them gave explanatory answers in comparison to their male counterparts. All three reveal no sign of overconfidence with Marie Simpson answering abruptly, ‘No. Definitely not’ with Fund Manager A and Helen Dodd all claiming that each manager has a different style and decision making process and that it is naive to think you are more informed.

The second question in this category asks the level of confidence they have within themselves in managing their fund. Both male and female participants reveal similar traits here in that ‘it can depend on whether you are having a good day or a bad day or a good month or a bad

month'. On the balance of things, fund managers reveal more confidence than not when posed with this question. There were no negative answers given. In the case of Fund Manager B, he specifies as to where his confidence stops. 'Clearly I have confidence but that would be over the medium term, experience tells you, you don't know what is coming around the corner and you don't know enough with certainty to be too certain on the long run'. In a number of cases in both the male and female participants, they all note that a high conviction rate is necessary. Helen Dodd explains how 'You have to have the courage to make unpopular or uncomfortable decisions and you have to be willing to live with the consequences of those decisions so with that in mind I would say I am very confident in my professional abilities'.

With regard to question fifteen whether an upturn in the market makes you invest more, there were a lot of conservative answers given. This was probably due to the fact again that these fund managers can only invest what money is given to them. Fund Manager B describes the market as 'a rising tide, it lifts all boats' however, not in the sense of investing more because if the money is not there, it is not possible. However, the general opinion within the group is that during an upturn, they become more active in an attempt to outperform the market. The general consensus was that more active trading was the effect of an up-turn in an economy, greater risks would be being taken and so this could be attributed as overconfident behaviour.

The following two questions relating to the rate of return on their portfolios was a misleading one. Each fund manager seemed very reluctant in answering this question in relation to past results or future predictions. The female participants were much more forthcoming and willing to divulge more detail than their male counterparts however. Of the male participants, they all reveal positivity towards their potential returns when compared to the returns they made in the past twelve months. It was mentioned a number of times the 'rough period' the financial world is going through yet each figure is outperforming last year's figure by a minimum of 3%. This is in relative terms but even at this, to be outperforming the market by more than this is a very flattering figure and would indicate an over – optimistic outlook on what the future holds which has a knock on effect to overconfident behaviour. The female candidates of this study maintain consistent figures for both comparisons, neither increasing nor decreasing. This is a signal that they are playing their cards safe and do not want to be seen to be too confident in the case of an error.

4.3.1 Summary of Overconfidence Findings

In an industry of this kind where a deterministic and positive attitude is needed, one would expect an innate level of overconfidence, but one would expect that this confidence was attributed to validity. These interviews show there is overwhelming evidence that this group of fund manager's exhibit overconfident behaviour. This is particularly the case for the male participants given the more objective answers given by their female counterparts. In relation to the management of their own funds and their confidence within themselves, both male and female interviewees provide an understanding where they feel extremely confident in the management of their own funds. There is little need to break this down into age/ experience categories given each individual reveals overconfident tendencies and as was expected the overconfidence in male participants is greater than that of the female participants.

4.4 General Findings (Q19, Q20, Q21, Q22)

A number of general questions were asked in relation to a number of recurring factors in the behavioural finance literature. The first question is whether the interviewees believe that fund managers act in a rational manner which forms the groundwork for the Efficient Market Hypothesis (EMH). Results from this question overwhelmingly prove that fund managers do not act in a rational manner. A number of the participants were aware of the area of behavioural finance and the various factors that are at play in making an investment decision. Fund Manager B immediately states how fund managers 'fall into the herd'. From a female perspective Helen Dodd thinks 'the psychology behind investment management is the definitive kind of human nature story that it's the idea of catching a falling knife that if the decision goes well you probably further commit to it and have a natural tendency towards selecting certain information that already verifies an existing decision.

The next question regarding any opportunities they are currently looking at was designed to elicit any trends in similar ideas or investments. Given the vast amount of funds being managed for various sectors and countries, it is very difficult to pin point a recurring theme. This question was also designed to gauge their level of optimism and the results show a rather large level of optimism. Each manager highlighted areas within their markets given valuations are low, expectations are low and companies with long term strategies and products must eventually see their value improve. Each manager specified an optimistic future in certain sectors given a considerable length of time.

The question was asked regarding the level of satisfaction with incentives provided to fund managers in order to investigate whether greater incentives would cause the fund managers to become more confident or whether they would invest in riskier projects if a greater incentive was provided. Each of the participants finds that incentives are of critical importance given the industry they work in. Helen Dodd says 'there is a certain amount of inherent stress in the profession and I think you have to be compensated for that'. Fund manager C describes how incentives can be 'the best of things and the worst of things'. If you are incentivised to have a very high return (50%), then that is going to influence the riskiness of the decision whereas if you are told to make a return of 5%, you are going to invest in very low risk companies. There was an overall majority in favour of incentives and an agreeable motion that greater incentives will cause you to become more confident and take more risks in relation to investments. Fund manager A feels incentives have some relevance, 'I suppose people are driven by different things and in this industry if you are not driven enough to take action, then you are in the wrong business'. This group attributes greater confidence and a greater tendency to invest in risky projects when the incentives are higher.

4.5 Chapter Summary

This chapter provided a complete presentation of the findings from the primary research. The findings for the fund managers indicate a rather strong tendency towards herding behaviour especially when confronted with information from outside their own company. It is the younger age category with the least experience which exhibits the most herding behaviour with three out of the overall five participants revealing such signals. It must be noted that two of these participants are female interviewees. It must also be noted that the participants who would rely on other people's opinions before making a final decision are again two female participants and one male participant within the 25 – 35 age category, with two of the older participants also revealing such behaviour. The only individual within this study who revealed no herding behaviour was Harold White, who falls into the 56+ category relying on no – one's intuition only his own.

