INVESTOR PSYCHOLOGY; A STUDY OF INVESTORS' OVERCONFIDENCE IN DUBAI FINANCIAL MARKET, UAE

By

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Abstract

"The economist may attempt to ignore psychology, but it is sheer impossibility for him to ignore human nature. If the economist borrows his conception of man from psychologist, his constructive work may have some chance of remaining purely economic in character. But if he does not, he will force himself to make his own, and it will be bad psychology."

John Maurice Clark, 20th Century

This paper studies behavioral finance in Dubai Financial Market, UAE, through a survey collection method. While referring to the previous work done by economists and psychologists on behavioral finance, it tries to assess the investor population of Dubai in UAE. Overconfidence is the main highlight of this dissertation, and its effects are studied on investment decisions of the two genders. Dubai Financial Market is generally concluded to be a relatively confident (overconfident) market in the region, and the psyche of men and women participating in it are not following a cliché of the Arab world; Women investors are not less confident than men investors, do not under-estimate their skills. Male investors are however known to prefer more of short-term investments, have more market optimism, trade more frequently with a less degree of risk aversion, and experience a higher tendency to review their past portfolios compared to women.

Introduction

The modern world we are living in is a dynamic mix of our knowledge, and our behavior. What we know is as important as how we feel about it, since only when it is agreed with and understood that knowledge can be transformed in to actions.

The world of economics and finance is no different. While we gain knowledge in universities, apply them at work, and gain money to spend later and rotate the wheels of the economy, not all the knowledge diverts itself into actions without change and manipulation. Human psychology, the attitude of beings, their reactivity, and the type of this reactivity can be translated into varying different forms. Each of these actions will affect the economy in a certain way. Hence, for us to study the financial market of a country, we also have to pay close attention to its constituents who are the people investing, and spending in it. Behavioral finance, a marriage between financial economics and psychology is a recently formed science that pays close attention to human as labor in charge of capital that runs the economy, and their behavior responsible for the trends and cycles that run through the economy.

Human behavior is complex, and so is the psychology behind this behavior. How a certain group of people (a mass collection of them formed into a community or country) behave depends on the culture, the norms, the beliefs, and the stability of their environment, and hence varies from region to region.

In an attempt to understand the psychological breakdown of the investors of the country I am residing in, United Arab Emirates, and the subsequent effects they have on the

economy of the country and the region, I have decided to look into the factors that stand out for local UAE investors, and evaluate their strength. Dubai Financial market, the local stock market of the emirate of Dubai, is where the investors were picked from. Among the many psychological factors that contribute to one's decision of investment such as greed, hope, and fear, overconfidence is expected to be the major issue of year 2012, since many rewarding news have been given out into the economy in terms of refinancing arrangements and improving of economic fundamentals since the beginning of the year. (BI-ME staff, 2012).

It has been argued that overconfidence, instead of a balance of fear and hope is a driving force in UAE stock market. I have addressed this issue in my dissertation, through a study of Dubai Financial Market investors, acquiring about their belief in self and confidence in investment techniques. Is overconfidence really 'driving' the UAE market, or is it a simple contributor to the behavior of stock markets? If so, is it headed towards the right direction?

The rational of the study suggests that if overconfidence runs through the market, there must be absence of reliable analytical and technical skills, and a lack of expertise; the market should hence be far from efficiency. The objective of my research is to create a mirror image of UAE investors psyche to gain an understanding of their investment behavior through their investment beliefs and practices. I also would hope for researchers to gain insight into the subject matter through my work, and analyze overconfidence in Dubai's stock market even further, and contribute to a more educated and reliable financial market in UAE.

Statement of Hypothesis

The validity of the question raised about investor's overconfidence has formed the hypothesis of my research.

H_0: argues that UAE investors are heavily overconfident about their investment decisions.

H_1: argues that UAE investors are not heavily overconfident about their investment decisions.

Sampling and data collection method included survey distribution among UAE investors in Dubai Financial Market (DFM). I have accessed a 100 of DFM investors on a one to one basis, and acquired about their decision making techniques and their confidence in the success and profitability of their choices. Data presentation techniques include charts, graphs, and tables, inclusive of percentages and demographics. Limitations of the Study include a limited number of first hand research in the GCC region, which makes comparison of like cultures impossible when it comes to the measurement of self-confidence among investors. Lack of national conformity, different cultural backgrounds of investors and variable habits of investors from a culture to another affects the market and this research. Since investors speak in different languages, there is also a language barrier to my research in data collection.

Review of Literature

Operational definition of terms and concepts

Broadly speaking, behavioral finance in the context of investment distinguishes investor reaction into two main reactions; under reaction and over reaction. Kaestner, M. (2006), the author of the paper 'Investors' mis-reaction to Unexpected Earnings' argues that both reactions have cognitive bases in investors' irrationality. Keasetner's argument that investors show overreaction to long term investments that used to show 'unexpected earnings in the past', and under reaction to promised short term earnings received much attention from economists. This scenario specifically applies to western markets of course, and my dissertation will reveal how the scenario is different in Gulf Co-operating Countries (GCC) as there is more preference towards short term investments. Even though this preference has decreased after the crisis, it still stands out compared to western countries due to the notable instability of the region.

Generally, as I show later, any psychological reaction is rather short term in Dubai Financial Market, whether it is over-reaction or under-reaction. Broadly speaking, announcements of dividends and any news release can spice up, or down the reactivity(under or over) of investors, yet it could not be measured with a snap shot of survey in one day and needs to be studied over several occasions.

In another paper called 'Piety and Profits' by Bialkowski, Etebari, and Wisniewski (2009), the reactivity of Muslim traders during Ramadan is assessed and it was found that there was a general optimism in the market, rather upward trends in the stock returns due to the positive psychology of fasters. This also applies to the DFM traders, as they are

mostly Muslims, yet it does not apply to this specific paper as the survey is conducted before the month of Ramadan. However, short interview with brokers at DFM suggested that this is true as long as the overall economy is not shaky and under stress.

The situation of the UAE local market in terms of the desired time horizon of investment has been put to words delicately by Nick Tolchard (2011). He stresses on the fact that the majority of the UAE population have a desire for investments shorter than five years in life. He argues that 'more than two-thirds of those polled (69%) had a time horizon of less than five years for investments made in 2011, while less than one-third (31%) had a horizon just beyond five years, both short when compared with investors in the West'. He also addresses the contributing factors to this preference for short-span investments. In questing random investors, he found that '23% cited cultural preference to be the main reason, while 22% believe that lack of investor experience is the driver. A similar proportion of population (21%) stated regional stability as a key factor. It appears that this short-termism is in itself a short-term issue, with nearly one in five (18%) of all investors' indicating they intend to extend their investment time horizons in 2012. For 2011, just 4% of retail investors say they intend to lengthen their time horizons. This jumps to 20% for 2012, along with just 7% of institutional investors who say they intend to lengthen time horizons this year. This jumps to 15% for 2012.'