It is found from these findings that each fund manager does possess attributes of overconfidence in all genders, age categories and experience in the industry. It seems that it is an expected attribute of a fund manager. The findings confer that male fund managers are exuberantly more confident than their female counterparts given the female participants are a

little bit more rational on certain questions than the male participants. The participant who reveals the most overconfident behaviour is Harold White.

The discussion chapter will follow which endeavours to adjoin these primary research findings with the literature review that was presented in chapter two.

Discussion

Chapter 5

Discussion

5.0 Chapter Overview

The purpose of this chapter is to evaluate and assess the results of the primary research outlined in the previous chapter. This chapter will also link the primary research findings to the ideas put forward in the literature review. This will allow for a more in-depth discussion of the findings. These findings will be interpreted in conjunction with the literature review and research objectives.

5.1 Prevalence of Overconfidence

In a study by Kruger and Burrus (2004), it is found that people in general tend to hold overly favourable views of their abilities in many social and intellectual domains. With particular reference to the overconfidence attributes of professionals, this is no different. Dittrich et al (2001) and Brenner and Koehler (1996) respectively find that experts in their area of specialism exhibit exuberant overconfident attributes. These studies showed individuals were found to overestimate the accuracy of their own knowledge, therefore exceeding the accuracy of the decision. Studies have shown that this is certainly the case with reference to fund managers and investment bankers (Odean 1998).

With regard to the discussion in Chapter Four, the findings also lend support to the assumption that overconfidence is more than evident in fund managers. Each fund manager exhibits overconfident behaviour in relation to the handling of their own fund and also exhibits overconfident traits in relation to the amount of knowledge they possess in comparison to their colleagues. There are many findings which need to be elaborated on in comparison to previous studies in relation to gender, age, experience and size of the fund managed. These are all contributing factors to the decision making process for fund managers and by analysing these factors in conjunction with the literature reviews seeks to combine research objective number one with research objective number two.

5.2 Overconfidence and Gender

The author contends that the most significant finding from the primary research is with regard to the overconfidence of the male and female participants. Beyer and Bowden (1997) assert that men tend to be much more overconfident than their female counterparts. Given the fact

that it is common knowledge that the dominant gender in the financial sector is male, one would assume that the results in relation to this study would be the same. In tasks that are considered to be masculine, men tend to be much more overconfident. Barber and Odean (2001a) assert that investing has traditionally been a masculine duty and predicts that men will be more confident than women when it comes to making an investment decision.

It is in conjunction with these studies that overall, the male participants of this study show exuberantly more overconfidence than that of the female participants. However, it must be noted that this is in particular reference to the greater level of knowledge they would assume to have over their colleagues. Each male participant claimed to be much more informed than that of their colleagues while each female participant provided the interviewer with much more rational answers in that 'it is naive to think you are more informed'. In comparison to this the male interviewees gave abrupt answers 'Yes, definitely'. This is as expected from the study carried out by Barber and Odean (2001a).

In deviating away from this, there was an interesting find in relation to when posed with the question regarding confidence in your own fund. There can be no division of gender here given the female participants are as confident in this task as their male counterparts. Again, the male participants claimed to be extremely confident whether they are having a good day or a bad day on investments. The female participants reinforced this with 'I would say I am very confident in my investment abilities'.

When faced with a general question regarding how well informed they are over their colleagues, the male participants exhibit much stronger signs of overconfidence than their female counterparts. However, when asked a personal question regarding the confidence you have in the management of your own fund, both gender types reveal overconfidence at its highest. This finding coincides with that of Griffin and Tversky (1992) where confidence is found to increase given the personal level of the task.

5.3 Overconfidence and Age/Experience

Menkhoff et al (2006) provides a very interesting study in their results on whether overconfidence is more evident in younger, less experienced fund managers than in older, more experienced fund managers. Menkhoff et al (2006) finds that overconfidence is decreasing with experience. Though this may seem odd, Menkhoff et al (2006) provides a rational view on this in that more experienced fund managers are aware of the true volatility

of asset prices and therefore could lead to better investment decisions. However, in relation to this study, the findings are a little more difficult to interpret on a comparison basis. The findings of this study reveal that all age categories reveal overconfidence attributes in particular in relation to the 25 – 35 age category. However, of the two gentlemen in the 36 – 44 and 45 – 55 age category respectively would claim that they are extremely confident in the medium term however would be less confident over the long term given, ‘experience tells you, you don’t know what is coming around the corner and you don’t know with enough certainty to be too certain on the long - run’. This would then follow the results of Menkhoff et al (2006) in that the more experienced fund managers have decreasing confidence in comparison to their younger less experienced counterparts. However, after analysis of all the participants, the oldest, most experienced participant in this study in the 56 + age category with thirty years experience reveals the highest level of overconfidence in comparison to the rest of the participants therefore causing the results to disagree with those of Menkhoff et al in that overconfidence actually increases with experience. These findings would coincide with Deaves et al (2010) in that overall financial experts tend to be outrageously overconfident and that it is the level of success on the predictions made that will actually determine the level of overconfidence in people.

5.4 Overconfidence and the Size of the Fund Managed

The size of a fund’s assets can cause a certain level of discomfort for equity managers given if the fund grows too large it can reduce returns (Hale 2010). The problem is referred to as ‘closet indexing’ (Appendix F) (Hale 2010). Therefore the level of activity on the fund is likely to impact the prices of securities, harming the confidence of the fund manager.

However, from the study carried out, there can be no conclusions drawn on the impact the size of the fund being managed has on the overconfidence anomaly given each fund manager exhibits some form of overconfidence whether it is in a general or personal instance.

5.5 Prevalence of Herding

Liao et al (2010) finds that in order to build a reputation when markets are imperfectly informed, fund managers may ignore their private information and hide in the herd. Managers may infer private information from the prior actions of agents and optimally decide to act alike. It is with particular reference to these times of market volatility when the signals for herding behaviour are at their highest (Chang et al 1999).

5.6 Herding and Gender

Avery and Chevalier (1999) shows that female participants in financial markets have a greater tendency to herd than their male counterparts given they are considered to be less risk takers than the male majority. According to a study carried out by Barber and Odean (2001a), their herding tendencies are all reliant on whether or not they have other responsibilities such as marriage status or whether or not they have children. According to this study (Barber and Odean 2001a) single men trade the most with an 85% annual turnover in comparison single women making an annual turnover of 51%. These figures indicate less risk taking behaviour from the female participants signalling they fall into the herd or the following of momentum trade more often than their male counterparts.

These results would reinforce the findings of this study in that the female participants do tend to exhibit stronger herding tendencies. Out of the three female participants two participant's exhibit recurring herding tendencies in rarely basing a decision on their own intuition and basing it on the knowledge of their colleagues and individuals in the same industry. In saying this though, the male participants also reveal herding tendencies in that they feel it is a vital part of the business to be able to discuss decisions over with someone. However, given the recurrence of the female participants in a number of instances, it is with agreement that the findings of Avery and Chevalier (1999) are reinforced.

5.7 Herding and Age/ Experience

In a questionnaire by Menkhoff et al (2006), it is questioned the importance of colleagues and other market participants as sources of information. The findings show that both sources become significantly less important with the greater the level of experience. Therefore, indicating herding decreases with experience. It is found that inexperienced fund managers rely on Momentum strategies the most and fall into the herd. However, the findings for this study find that the majority of fund managers maintain a similar view on strategies, however,

Momentum strategy is not the similarity. Out of the eight participants, six of them claim to base their strategies on Fundamental analysis, therefore indicating the use of valuations which are different for each company. This would signal individuality in their investment techniques which would mean they do not engage in herding activity. However, when questioned in relation to the importance of their colleagues and outsiders as a source of information, the results show the opposite. The findings to these questions indicate a significant amount of herding activity in the 25 – 35, 36 – 44 and 45 – 55 age categories. Again, this would signal major differences to the studies of Menkhoff et al (2006). From these findings, there is a significant amount of herding activity happening regardless of the level of experience the fund manager has. In saying this, similar to the findings of the overconfidence anomaly, one participant who falls into the most experienced category in the 56 + age category shows no signs of herding behaviour which would coincide with the results of Menkhoff et al (2006).

5.8 Herding and the Size of the Fund Managed

Similar to the overconfidence findings, there can be no conclusions drawn regarding the impact the size of the fund managed has on the herding tendencies of fund managers. The only fund manager who exhibits zero herding tendencies is Harold White who handles a fund to the value of €1.5 billion. The level of funds range from 40 million to 3 billion so the only conclusion that can be drawn from this is the experience the individual has along with the fact that it is a male participant.

5.9 Fund Managers Rationality

The efficient market hypothesis (EMH) has formed the groundwork for efficient markets throughout the last three to five decades (Shleifer 2000). Within this theory ‘prices fully reflect all available information’ (Fama 1970). However, in deviating away from this traditional finance theory academics have opened up an alternative to this - ‘Behavioural Finance’. It is the area of behavioural finance and the rationality of the fund managers which are the particular focus of this study with particular reference to overconfidence and herding. Stracca (2002) defines market anomalies as ‘the systematic traits of behaviour of economic agents’, which cannot be explained by the traditional view of the finance paradigm. It is in deviating away from the traditional view, that prices fully reflect all available information and considering the alternative that behavioural biases have a rather large role to play in the decision making process of fund managers that sets the basis for the conclusion that fund

managers do not act in a rational manner. This conclusion therefore contradicts the efficient market hypothesis in favour of the behavioural finance view that behavioural tendencies need to be incorporated into the thoughts and views of the decision making process for fund managers. It is with an overwhelming majority of interviewees who claim that fund managers do not act in a rational manner has caused such a conclusion. When asked the question regarding the rationality of fund managers, there was a seven to one conviction rate against the notion that fund managers behave rationally. The majority feel that the psychology behind investing is a major contributor and an in-escapable factor which merits further examination and study.

Another issue which causes the findings to indicate irrationality on the part of the fund managers is the emphasis these interviewees puts on incentives and the fact that incentives are a huge driving force in the effectiveness of the fund and the potential returns it could make. This finding is in line with that of Masood (2008).

5.10 Concluding Comments

It is worthy of note with reference to this particular study that the results show that individuals who reveal overconfidence traits are the least likely to fall into the herding trap or at least recognise the potential for this. It is the female participants of this study in the 25 – 35 age category who reveal the greatest tendency to herd and the least amount of overconfidence. The older participants in the 36 – 44 and the 45 – 55 age category reveal a high level of overconfidence but only in the medium term. These participants reveal herding tendencies also. It is the oldest participant with the most experience in the 56 + age category who reveals an exuberant amount of overconfidence however exhibits no tendency to herd. These results in most cases are supported by various studies (Menkhoff et al 2006), (Masood 2008) and Barber and Odean (2001a) however there are slight differences in some cases which have been noted.

5.11 Chapter Summary

This chapter reviewed the primary research findings with regard to the discussion of the literature review and the outlined objectives. In essence, the analysis of the findings concurred with the majority of findings in the literature review with minor deviations in some cases. As such, the findings have provided a more up to date analysis of the existing literature and have also added new elements to it from a qualitative perspective.

The following chapter brings this study to a conclusion. A synopsis of the overall study will be provided.

Conclusion

Chapter 6

Conclusion and Recommendations

6.0 Chapter Overview

This chapter aims to provide a conclusion to the study outlined in the previous sections. Firstly, there will be an analysis of the conclusions from the overall research in relation to the literature review and the primary research. Following will be recommendations for future research before a closing comment to conclude the study.

6.1 Conclusions from the overall research

The primary research undertaken in this study, in addition with the analysis of existing literature presented in the preceding chapters highlights the prevalence of human fallibility in the fund management industry (Shleifer 2000).