Prospect theory and mental accounting are other approaches to identify with irrationality of investors at times. Prospect Theory, discussed in details in the next paragraph, insists on the importance of changes to wealth in general versus levels of wealth, more responsiveness to negative information than to positive due to risk aversion and diminishing sensitivity by time.

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The Paper 'What is Behavioral Finance' by Ricciardi and Simon (2000) discusses behavioral finance in four paradigms. I stress more on this literature review as it is the backbone of my survey and highlights the direction I would like to seek in my own study of DFM psychology of brokers. The four paradigms of behavioral finance are as follows:

A. Overconfidence: Human beings are naturally biased against their choices, if successful once with a certain choice, investors cling to the idea as it being 'the' secret and tend to apply it again in future decision makings.

Ricciardi et al. argue that 'we have a tendency to over-estimate our own skills and predictions for success,' and overestimate the probability of our projections. An interesting point to draw your attention to is that men are often having a higher degree of overconfidence (more than 45%) in investment decisions compared to women. This ratio goes up to 67% in single men. As a result men are prone to making bigger losses and higher costs of transactions due to their over reactivity to market information. 'These trading costs reduce men's return by 2.5% compared to 1.72% by women.

B. Financial Cognitive Dissonance: As people have to face new investment decisions, they often face stress and anxiousness. Morton suggests that we rationalize our choices by either changing our past beliefs and values or attempting to justify it, in order to gain confidence. We might either alter our decision making process to attain different results, let go of old methods such as Price to Earnings (PE) ratios and follow new rules of thumb, or stick to the old method of identifying risk and revenue.

C. Regret Theory: Individual, group or corporate investors all experience regret to a certain extent while considering investment options. The feeling of regret not only comes after a loss has been made, but even before a decision is being taken, amid considering the opportunity cost of each investment option. It is the fear of loss that brings forward the experience of regret. Individuals are more likely to favor investment in mutual funds compared to individual stocks. Knowing that other people are sharing the loss and will go through the same scenario as them has a comforting effect that brings confidence and relief. This is another reason why investors in individual stocks face either a greater or lower return compared to an average investor in mutual funds.

D. Prospect Theory: Investors look into the prospects of their decisions, but often in an inverted manner. Ricciardi argues that decisions weights (weights given to certain investment decisions according to profitability) often tend to 'over weigh' small probabilities and 'under weigh' moderate or higher probabilities. Assume that there are two investment options:

A. One with a $1000 return and high certainty

B. Another one with a 60% probability of giving a $2000 return and a 40% probability of giving a $200 return.

Most individual investors would give a high decision weigh to the $1000 return investment, even though the risk is not diversified, and the certainty of return is high, while as an educated investor the package that holds two different assets is much more

likely to over perform. 0.6*2000 + 0.4*200=$1280 Ricciardi argues that investors would favor greater risk as a payoff for avoiding losses.

Hence the prospect taken by investors plays a role not only in net accumulated profit, but the direction in which the market moves toward. In the paper called 'Behavioral Economics', by Sendil Mullainathan and Richard Thaler (2000) these are termed as 'bounded rationality, bounded willpower, and bounded self-interest'. The paper suggests an interesting approach-that is not used in this paper- on how to come up with a way to put psychological factors affecting financial markets into testable predictions. It raises the question that in an efficient market with rational, experienced investors, do only investors who act rationally survive or do others with fears and over/under reaction also exist and survive.

'Behavioral finance is the psychology of expectations in finance theory.' An investor would first look into security prices, forms his own price expectations, considers expected returns, and in doing so considers two important factors; the possibility that the stock is mis-valued and the risk associated with the investment. Decision-bias proposes an assumption in behavioral finance suggesting that investors and managers are less than fully rational. They have non-standard preferences and biases, and the factors underneath this bias come from the psychology of each individual investor. (Barberis and Thaler, 2003)

In studying the quality of investors' decision making, certain measures and quantitative figures come to use. Alpha is one of the figures that are mostly used when it comes to the study of behavioral finance. Being the difference between a portfolio's risk-adjusted return

and the return for an appropriate benchmark portfolio, alpha can be used as a statistical measure for human predictability; his optimism or pessimism. What feeds into alpha is an investor's superior information, his better processing of information, and his behavior bias.

Types of behavioral biases include non-wealth-maximizing behavior, heuristic bias and systematic mental mistakes. Investors typically invest in a portfolio based on their expectations of the profitability of the instruments and their riskiness. As today's price of a stock reflects it's tomorrow's market expectations, in order to be willing to buy an instrument, one need to be optimistic about the future performance of the underlying stocks and predict an improved return on the instrument than the market actually suggests.

All economic models make simplifying assumptions about market conditions and the behavior of market participants. Behavior finance questions the underlying assumptions of efficient market hypothesis; that is, do investors act in an unbiased manner to maximize their portfolio value? Do they always act rationally in their own self-interest?

Theoretically speaking, there are two groups of managers, as well as investors. First are traditional managers and investors, who try to rely on better understanding and familiarity with an industry or market, or to learn about profitability tricks. Second are quantitative investor or managers who believe that information is readily available to everyone and hence, in order to make more profit-leading decisions, one has to come up with the right processing, quantitative, and analytical techniques. By addressing the mental error and wrong predictions, behavior finance helps to locate some anomalies in efficient market hypothesis. (Russell Fuller, 2000)

One way to address the problem of behavioral finance is to break down and study investors' decision-making process in the first place; that is to rely on the psychology of decision-making.

An issue to consider is that investors and specifically fund managers are known to be generally overconfident about their performance and hence their capability in taking decisions. When James Montier asked a pool of 300 fund managers about how they perceive their job performance, he found that 74% of them view their performance to be above average, while all the 100% believed to be performing on average or above. While one would rationally assume that 50% of the population should be above, and around 50% should be below the average, the outcomes of Montier's research did not even approach this statistic. The trick is that one needs to recognize the thin line that separates confidence from over confidence. Believing in one's ability to choose realistically, and allowing for possible minor mistakes is confidence, yet unrealistically believing in one's flawless decision making skills with no potential of making mistakes can pull one into overconfidence trap. In a study by Terrence Odean (1998) called 'Volume, Volatility, Price, and Profit When All Traders Are Above Average', the author rightly argues that overconfidence showcases itself in an investor's illusion of over-the average-ability to choose the right stocks at best times, and not only at a good time. He found that overconfident investors not only trade more often than an average investor, they in fact turn out to achieve much lower returns than the market over the long run. While an average investor is competing with professional brokers and fund managers who often have a professional source of computational and informational resources (who themselves fail to beat the market often), he/she needs to think twice before giving into bias about the

existence of an undervalued/overvalued stock, and the right time and method of entry or exit, in or out of an investment.