The author has carried out an in-depth analysis on two of the most prevalent behavioural biases in the decision making process for fund managers. It is found that these biases can cause investors to trade too much, too often, regularly leading to a bad final decision. It is this decision making process which can make or break an investor thereby giving merit to this particular study.

6.1.1 Overconfidence

It is from this study, that the author can contend that overall, the market participants in the fund management industry are exuberantly overconfident in their day to day duties. This confidence is even higher in the male participants, until the female participants are confronted with a question which refers to their own personal involvement. The female participants are then on an equal par as their male counterparts (Griffin and Tversky 1992). It is also found that the oldest and most experienced participant reveals the highest level of overconfidence which would contradict certain studies in that overconfidence decreases with experience (Menkhoff et al 2006).

6.1.2 Herding

The findings of this study have demonstrated the prevalence of herding in equity markets. It is in these times of market turbulence that the word 'herd' becomes a common one. This study demonstrates the herding tendencies of eight fund managers with the results

overwhelmingly in favour of their tendency to herd. It is particularly of note that the female participants within the 25 – 35 age category exhibit the most herding traits along with two of the older participants in the study. These results are all coinciding with the findings of Menkhoff et al (2006). However, one male individual in the 25 – 35 age category exhibits less herding traits than the other participants which would also follow suit given the younger the fund manager and providing he is male, the more risk he is expected to take which means he avoids herding. To contradict this, the findings of this study show the oldest participant exhibiting no herding traits. This would contradict many studies in that herding becomes greater the more experience you have given you have a reputation to protect (Liao et al 2001).

6.2 Market turbulence

It is notable the impact these unpredictable times have on the financial market and its participants. Christie and Huang (1995) find that herding behaviour and overconfidence traits can cause market instability. However, it is from the findings of this research that the participants exhibited very little difference in the way they make their investments in times of market volatility. It is an overall consensus that the money is either there for investing or it is not and the success or failure of the economy has little or no impact on investments. The most notable change is that the fund managers become more active during times of an upturn in the economy and become a little bit more conservative in times of a downturn.

6.3 Recommendations

The results from chapter four and five have provided some interesting findings into the area of investor psychology. These findings have highlighted some interesting areas for future research.

Given the fact that this study focused on herding and overconfidence, there is a certain gap in the literature for a greater depth of questioning in order to gain a greater understanding to the exact factors that affect the decision making process of fund managers. Risk and loss aversion is one area where there would be a contribution to the area of behavioural finance.

The design of this study was based wholly on the interpretations of the interviewer given the feedback from the respondents. Given there is such a large gap in the literature for qualitative research it is recommended that some form of quantitative research is carried out along with the interview type research. This type of analysis will allow the researcher to come to

conclusions regarding the interview process whilst using statistical details as a second source of primary research. This would provide the researcher with certain validity and reliability in their findings.

Also, when following a qualitative type approach, it is advised to have a balance of candidates of both genders and from numerous age categories in order to come to definitive conclusions on the decision making process for fund managers.

6.4 Concluding Comments

This study was undertaken in an attempt to investigate the prevalence of overconfidence and herding on the decision making process of fund managers. The author contends that this objective has been achieved. A review of existing literature along with the findings of this study highlight the fact that overconfidence and herding are extremely prevalent in the financial sector in most cases. It is apparent from the findings that irrationality forms the basis of the decision making process of fund managers which should cause concern to governments, regulators and financial managers. It is hoped that the author's study can contribute to existing literature. The area of behavioural finance is one which merits in depth analysis in order to compliment this study and those before it.

Bibliography

Agudo, L.F., Sarto, J.L. and Vicente, L. (2008) 'Herding behaviour in Spanish equity funds', *Applied Economics Letters*, Vol. 15, pp. 573 – 576

Arnsward, T. (2001) 'Investment behaviour of German Equity Fund Managers: An exploratory Analysis of Survey Data', Economic Research Centre of the Deutsche Bundesbank

Baker, H.K. and Nofsinger, J.R. (2002) 'Psychological Biases of Investors', *Financial Services Review*, Vol. 11, pp. 97 – 116

Barber, B. and Odean, T. (2001a) 'Boys will be boys: Gender, overconfidence and common stock investment', *Quarterly Journal of Economics*, Vol. 110(1), pp. 261 – 292

Barber, B.M. and Odean, T. (2000) 'Trading is hazardous to your wealth: Common stock investment performance of individual investors', *Journal of finance*, Vol. 55, pp. 773 – 806

Beyer, S. and Bowden, E.M. (1997) 'Gender differences in self perceptions: Convergent Evidence from three measures of accuracy and bias', *Personality and social psychology bulletin*, Vol. 23, pp. 157 – 172

Bikhchabdani, S., Hirshleifer, D. and Welch, I. (1992) 'A Theory of Fads, Fashion, Custom and Cultural change as Informational Cascades', *Journal of Political Economy*, Vol. 100(51), pp. 992 – 1026

Bikhchandani, S. and Sharma, S. (2001) 'Herd Behaviour in Financial Markets', *IMF Staff Papers*, Vol. 47(3), pp. 279 – 310

Block, S.B. (1999) 'A study of Financial Analysts: Practice and Theory', *Financial Analysts Journal*, Vol. 55 (4), pp. 86 – 95

Borensztein, E. and Gelos, G. (2003) 'A panic-prone pack? The behaviour of emerging market mutual funds', *International Monetary Fund Staff Papers*, Vol. 50, pp. 43 – 63

Brenner, L.A. and Koehler, D.J. (1996) 'Overconfidence in Probability and Frequency Judgments: A Critical Examination', *Organizational behaviour and human decision processes*, Vol. 65(3), pp. 212 – 219

Brown, C.K., and Reilly, K.F. (2003), 'Investment Analysis and Portfolio Management', 7th edition, South western, U.S