Just like any other measurable concept in social sciences, overconfidence has also been quantified to ease its comparison. The index introduced by Sate Street, called Investor Confidence Index ICI has been formed for the same purpose. State Street, a financial service provider based in Boston, that offers market research tools focused on institutional investors. Investor Confidence Index in effect is a reasonable measure of how determined and confident the investors are in their decision-making, designed by Kenneth Froot of Harvard University and Paul O'conell. Market values are taken at 10 A.M. eastern time on the last Thursday of every month. By comparing the actual sell and buy quantity of institutional investors ICI measures the risk appetite of investors. An index of 100 is considered neutral, at which point investors have no preference over the increase or decrease of the ratio of risky assets to risk-free assets. The difference between the ICI index and those indices that come from surveys and questionnaires is that ICI values are based on actual data, as opposed to the predictions and expectations that are reflected in surveys. The study of ICI covers the United States, Europe, and Middle East individually and has a separate global measure consisting of all markets too. Their data reveals that the global Investor Confidence Index has decreased from 100.8 in 2011 to 92.4 points in 2012, a general decrease of 8.3 % (1 dp). North American ICI has decreased by 9.6% (1 dp), from 99.3 in 2011 to 89.8 in 2012. European ICI has decreased by the slightest proportion of 1.2%, from 92.8 in 2011 to 91.6 in 2012. The interesting point however comes into play at this instant; Asia has in fact experienced a general increase, even though a minor of 0.4% from 96.5 in 2011 to 96.9 in 2012.

It is evident from the numbers and the graphs that North America and Europe has experienced a decline in their investment confidence, and has hence set on a defensive approach. These markets seem to have experienced the most risk aversion. In response to their sovereign debt crisis, investors have added to their equity holdings in Asian markets, and have contributed to an increased ICI for the Asian markets.

Investors' overconfidence about their valuations and trading skills lead to increased trading volumes. At times when investors are holding a greater proportion of shares, or when the weight of the portfolio comes from investment in small-cap stocks, overconfidence and disposition effect trading are more dominant. When it comes to overconfidence and trading volume, Thorleym, Statman, and Vordik found that the turn-over is positively related to lagged returns for months and years, even after controlling for turn-over trend and contemporaneous volume-trading relationship. In their work on investor overconfidence and trading volume Thorleym et al. remind us that overconfidence is known to be a 'pervasive behavioral norm in competitive settings.' The question of psychology raised here is if their over-estimation comes into play in measuring their financial skills and investment abilities only, or is it them being overly confident individuals in general and in the first place, and that is why they have chosen to work and trade in finance industry?

Glass and Weber (2003) differentiated the dis-calibrated nature of over-confidence and the idea that most investors view themselves and their techniques to be above average; the dilemma known as overconfidence versus the disposition effect. Investors tend to realize profits and sell (cash-in) for improved stocks much quicker than realizing losses. In

other words, investors tend to hang on to losses for longer periods in hope of improvement perhaps, yet do not show patience when it comes to making profit, and are willing to cash out. The important point to keep in mind while studying individual investor's trading volume is to wonder whether or not it has the capacity to actually affect the structure and functionality of the market or not.

Disposition effect was initially introduced by Shefrin and Statsman in 1984, through combining the prospect theory with tracks of pride and regret. Investor overconfidence theory however differs from disposition effect. The disposition effect looks into one side of a trade; the desire of an investor to sell all his security in realization of profits, while this could affect the price equilibrium of the security, the other side of scenario with an investor buying a stock in anticipation of price increase is disregarded. The author of the paper argues that trading volume fluctuates after sharp increase or decrease in prices, hence one needs to monitor these fluctuations in short time intervals proceeding price change. Daniel, Hirshlie, and Subrahmanyam (1998) had come up with equations that had incorporated investor's confidence in spotting misplaced stocks, and their performance predictions. Later on, Gervais and Odean imitated their work in 2001. The issue to be noted in their arguments was not only investors' false faith and trust in the precision of their predictions, their access to reliable private information, or the efficiency of their analysis techniques, but that the degree of their very own 'self-attributed bias' changes with 'realized' results and profits. Over confident investors are reportedly noted to experience enhanced/improved confidence through high return periods, even if everyone else in the market has enjoyed a general increase in return. Following the same spirit, losses decrease investors' confidence, but not in a symmetric manner; that is the

magnitude of boosted confidence during high-return intervals does not equate that of the dropped confidence at times of loss. It follows the previous argument that changes in trading volumes are good indications of investors' bias after profits or losses have been made. Of the many complex human emotions, pride follows a gain in value and regret follows a value drop in values. A drop in trade activity implies a drop in investor's confidence.

De Bondt and Thaler (1994) studied the risk aversion of investors and tracked down the behavioral model of investors in today's modern finance 'Financial Decision Making in Market and Firms'. They argued along the same line of idea that an average investor is said to be a rational, risk-averse, decision maker. He is believed to look for maximizing profit and utility while being an 'unbiased Bayesian forecaster'. De Bondt et al. argue that the problem is here itself, because no investor masters the art of prediction and decision making under varying unreliable assumptions of future's performance. Their approach is by looking into actual examples of investment, a collaborative work between economists and psychologists. Looking into investor's behavior, De Bondt et al. wondered why do investors give too much weight to 'vivid information' and indulge in over confidence. They believed that human psychology runs its roots in every market, specifically those related to financial services; should it be in public finance where tax payers respond to changing policies, in labor markets where labors have to decide on their job, salary expectations, or in microeconomics where spending and saving is initiated by consumers choice. However, when it comes to finance and financial planning, most if not all assumptions are based on the presence of a rational decision maker, who even though has to consider many options before investing, will however make the best decision. He will