Bulmers, M. (1984) *Sociological Research Methods*, 2nd ed., Macmillan

Burgess, F.T. (2001) 'A general introduction to the design of questionnaires for survey research', available: <http://leeds.ac.uk/iss/documentation/top/top2.pdf> [accessed 10th July 2010]

Chang, E.C., Cheng, J.W. and Khorana, A. (1999) 'An Examination of Herd Behaviour in Equity Markets: An International Perspective', pp. 1 – 36

Chiang, T.C. and Zheng, D. (2010) 'An empirical analysis of herd behaviour in global stock markets', *Journal of Banking and Finance*

Christie, W.G. and Huang, R.D. (1995) 'Following the Pied Piper: Do individual returns herd around the market?', *Financial Analysts Journal*, pp. 31 – 37

Colin, R. (2002) *Real World Research: A resource for Social Scientists and Practitioner Researchers*, 2nd edition, Blackwell Publishing: United Kingdom

Conrad, J., Cornell, B., Landsman, W. And Rowntree, B (2006) 'How do analysts recommendations respond to major news?', *Journal of financial and quantitative analysis*, 41, pp. 25 – 49

Cooper, D.R. and Emory, C.W. (1995) *Business Research Methods*, 5th edition, Chicago: Irwin

Daniel, K., Hirshleifer, D. and Subrahmanyam, A. (1998) 'Investor psychology and security market under and overreactions', *Journal of Finance*, Vol. 53, pp. 1839 – 1885

Davis, J. (2010) 'Folly of forecasting and useless data', [Financial Times Fund Management], Financial Times, 18th January, p. 24

Deaves, R., Luders, E. and Schroder, M. (2005) 'The Dynamics of Overconfidence: Evidence from Stock Market Forecasters', Centre for European Economic Research, 05-83

Devenow, A. and Welch, I. (1996) 'Rational herding in financial markets', European Economic Review, Vol. 40, pp. 603 – 615

Dittrich, D., Guth, W. and Maciejovsky, B. (2001) 'Overconfidence in Investment Decisions: An Experimental Approach', Max Planck Institute for Research into Economic Systems, Working Paper, pp. 2 – 20

Eurekahedge (2004) 'Interview with Griffin Capital Management', Hedge Fund Databases, July 2004, available: http://www.eurekahedge.com/news/04july_archive_news_interview_griffin_capital.asp

Fama, E. And French, K.R. (2009) 'Luck versus skill in the cross section of Mutual Fund Returns', Journal of Finance forthcoming, pp. 1 – 42

Fama, E. and Malkiel, B.G. (1970) 'Efficient Capital Markets: A review of theory and empirical work', Journal of finance, Vol. 25 (2), pp. 383 – 416

Fama, E.F., Fisher, L., Jensen, M. And Roll, R. (1969) 'The adjustment of stock prices to new information', international economic review, Vol. 10, pp. 1 -21

Fischhoff, B., Slovic, P. and Lichtenstein, S. (1997) 'Knowing with certainty: The appropriateness of extreme confidence', Journal of experimental psychology, Vol. 3, pp. 552 – 564

Forbes, W. (2009) Behavioural Finance, Great Britain: John Wiley and sons

Franks, J. and Mayer, C. (2001) 'Risk and Regulation in European Asset Management: Is there a role for capital requirements?', Oxford Economic Research Associates Ltd, available: <http://www.afg.asso.fr/upload/3/Fichier117.pdf>, [accessed 28th July 2010]

Glaser, M., Langer, T. and Weber, M. (2005) 'Overconfidence of Professionals and Lay Men: Individual Differences Within and Between Tasks?', available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=712583 , [accessed 15th June 2010]

Gort, C., Wang, M. And Siegrist, M.(2008) 'Are Pension fund managers overconfident?', The Journal of Behavioural Finance, 9, pp. 163 – 170

Griffin, D. and Tversky, A. (1992) 'The weighing of evidence and the determinants of confidence', Cognitive Psychology, Vol. 24, pp. 411 – 435

Grinblatt, M., Titman, S. and Wermers, R. (1995) 'Momentum investment strategies, portfolio performance and herding: a study of mutual fund behaviour', American Economic Review, Vol. 85, pp. 1088 – 105

Grot, C. (2009) 'Overconfidence and Active Management: An Empirical Study across Swiss Pension Plans', The Journal of Behavioural Finance, 10, pp. 69 -80

Hale, N. (2010) 'American Fund Managers: Our funds are too large', moneywwatch.com, 31 May, available: <http://moneywatch.bnet.com/investing/blog/fund-watch/american-fund-managers-our-funds-are-too-large/426/> [accessed 7 June 2010]

Haugan, A.R. (2001) 'Modern Investment Theory', 5th edition, Prentice – Hall Inc, New Jersey: US

Healy, M. And Perry, C. (2000) 'Comprehensive criteria to judge validity and reliability within qualitative research within the realism paradigm', Qualitative Market Research: An International Journal, Vol. 3(3), pp. 118 – 126

Irish Funds Industry Association (IFIA) (2010) 'Welcome to the Irish Funds Industry Association', [online], available: <http://www.irishfunds.ie> [accessed 6th August 2010]

Jones, S., Lee, D. and Weis, E. (1999) 'Herding and Feedback trading by different types of institutions and the effects on stock prices', Working Paper

Kahneman, D. and Riepe, M.W. (1998) 'Aspects of investor psychology', *Journal of portfolio management*, Vol. 24(4), pp. 52 – 65

Kahneman, D. and Tversky, A. (1979) 'Prospect theory: An analysis of decision under risk', *Econometrica*, Vol. 47, pp. 263 – 291

Klayman, J. and Soll, J.B. (1999) 'Overconfidence: It depends on How, What and Whom You Ask', *Organizational Behaviour and Human Decision Processes*, Vol. 79(3), pp. 216 – 247

Kruger, J. and Burrus, J. (2004) 'Egocentrism and focalism in unrealistic optimism (and pessimism)', *Journal of Experimental Social Psychology*, Vol. 40, pp. 332 – 340