make the most rational decision even though he has to 'optimize' everything, and behave no differently from a scenario to another, and always acts straight forward. Most of the available finance literature is heavily focused on mathematical models and rational expectations, with little or no interest in behavioral aspects of investors, their likeliness to go through differing behavioral/emotional stages, and in general too little interest in the 'decision making processes and the quality of their judgements'. (De Bondt and Thaler, 1994) As a result, finance had been nearly 'deprived of people'. They looked into market forces, and criticized the general exclusive idea held by economists that irrationality of some investors will be beaten by rational, well-informed opportunity seekers (investors) and forced away from the market. While it might sound right in theory and over the long run, yet the day to day activity of the markets are driven and affected by these false investments and the overall shape of the market would no longer look perfect and flawless. This effect is hence studied by studying a fully rational investor's model versus that of a noise trader (a quasi-rational investor). Have all the investors being rational, the trade conditions would have been costless options, at a lifelong equal to the maturity time of the securities, and investors favoring the very same time horizon, very few quasi-rational traders active in the market with positions where short-selling happens only by rational traders under certainty. Hence, even at diverging prices from the normal target, arbitrage opportunity is only readily available under such simplified conditions. It is equally false to consider that irrational quasi-rational investors lose wealth against rational ones. In fact, under some circumstances, irrational investors are more likely to make profits and arrive at higher returns than rational ones. Noise traders are generally meant to have higher wealth due to their lower utility, even though the same characteristics may

lead them to make huge losses. Only an irrational risk-taker can go against, slower or faster than the average crowd and hit on uncommon profits. They eventually argue that as evolutionary forces tend to be slow in their effect, even if noise traders hit on lower returns, they are still strong enough to affect the market. The theories work only because they are based on a rational investor's model, and the assumption is that all investors are rational in nature; now that this assumption is way too simplistic and ideal, we as beings are made up of a complex construct that has the potential to behave unexpectedly even in the most expected situations. (De Bondt and Thaler, 1994)

Earlier works had been simpler, yet more considerate of human's behavioral being. Works of Irving Fisher, John Keynes, Benjamin Graham, Meinsterin and Elster (1991) had great insights into the matter, yet this has been replaced by 'representative agent's model' in modern finance theory, where every investor's action is predictable and every outcome follows is what economists believe in, with little flexibility. Most people, inclusive of investors and financial modeling experts believe that themselves or many people they know do not necessarily follow this path, and yet these rigid models with no flexibility in mentality, ideology, and behavior still exist.

It might be true that the 'as if' defense by Millon Friedman (1953) exists and holds in practice; that is even though investors cannot be fully confident in the accuracy of their predictions, yet they can hold a position in which every scenario could be covered and any event could happen, 'as if ' the investors were all set for it; as a theory is put to use only under the assumption that its predictions are reliable in most cases, one wonders how come are the financial modeling theories planned and practiced, while in certain occasions

of crises and crush, securities has experienced a drop or growth of as great as 50%, as in 1987 and 2008.

Over the past two decades and after the rise of psychology, psychologists such as Kuhneman and Tversky have proven that the "usual axioms of finance theory consisting of utility theory, risk aversion, Bayesian updating and rational expectations are descriptively wrong"; existence of over confidence, and framing-based investments (based on how a problem is framed) as the main incentive (as opposed to the potential return) are examples of it. While De Bondt and Thaler considered these deviations from the normative model to be systematic, they believed that aggregating these deviations cannot make it disappear. (De Bondt and Thaler, 1994)

An interesting position taken by Graham and Dodd (1934) describes the scenario with a use of simile. They wondered, whether the stock market is a 'weighing machine' where a set of mechanisms are used to weigh the options and identify the correct choice, or a 'voting machine' where the crowd of investors get to register their opinions and act based on their will anywhere between rational to completely irrational, which is an attitude based on a mixture of emotion and reason. De Bondt and Thaler believed that behavioral finance can come to rescue at this point, by offering a plate that promotes maximizing utility optimization, and use of Baye's rule, yet offers a comprehensive study of the market and human psyche when it comes to individual/group decision making. Unlike most authors who have complained about the limited availability of literature on this topic, De Bondt et al. found their quantity and quality fair and sufficient for further digging and search. They also argued that despite what is expected of their paper, they do not criticize

the existing theories of modern finance. They in effect have considered most of these theories reliable such as the perfect market-perfect people approach, and assumptions that a typical investor is focused on self, and has his/her interests in mind, tries to maximize profit, exclude possible losses and prefers more wealth to less. They however proposed a further look and consideration within the same frames. They also credited the Black and Scholes model of asset pricing to be coherent and true, even though it might appear incomplete to a certain degree. They considered behavioral finance to offer answers to exceptions and puzzles that deviate from these theories. Speaking about the common understanding and assumption of behavioral finance to be undisciplined, some theorists believe that any pattern could in effect be theorized and rationalized, what is known to be 'model drodging' by Famn(1991). De Bondt et al. therefore argue that 'behavioral research' is the most disciplined and reliable method, closest to economics as it is closest to the behavior of the players in the market.

On the contrary, Miller (1986) argued that behavioral finance is a distraction from the dominant market factors that needs our attention. De Bondt and Thaler's criticism of modern finance theory acknowledges the assumption that individual investors are risk averse, utility-maximizer, and 'unbiased Bayesian forecaster", yet they impose two incompetence on the theory. For one thing, some assumptions are not necessarily true such as the argument that 'people violate the substitution axiom of expected utility'. For another thing, some assumption sets are incomplete, like the failure to include and discuss the social norms, when it comes to financial activities such as decision-making. Some of the most relevant concepts of behavioral finance are mentioned to include over confidence, non-Bayesian forecasting, loss aversion, framing and mental accounting, and fashion and

facts. Overconfidence comes in over-looking their flaws and the possibility of making mistakes. Non-Bayesian forecasting argues that most investors have got not enough knowledge of Bayes theory. What they look for instead is similarity in patterns, and what they call 'representative heuristic'. (Kahneman and Tversky, 1974) This can lead to systematic errors. Following similarity assumptions, investors tend to focus on only the most recent relevant events, and ignore the relativity of other odd events in the past. Predictions also tend to be extreme at points, when subjects are over-reacting to the present evidence. (The question raised here relative to the UAE market is if there are enough past events that can be used as a measure of comparison, or is it that the recent events in the market all we really got?)

Loss aversion argues that people favor gains more than they dislike losses. Specially, it has been proven that losses could be weighed twice as heavy as gains. Framing and mental accounting argue that depending on how a trade is framed mentally or put forward verbally, we could get differing results. While two separate trades, one loss and one of gain could not both happen quite willingly, yet a lager trade combining the two gain and loss portfolios with a net gain can be much more appealing to investors. Fashion and fads allow one to conform to society norms and habits of investment, risk taking and expenditure, even if these rules change drastically over time and space. Regret, responsibility and prudence: It is often suggested that negative outcome should be clarified from negative decision, in an attempt to minimize the feelings of regret. Allowing an external agent to do the decision-making could improve self-confidence, as it is easier to move on from someone else's mistake in the market, than self. It is also known that regret is less severe in prudent conventional decision-making.

De Bondt and Thaler argued that markets are not reliable references to help eliminate rationality; hence in order for one to set on a corrective path to rationalize the performance of investors, one must look into the market anomalies. Most of the available literature focuses on trading volume. The difference in investor's reaction is partly due to the differing quality of information available to them, and their understanding of it. In fact, one factor that initiates trade is the disagreement between investors; while one perceives a drop in prices and hence a sell plan, another assumes a sharp increase in its price and develop a buy intention. If they all consider a security to be a buy, then no one would be willing to sell, and no trade would ever happen. It is human psychology that promotes varying thoughts and position taking, and that makes people want to prove to others wrong and emphasize on the reliability of their arguments. One should wonder where the high turn-over rate of the market is coming from. Why do institutional investors tend to experience a much larger turn-over rate than individual investors?

A generally proven idea to note while discussing behavioral finance is that index funds tend to experience the highest returns, now that very few funds tend to experience the highest returns, and very few funds seem to be able to beat this return. Yet fund managers are still very active in the market, while the index funds are only taking up a decent share of the market. Does that not prove that man is still hopeful, confident, and rather overconfident that it can turn out the result to their benefit and beat the simple mechanics of the market? (Note: De Bondt and Thaler have found however that past loser companies are holders of higher risk with a higher beta, only at times when the market was rising.)

Hawanini and Ken (1991) were interested in studying market anomalies and deviations away from the Efficient Market Hypothesis, and investors have tried to act as unconventionally as buying out-of-favor stocks. Holding on to it for a long while and selling it at a huge return, De Bondt et al. highlighted that these companies are the ones with a low price to Earnings ratio, a low ratio of market value to book value, and low past returns. Investors rely on the rationally depressed value of stocks, as the 'here-and-now' values for the stocks are very low. They argued that if past losers are expected to out-perform the market in the future, then why don't we all invest in poor stocks and hold it and wait? (Note that past losers land about 8% above past winners every year, Chopra et al. 1992) Some such as Chan (1988) and Ball and Kothari (1989) argue that the mentioned stocks are rather to be called risky than under-valued.

Humphy Neil (1989) quotes William Stanley Jevons argument in 'Primer of Political Economy' that in investing, it is foolish to do what everyone else is doing, because there certainly are too many others doing the same thing. Hence, it must pay to systematically bet against financial analysts' earnings forecast.'

Getting into further details of risk aversion, and the general perception of risk, De Bondt et al. added their valuable input. They argued that people's conception of probabilities is wrong, and that they cling on other signs such as the relevance, recentness, or effectiveness of an event to make up its probability. 'Value-money-managers' are typically interested in stocks of relatively high riskiness to catch the higher return, yet this goes against the odds of the market and requires a great deal of courage, confidence and faith in analysis skills. Common investors avoid regret and hence risky assets, yet the

same reason of riskiness increases the profitability and the attractiveness of the products. The gap between perceived risk and actual risk could in fact have an equal effect on price rise; psychology of beings fades the border between reality and perception. Opposition to this topic stands by Fama and French (1988) who believe that rationality and behavioral explanations of return predictability cannot be separated, unless through a thorough study and formation of an equation between return and 'perceived risk'. The marriage of 'biased forecast' and 'misperceived risk' creates a platform that feeds into the success of the contrarian theory. Post earnings announcements are believed to experience under-reaction, rather than over-reaction (Bernard And Thomas, 1989, 1990). While stock returns are the best and most visible market information to act upon, the market and investors seem to be surprised of sudden high returns and pause at times for up to 3 quarters before reacting fully.

De Bondt et al. offered a behavioral explanation of asset (closed-end fund) pricing, They argue that investor's sentiment will not change over time, especially if the average of returns are taken. Upon optimism, the price of funds increases and the discounts narrow. IPO managers could take advantage of people's psyche in favor of their listings. Reducing the initial price of IPOs to make it look underprice could create excess demand, up to a fake level of greed for those who missed out.

Behavioral finance aids in solving the puzzle of equity premium, the differential between return and risk free rate. Mehra and Prescott (1985) suggested that only a group of overly cautious and risk-averse investors could contribute to a large equity premium.

Constantinides (1990) approaches the puzzle suggesting that habit formation can make investors unwilling to change their consumption from a period to another.

Benartzi and Thaler expanded on Kenma and Tversky's Prospect Theory and consider the utility derived from investment, and argue that the marginal utility from a gain is only half effective as the disutility coming from a loss. Depending on how effective an asset is being evaluated, the attractiveness of securities varies; The more the frequency of evaluation, the less the attractiveness. Consider an investor who checks the value of his investment everyday as opposed to one who checks it every once in a while. Daily returns could fluctuate variably, and one day loss or profit could be large, but not a fair basis for judgment. Prices tend to correct themselves and balance out through time. Hence longer term evaluation makes investment choices more attractive. 'Myopic loss Aversion' refers to the short term investing mania, as investors would fear the rapidly varying prices.

De Bondt and Thaler discussed the effect of dividend payment and policies on an average investor, and how it affects his/her perception of the firm's value. Even though dividend policy does not matter in perfect markets according to Miller and Modigliani(1960), judgment of a firm's value vary greatly according to how much is paid as dividend. This concept gets surprisingly high when they actually favor the payment against their own long-term interest. Dividends are taxed at a higher rate than capital gains. Any attempts in reduction of dividend for investor's best interest will make the investor unhappy and ready to misjudge the real value of the firm, and complain about the

cut in dividends. Yet managers still insist on doing so, to make their securities more appealing to an average investor. (De Bondt, and Thaller, 1994)

Lawrence Tai, a professor at Zayed University refers to the use of technical and fundamental analysis as the still existing source of value analysis for stocks in modern finance theory. While traditional finance theory argues an investor to be a rational risk taker who looks into risk-return trade-off for stock analysis, Tai argues that it lacks validity in revision of the past and reliability in prediction of the future. Tai pays close attention to the effect of news on investors, and stresses on the importance of worldwide net on an average investor's decision making. The varying investment suggestions given out by the abandoned amount of online brokers whose professionalism is not proven either plays an important role on investors' psychology in the market. At certain points when it came to uneducated investors, use of online literature such as 'get rich quick', 'the promising reputation of the firm', and ' a feel for company's products and services reveals its profitability' brought the most reaction among investors and have driven inflationary results. (Shiva, 2008) The threat of internet is the most for starters, as it gives them a fake sense of overconfidence over the stock options they suggest. Tai perceived the external noise to be dangerous, and noise traders who believed to have access to some reliable internal information often through online traders' posts and publications, to be threats to the health and stability of an efficient market. He believed that they in fact create a false atmosphere of hope and confidence. Maditinos, Sevic, and Theriou (2007) showcased how individual investors rely on online information and analysis, noise in the market, media, and newspapers, while professional traders rely on technical and fundamental analysis of the market.