Lee, T.W. (1999) *Using Qualitative Methods in Organisation Research*, Sage Publications

Liao, T.L., Huang, C.J. and Wu, C.Y. (2010) 'Do fund manager's herd to counter investor sentiment?', *Journal of Business Research*, Vol. 1 (1)

Loewenstein, G.F., Hsee, C. K., Weber, E. U. and Welch, N. (2001) 'Risk as Feelings', *Psychological Bulletin*, Vol. 127(2), pp. 267 – 286

Maciejovsky, B. and Kirchler, E. (forthcoming 2002) 'Simultaneous over and under confidence: evidence from experimental asset markets', *Journal of Risk and Uncertainty*

Malkiel, B.G. (2003) 'The efficient market hypothesis and its critics', *Journal of Economic Perspectives*, Vol. 17(1), pp. 59 – 82

Masood, O. (2008) 'Key drivers investment decision-making process for fund managers of a large bank', *International Journal Monetary Economics and Finance*, Vol 1(3), pp. 250 – 261

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, pp. 1753 – 1766

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*, Vol. 50, pp. 1753 – 1766

Mottola, M. (2010) 'Why it's so hard to consistently beat the market', [Financial Times Fund Management], *Financial Times*, 18th January, p. 10

Odean, T. (1998) 'Do Investors Trade Too Much', *The American Economic Review*, Vol. 89(5), pp.1279 – 1294

Oehler, A. (1998) 'Do mutual funds specializing in German stocks herd?', *Finanzmarkt and Portfolio Management*, Vol. 4, pp. 452 – 65

Olsen, R.A. (1997) 'Prospect theory as an explanation of risky choice by professional'

Olsen, R.A. and Khaki, M. (1998). 'Risk, Rationality and Time Diversification', *Financial Analysts Journal*, Vol. 54 (5), pp. 58 - 63

Palan, S. (2004) 'The efficient market hypothesis and its validity in today's market', Grin[online], available: <http://www.grin.com/e-book/32694/the-efficient-market-hypothesis-and-its-validity-in-todays-s-markets#> [accessed 21 June 2010]

Patton, Q.M. (2002) *Qualitative Research and Evaluation Methods*, 3rd edition, Sage Publications Inc.

Pearlman, R. (2010) 'Interview with fund manager David Winters', *Smartmoney magazine*, June 14th, available: <http://www.smartmoney.com/investing/mutual-funds.com> accessed [14th June 2010]

Private Equity Wire (2010) 'The Interview, Thomas Ferris, Sagres: Investors currently have a short investment horizon and a focus on manager transparency, but they are still seeking above average returns', *Private Equity Wire*, 4 June, available: <http://www.privateequitywire.co.uk/2010/06/04/interview-%E2%80%93-thomas-ferris-sagres-%E2%80%93-investors-currently-have-short-investment-horizon-and-f> [accessed 7 June 2010]

Rev, I., Wallstein, T.S. and Maciejovsky, B. (2001) 'Illusion of expertise: An Experimental Approach', Papers on strategic Interaction, Max Planck Institute for research into economic systems

Ricciardi, V. (2004) 'A Risk Primer: A narrative research review of the risk perception literature in behavioural accounting and behavioural finance', Preliminary version

Ricciardi, V. (2005) 'A research starting point for the new scholar: a unique perspective of behavioural finance', Journals in Behavioural/ Experimental Finance

Ricciardi, V. (2008) 'The financial psychology of worry and women', Social Science Research, 1(1)

Ritter, J.R. (2002) 'Behavioural Finance', University of Florida, August 31st 2002

Sarantakos, S. (1994) Social research, The Macmillan Press Ltd

Schiller, R.J. (2000) 'Measuring Bubble Expectations and Investor confidence', Journal of Behavioural Finance, pp. 1 – 24

Shefrin, H. (2002) 'Beyond Greed and Fear: Understanding Behavioural Finance and the psychology of Investing', available: <http://books.google.com>, [accessed 20th June 2010]

Shleifer, A. (2000) 'Inefficient markets', Oxford University Press, available: <http://books.google.com>, [accessed 20 June 2010]

Stracca, L. (2002) 'Behavioural finance and aggregate market behaviour: where do we stand?', University of Leicester, Discussion Paper in Economics, 02/10

Strauss, A. and Corbin, J. (1998) Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2nd edition, Sage Publications Inc.

Svensen, O. (1981) 'Are we all less risky and more skilful than our fellow drivers?', Acta Psychologica, Vol. 47, pp. 143 – 148

Tversky, A. and Kahneman, D. (1974) 'Judgment under uncertainty: heuristics and biases', *Science*, 185, 1124 – 1131

Venter, G. and Michayluk, D. (2008) 'An insight into overconfidence in the forecasting abilities of financial advisors', *Australian Journal of Management*, Vol. 32 (3), pp. 545 – 557

Wermers, R. (1999) 'Mutual fund herding and the impact on stock prices', *Journal of Finance*, Vol. 54, 581 – 622

Wolcott, H.F. (2002) 'Writing up qualitative research better', *Qualitative Health research*, Vol. 12(1), pp. 91 – 103

Appendices

Appendix A

Reflective Diary

Personal Reflection

I feel it is necessary to start this personal reflection from the time this thesis first got under way. There were a lot of question marks regarding the title or the research question which was going to be examined. From the day I was posed with the task of getting a topic to the time I finally came up with a research title was a rather testing period. There was an amount of literature trawled through for many weeks until finally a topic was brought to my attention by Professor William Forbes in a Seminar Series session. This was a rather daunting experience given the passion felt for the subject area of Behavioural Finance, however I felt it merited further examination and consideration. This process in coming to a final research question was a difficult one given the vast amount of literature in the subject area. However, after reading and considering all the options available to me, it was decided the most suitable areas to discuss were the most recurring themes in the area of behavioural finance; Herding and Overconfidence. It was the research proposal stage which pushed me to come to a final decision. After giving my research proposal I was met with some constructive criticism from the panel which enabled me to further focus my thesis.

I began this process through the Introduction which assisted me in setting out the groundwork for this thesis. Given the restriction on the word-count for this section I felt it necessary to ensure a solid Introduction was constructed. The contents of this section was given careful consideration as this section was going to be needed to refer to in the sections to come.

The next part of this process was to ensure a concise literature review followed the introduction with particular relevance to the issues discussed in the Introduction. It was vital to cover a vast amount of literature in the particular areas of discussion. There were journals, books and websites covered in this section in great detail in order to gain an in-depth analysis into the studies already carried out in the field of behavioural finance. This was a vital period as it was essential to ensure that the type of research carried out in my research was going to be original and make a contribution to the area of behavioural finance.

The following section outlines the methodology in providing a summary of the research problem and the gap in the literature. This section was formed with intent to highlight the gap in the literature for qualitative type research. This type of research brought a sense of

originality to my study and made me feel like I was contributing to the area of behavioural finance which further encouraged me to continue to work hard and ensure a valuable contribution was going to be given. This was a rather testing period on deciding what method to use and the author considered for a very long period the use of questionnaires however after considering the advantages of an interview type examination, I felt it would be more beneficial to the research at hand as a more personal perspective would be gained.

This was a difficult period in the research process. I found it difficult to pin – point the most relevant particulars of the findings. Given I am relatively inexperienced in the field of research I found myself noting every little piece of information even though it may have had little relevance to the area I was focusing on. However, after much deliberation and scrutiny I managed to exclude any irrelevant detail.

I must say I enjoyed the next section thoroughly given I was comparing the findings of other studies to the findings of my own. Even though most of the findings were similar to those of studies previously carried out, the slightest difference in my own research gave me great satisfaction as I felt even the slightest difference in my findings were a valuable contribution to the ever evolving field of behavioural finance.

In conclusion to the research period it was quite a difficult task in trying to include the most vital factors. However, it was vital that a good conclusion was given to ensure a thorough analysis was carried out. I tried to include the particulars from the study which I felt were the most notable in my own findings.

In relation to doing things differently, I have to note that the one thing that caused me the most discern was the transcription period. This was an extremely time consuming period and I felt a lot of time was spent in this area when it might have been more valuably spent elsewhere. If I was given a wider timeframe I would have ensured to interview a greater number of people as I felt it would have given my research more merit.

This whole experience was a worthwhile experience and I feel it is one that every student should endure. It is fair to say there were periods of the unknown where I felt I was never going to finish but on completion I felt elated. I feel this experience was very worthwhile and will hugely contribute to my development. I feel the self discipline and determination I have gained from this experience will contribute to every aspect of my future life. It has thought me to prioritise events in my life.

Appendix B

Interview Questions and Relevant Literature Rational

<u>Interview Question</u>	<u>Relevant Literature</u>
Q1. Please tick the appropriate age category	Menkhoff et al (2006) Gort et al (2008)
Q2. How long have you been working as a fund manager?	Menkhoff et al (2006) Boholm (1998)
Q3. How large is the total volume of equity under your management	Hale (2010)
Q4. How would you describe your Investment style?	Forbes (2009) Private Equity Wire (2010)
Q5. What level of education have you attained?	Masood (2008)
Q6. How important are colleagues (from your own company) for you as a source of information when making investment decisions?	Forbes (2009) Menkhoff et al (2006) Schiller (1989)
Q7. How important are other market participants (not from your own company) for you as a source of information when making investment decisions?	Menkhoff et al (2006) Arnswald (2001)
Q8. Throughout your experience within this industry, what strategies have you relied on? With particular reference to pre and 'post' recession.	Eurekahedge (2004) Liao et al (2001)
Q9. With Particular reference to the bear market that struck in the early 2000's, could you tell me how you chose your investments ?	Ritter (2002)
Q10. How do you tend to make investment decisions? Is it a sole decision or can others be responsible too?	Pearlman (2010)

Q11. When it comes to making an Investment decision, do you and have you found that the best consensus is to go with whatever the majority say?	Chang et al (1999)
Q12. Do you and have you found that the best consensus is to go against the majority? With particular reference to pre and post recession – did you find it hard to maintain an individual stance during the Celtic Tiger?	Chang et al (1999)
Q13. How do you deal with the downturn in the economy in relation to any money lost?	Pearlman (2010)
Q14. Do you think you are more informed or engage in greater information gathering compared to your colleagues?	Menkhoff et al (2006)
Q15. How confident are you in your own abilities in managing your funds?	Forbes (2009) Grot (2009)
Q16. Do you find an up-turn in the market makes you invest more? (increases your confidence in investing)	Conrad et al (2006)
Q17. What overall rate of return do you expect to get on your portfolio in the next 12 months?	Menkhoff et al (2006) Forbes (2009)
Q18. What overall rate of return did you make in the last 12 months?	Arnswald (2001)
Q19. Do you think Fund Managers act rationally?	Olsen (1997)
Q20. What opportunities are you currently looking at?	
Q21. How do you rate the importance of incentives?	Masood (2008)
Q22. Give me your best estimate of where the euro v dollar rate will be?	

Appendix C

Institutional Details and Applicability of Institutions and Participants

Company A

This company is a subsidiary arm to its mother company. It focuses on Asset Management. Company A manages money on behalf of a wide range of institutional and retail, occupational DB and DC pensions, large multinational corporation, charities and domestic companies and is the largest manager of Irish pension Assets. It is currently managing assets of €30 billion.

Fund Manager A: operates in the fixed income department. She runs the active fixed income fund, i.e. bonds for her clients that would mainly include pensions.

Company B

Company B is an autonomous, independently managed investment management company. It is a subsidiary arm of its mother company. They specialise in the provision of discretionary investment management on behalf of a diverse client base. This company has been managing investment portfolios in Ireland, the U.S., Europe and Asia since 1966. This company is headquartered in Dublin.