Tai's study shed light on the differentiating tools that are used by individual investors and professional ones. His survey of 19 professional and 85 random individual investors in 2009, trading in Abu Dhabi Financial Market and Dubai Financial Market revealed that both groups consider foreign markets to be the most important factor when it comes to decision making. They however differed in how much value they would give to portfolio analysis and the news from media. While professional investors considered portfolio analysis to be one of the most important factors before making decisions, individual investors considered that negligible. Yet, individual investors gave too much weight to the importance of the news from media, which was considered non-important by professional investors.

The Hindu Business Line on 'Overconfidence and how to fix it' by Adarsh Gopalakrishan argues that overconfident investors trade more often in higher volume and arrive at lower returns. It sees the problem in not knowing where the line is between things we can control, and those we cannot; human nature assumes in his control that are not always realistic. He further argues that not only overconfident investors make lower returns in the long run, but they may in fact contribute to increases in prices due to frequent trading. He argues that feeling overconfident does not always come to feed one's ago, but sometimes to make him optimistic and willing to carry on a path. Since past ability sets the path for further success when it comes to competition, investors think that the same applies to stock markets, and hence ignore the 'chance' portion, which indeed is the bigger portion in stock markets. Even though mutual fund managers disclaim that past performance does not set future's performance, yet who would be willing to invest in a

previously loss-making business anyway, unless he sees a positive trend. (Adarsh
Gopalakrishnan, 2007)

A Recent Outlook on Investment in UAE

Friends Provident International Investor Attitudes reported that UAE's investor
overconfidence had been highest since the summer of 2011, after the global crisis of 2008.
Despite the political unrest in Middle East, as much as 70% of investors had a positive
perspective on investment return in 2011. Nick Kirrage of Schroders UK Equity team
argued that overconfidence is strongest among people when it comes to forecasting the
future and the wrong assumptions is that businesses and industries are safe and stable
ways to invest in, to keep their money at times of political uncertainty. (Mindful Money,
2011)

Even though the UAE debt crisis in 2009 had its effects on UAE's investor confidence
index, yet investors have been calmed down by government interferences. Following the
positive, prosperous news in 2012 regarding a boost in economy, the credit default swaps
have been as low as 372 basis points in March 2012, their least in the past four years. The
continuation of this increase in confidence and drop in credit default swap prices could
result if the two major Sukuk repayments of July and November come out successful and
paid for. The former is the Dubai International Financial Centre's Sukuk due of US$1.25
billion on July, 2012, and the later is the Jebel Ali Free Zone (JAFZA) Sukuk of US$2
billion in November, 2012. Biswajit Dasgupta, the Head of Treasury department at
Investor AD argues that lack of new money supply and increased risk appetite has

encouraged investors to dive into Dubai's market. Dubai's economy had been sending positive signals to investors by indulging in trade, tourism, and financial services, and increasing their communication with investors. The role Abu Dhabi played in Dubai's economy is quite important after its interference and back up in calling off parts of the debts of the emirate. Abu Dhabi looks out for UAE economy's image. (Business Intelligence, 2012)

Despite the existing signs of over confidence in UAE's market, yet this might be hard to recognize if not being compared to other markets. Since the world economic crisis of 2008, all the major indices have experienced a drastic drop and hence comparison of overconfidence makes no sense under a timeline. Researchers at Shuaa Capital, an investment bank headquartered in Dubai, UAE, have done an extensive work on investors' confidence in the GCC region. Shuaa's research arm first looked into GCC Investor overconfidence Index, which consisted of UAE, Bahrain, Saudi Arabia, Oman, and Qatar. They later replicated the idea individually for each market, and reported their results since 2009. Shuaa's GCC Index shows a net increase of 100 scores from 2850 to 2950 over the past four years, while experiencing rises as high as 3400 and as low as 0. Of limitations of this study is that it only started in 2009, after the great economic hit of 2008, hence it misses the lowest point and an important base line; the level of confidence in recent years cannot be compared to that of 2008 and prior[1].

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[1] http://www.shuaacapital.com/en/businesslines/research/familyofindices.aspx
http://www.shuaacapital.com/en/businesslines/research/familyofindices/Historicaldata.asp
xhttp://www.shuaacapital.com/en/businesslines/research/familyofindices/Historicaldata.as
px

Study of the UAE market reveals a change in trends over the past; A net decline in shares value of the banks; A net decline in shares value of the industrials; A strong net decline in shares value of the insurance industry; A net increase and positive growth in the value of Nasdaq Dubai shareholders, including Damas, DP World, and Dubai Gold Securities; A general decline in service industries; A general decline in transportation industries.

Most sectors in the economy have experienced a decline in their share values, yet only the major local institutions/companies have experienced a net growth in their share value; these firms such as Damas, DP World and Dubai Gold Securities are owned by institutional investors and individuals coming from big families. This shows that over confidence protrudes itself in the context of a group, mostly one that comes from a fairly safe monetary background.

Of possible ways to gain a fair understudying of the market's psychology, one can look into the relationship between the following pairs. The market returns response to a market shock, security turnover response to market shock, security turn over response to a security (turnover) shock, security return response to a security (return) shock.

Summary

- Over confidence could differ between males and females.
- Financial Cognitive dissonance in UAE market has to do with how investors rationalize their decisions. Do they review their actions, correct their

mistakes, change their techniques, or do they simply find an excuse for what they did.

- Regret theory has to do with fear of loss, which could vary among investors in single stocks or mutual funds.

- Prospect Theory is known to under weigh high probabilities and over weigh low probabilities.

- Investor overconfidence in UAE; they listen to family, friends, brokers, or a combination of all. In UAE market, the priority goes to family members who are also active in the market, friends, and brokers respectively.

- Over reaction and under reaction both result from investors' irrationality.

- Preference towards short-term investment versus long term investment is an indication of irrationality of the investors, and possible pessimism.

- Over confidence links to more frequent trade. (Compare the average frequency of investment in DFM over its overall market cap, to that of LSE or NYSE).

- The lengthening of the time horizon of securities signals confidence and optimism.

- Factors important on the degree of irrationality include the general economic instability, cultural preferences, and lack of investors experience in trade.

- In 2011, investors decreased their risk by a great amount, yet this is expected to reverse in 2012.

- Risk aversion and short-term time horizon is an interesting mix of the UAE market.

- Since it is generally believed that private investors are looking for a lower return, it is important to know the demographics of the market, in terms of private owners of securities, family or corporate ownership.

- Men trade 45% more than women, and earn 1.4% less in net return.

- Families tend to look for an average of %15 return, and firms for %17, since families are more cautious with their own money; yet the proximity of the two figures show that individuals, or collected groups of investors believe in their choices reliability.

- The wealth of the governmental companies publicly listed in the stock exchange, usually coming from a selected group of local families investing in it, is a safe choice in the eyes of UAE, in particular Dubai investors. Hence they tend to show the least irrationality in their investment portfolios when it is consistent of like governmental companies(such as Damas and DP)

- We could in effect compare an individual's return to that of the market. Over confident investors come up with lower returns.

- Trading volume is a good measure of the investors' confidence in the market.

- The degree of self-bias changes with realized return. The more actual profits one makes, the more confidence he/she gains.

- Over confident investors are reportedly noted to experience enhanced/improved confidence through high return periods, even if everyone else in the market has enjoyed a general increase in return

- People's conception of probabilities is wrong, and that they cling on other signs such as the relevance, recentness, or effectiveness of an event to make up its probability.

- Loss aversion argues that people favor gains more than they dislike losses. Specially, it has been proven that losses could be weighed twice as heavy as gains.

- Framing and mental accounting argue that depending on how a trade is framed mentally or put forward verbally, we could get differing results.

Comments and Criticisms

Behavioral Finance is the study of human reactivity to market information and its effects. It is an attempt, to combine the psychology of humans to applications of finance. In the paper 'What is Behavioral finance' by Ricciardi and Simon, Behavioral finance is mentioned to be a blend of psychology and sociology into finance. It's a measurement of investors' reactivity to market information or the reasoning patterns of investors including emotional process and the degree to which it affects the investment decisions. He argues that traditional finance is the center piece of Behavioral Finance and it provides a good reasoning for 'market anomalies such as bubbles and speculative uprising effects and crashes (such as January effect in 1999 and the economic crisis in 2008).

The formidable fact about investors' contradictory predictions of the market and performance of stocks suggests that 'a person's wrong judgment and loss leads to another's profit'; and this is another way in which behavioral finance becomes important.

My research shows that most relative family members have the same projections about the performance of a stock and influence group decision making. While the broker have a say and leads the decision making, the actual bias and belief comes from individual investors. Theoretically speaking it might make sense to look into the trading volume of UAE investors and compare it to that of the global market, yet practically this makes no sense as the financial markets in Middle East have a complete different breakdown to those of Western markets.

Data Methodology

Sample Data and Methodology

Our sample consisted of 101 individuals, 13 of which were women investors, and 88 of which were men. These participants were chosen on a random basis. The data collection started by distributing the designed questionnaire amid investors and brokers on Dubai Financial Market floor, on two random days of the month February, 2012. Participants were approached on a one-to-one basis. They were asked about their confidence in decision-making techniques, and their faith in the success and profitability of their portfolios. Thorough persuasive information about the nature of the survey and the intentions of the study were communicated to the participants before conducting the

survey. I carried the survey twice; once on Thursday the 9th, and later on Monday the 20th of February, 2012. The format of the survey consisted of two parts; the first three questions at the beginning of the survey were designed to include information about the demographics of the participants. These questions were used to analyze overconfidence and reactivity of DFM investors amid the two genders and differing occupations. The second part had ten questions were participants had to answer the questions on a three-point scale; A 1 implied none or weak, a 2 implied average, and a 3 implied strong or more. These questions were developed after the literature review was done. The questions were as follows:

1. What is your gender? Male Female

2. Which Emirate are you coming from? Dubai Abu Dhabi Other Emirates

3. Which sector are you employed in? Financial Services Real Estate Industrials Others

4. How optimistic are you about the direction of the market? 1 2 3

5. How optimistic are you about the direction of your investments? 1 2 3

6. How actively do you trade? 1 2 3

7. How often do you review your past investments? 1 2 3

8. How much preference do you have for short-term investment? 1 2 3

9. How risk-averse are you? 1 2 3

10. Compared to your friends, how do you rate your investment skills? 1 2 3

11. Compared to an average investor, how do you rate yourself? 1 2 3

ANOVA, a study of variance was used to test the difference between the mean of answers.

Through regression analysis, I have studied the inter-relationship between independent variables such as gender, Emirate, and occupation and dependent variables such as optimism in the market, investment techniques, self-confidence, and competitiveness of investors. The variance between the different population of male and females are also calculated and the P-Value for each factor is taken. If $P < 0.05$, the answer is significant, and the hypothesis that means are equal is accepted, otherwise the hypothesis of equal means is rejected.

For further analysis, we have differentiated our dependent factors between male and female, and those from Dubai, Abu Dhabi, or else where, and have studied their strength under each scenario, for instance how optimistic are male investors versus female investors, how confident are Dubai investors versus that of other emirates.

Limitations

The survey had to be short and straight, taking into account specific information inclusive of the gender, occupation, and social dimensions along with addressing the necessary information I was looking for. Since investors spoke in different languages,

there was a language barrier to my research in data collection. An Arabic questionnaire and survey was much more preferred, but unfortunately because of my lack of knowledge and short time, I missed out on the opportunity of addressing some purely Arab speaking investors. I however talked to their brokers and got ideas about their investment behaviors. I tried to be direct and give the wide spectrum of audience with different language skills an equal chance to 'interpret' my questions rightly and yet answer them independently. Ease of vocabulary, 'relaxed grammar' and a limited choice of answer options helped them to give prompter replies. However, have I had more time to spend on my paper, I would certainly have done the job both in Arabic and English for more responsiveness and accuracy of answers.

Of the already mentioned limitations of the study, Lack of national conformity of investors in UAE, different cultural backgrounds of investors and variable habits of investors from a culture to another affects the market and our research. Another important challenge faced during data collection was my gender as a female researcher. This idea was not as comfortable to male investors as it was to women investors, even though their number was very rare compared to men. I realized that while few rejected to hear my request once being approached, some others accepted to fill out the questionnaire just because they felt uncomfortable to say no. This made me wonder about the reliability of the answers I got.