Fund Manager B: manages the European fund in European equities. He covers a number of sectors and also works on the construction of portfolios.

Company C

Company C is originally an Australian company with an office in Dublin. It offers investment products, financial advice, philanthropic and corporate services to individuals, families, financial advisors and organisations. A range of investment, superannuation and retirement products are offered. Company C invests in all major classes including Australian and global shares, fixed income and property. They make active investment decisions on the analysis of an investment's quality, value and risk. Company C has an Asset Management team of 36 people ranging from Australian equity portfolios to International equity portfolio to Quantitative analyst teams.

Fund Manager C: manages the global equity fund. It's a global fund and he invests in a lot of different countries in a lot of different sectors.

Pioneer Alternative Investments

Pioneer Alternative Investments controls assets of over €2.5 billion. Pioneer focus on the optimisation of hedge fund products with the aim of assisting investors in the diversification of their portfolios without compromising absolute returns. Consistent with that focus, pioneer aims to manage risk rather than avoid it.

Adrian Doyle: manages the global equity fund for the Asian part of that fund in particular the Asia Long – Short hedge fund.

Simon Gordon: manages the global equity fund for the U.S. part of the fund.

KBC Asset Management

KBC Asset Management is a specialist provider of niche investment strategies for pension funds, charities and corporate from Dublin and New York. It is the belief of KBC that successful long – term investment strategies are based on diversification, innovation and specialism. It is their aim to improve their clients potential investment return with the lowest possible risk profile.

Harold White: handled the global equity fund in KBC. He also managed fixed income and corporate funds throughout his experience

Fideuram Asset Management

Fideuram Asset Management is an Italian company with a base in Dublin. Its principle activities are security broking and fund management.

Marie Simpson: manages the equity fund for the Japanese market

Helen Dodd: manages the global equity fund. She operates in many different countries in many different sectors. She follows an index called the ibox which references 125 different corporate in its universe and the purpose of her fund is to outperform the rreturns achieved by that index.

Appendix D

Interview Questions

Q1. Please tick the appropriate age category

25 – 35 ☐

36 – 44 ☐

45 – 55 ☐

56 + ☐

Q2. How long have you been acting as a fund manager?

Q3. How large is the total volume of funds under your management?

Q4. How would you describe your investment style? E.g. Aggressive

Q5. What level of education have you attained?

Q6. How important are colleagues (from your own company) for you as a source of information when making investment decisions?

Q7. How important are other market participants (not from your own company) for you as a source of information when making investment decisions?

Q8. Throughout your experience within this industry, what strategies have you relied on? With particular reference to pre and 'post' recession.

Q9. With Particular reference to the bear market that struck in the early 2000's, could you tell me how you chose your investments?

Q10. How do you tend to make investment decisions? Is it a sole decision or can others be responsible too?

Q11. When it comes to making an Investment decision, do you and have you found that the best consensus is to go with whatever the majority say?

Q12. Do you and have you found that the best consensus is to go against the majority? With particular reference to pre and post recession –do you find to maintain an individual stance during an up-turn in the economy?

Q13. How do you deal with the downturn in the economy in relation to any money lost?

Q14. Do you think you are more informed or engage in greater information gathering compared to your colleagues?

Q15. How confident are you in your own abilities in managing your funds?

Q16. Do you find an up-turn in the market makes you invest more? (increases your confidence in investing).

Q17. What overall rate of return do you expect to get on your portfolio in the next 12 months?

Q18. What overall rate of return did you make in the last 12 months?

1% - 20% ☐

21% - 40% ☐

41% - 60% ☐

61% - 80% ☐

81% - 100% ☐

Q19. Do you think Fund Managers act rationally?

Q20. What opportunities are you currently looking at?

Q21. How do you rate the importance of incentives?

Q22. Could you give me your best estimate of where you think the Euro v Dollar rate will be in the next month or two?

Appendix E

Categorisation of Participants

A total of eight active fund managers participated in this research, of which five were male and three were female. In terms of the fund managers age profile, five of them are between the ages of 25 – 35, with one participant falling into the 36 – 44 age group, another in the 45 – 55 and the most experienced participant in the 56 + category.

With regard to the years of experience in the industry, each participant boasts a rather impressive history given their age profiles. Within the 25 – 35 age category, four of the interviewees have ten years experience within the industry with three of them handling their own funds with eight years and the other with four years. The other participant within this category has seven years experience in the industry handling her own fund with four years. The participant within the 36 – 44 age category has twelve years experience within the industry handling his own fund with 10 years while the interviewee in the second oldest category has twenty years experience handling his own fund with sixteen years. The oldest participant has been an active fund manager with 30 years.

Each fund manager is responsible for their own fund ranging from €40 million up as far as €3 billion (Appendix B). It is with all of this data, the findings in relation to the decision making process for fund managers will be discussed with particular reference to the impact these factors have on a fund managers tendency to exhibit overconfident behaviour and the tendency to herd.

Of the five participants categorised in the 25 – 35 age category, each one of them have a Degree and a Masters along with certain levels of the CFA qualification. Of the older participants, two of them have a degree and the equivalent of the CFA qualification with the most experienced interviewee having attained the leaving cert and the equivalent of the CFA.

Appendix F

Closet indexing

One of the greatest problems associated with a fund is that as it grows in size, the pool of stocks that it can own a meaningful amount of shrinks. This often leads to what's known as "closet indexing." A multi-billion dollar fund ends up concentrating its holdings in the large firms that dominate the broad stock market indexes, and the fund ends up behaving a lot like that of an index fund. If you're paying an expense ratio of 0.1 percent it is ok however if you're paying ten-times that amount for active management, it's not ok. It also seems large funds struggle much more with market impact costs than smaller funds do. As they buy and sell the large blocks of stocks that their funds own, that activity is likely to impact the prices of those securities, therefore harming performance.