Non- Middle Eastern investors were more cooperative, perhaps because they were more used to the ideology and practice of carrying surveys.

I could not have approached every single person. As they were busy sitting in groups, perhaps one or two would have accepted to fill out the form, and the rest assumed that they did not need to contribute.

I also faced limitations with writing the survey. The survey had to be short, one page was optimal, (I recognized that a one page survey would have been much more applicable to conduct than a one and a half page survey) but my questions did not fit in one page at all, and so my work was limited to 2 pages, mostly multiple choice. The letters had to look big enough, cause big looks easy, and that would have taken lots of my space. I had to find the best investor-friendly font that is in good shape and size but gave me enough space too. Had I included all my questions, a three-paged survey would have sufficed. Hence obviously, I had to give up my curiosity. I carried around two surveys at two different times, to see as the first attempt did not satisfy my expected quality and depth.

A multiple-choice questionnaire made investors not quite willing to accept the task. A better attempt had to be ratings.

I have also emailed the copies of the survey to investor acquaintances but the results I got were quite different from those I have gotten from the DFM floor. I decided to exclude those answers due to the different demography of investors who are fully employed, not active traders, but who also trade as a hobby or investment on the side. Their answers would have mis-disturbed the uniformity of the demographics of my data collection.

On a broader perspective, narrowing down the limitations of the theory of behavioral finance to few clear cut points may seem difficult, as it is still a growing and developing

concept. Behavioral Finance, due to its social and psychological dimensions allows for much variety and fluctuations in it, as human psychology is complex and multi-dimensional. At the same time, any assumption about a specific group of audience excludes other individuals with differing appetite for risk and alternative reaction to market information. I believe that there needs to exist several broad categories within behavioral finance and subsections underneath that to allow for the study of economic circumstances derived from the varying characteristics of investors' psychology.

Application

The result of this work could be applicable to those thinking of issuing shares and IPOs, attempting further stock offerings, regulators, and most importantly average investors who need to educate themselves about the market and human minds' processing of an efficient, or rather quasi-efficient market. The study in your hands aims to offer hints to brokers and financial firms for a solid 'profiling of individual investors', and designing of financial products according to customers' needs, preferences and comforts.

Empirical Findings

I have considered overconfidence within the UAE market as the highlight of this study. Over-reactivity and under-reactivity are extreme, obvious forms of investor psychology that will be studied in the context of UAE investors.

To study the psychological breakdown of investors, we have differentiated them into men and women investors, and addressed their psyche differently.

Of the 101 participants, only 13% of them were female investors, and 87% were males.
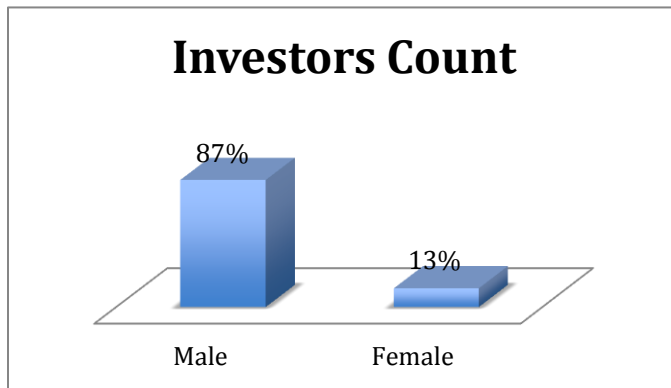
Figure 1. **Investors' Population Percentage (M=87%, F=13%)**
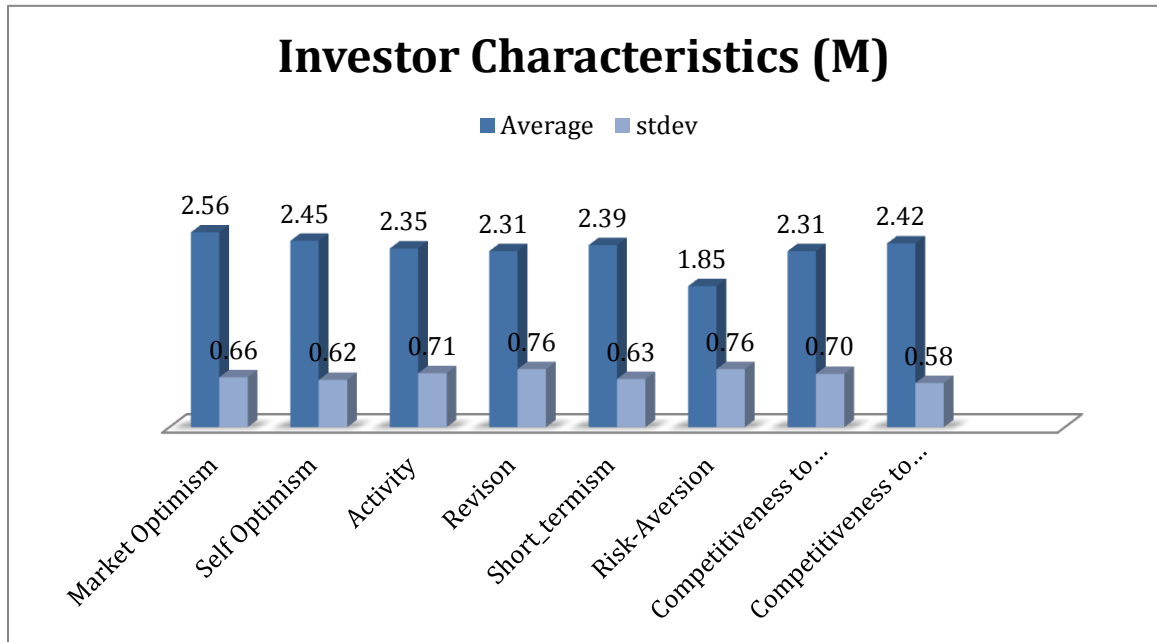
Figure 2. Investor's characteristics, Mean strength and standard deviation

In Figure 2, the average (on a scale of 1 to 3) and standard deviation of the responses to each of the factors under study were graphed. Market optimism, with a mean of 2.56 and a standard deviation of 0.66 was the strongest factor after optimism in self (M=2.45, STDEV=0.62). Risk Aversion, with a mean of 1.85 and standard deviation of 0.76 was the weakest factor among the male investors of our DFM study. Other factors included in decreasing order of strength and importance are competitiveness to an average investor (Mean=2.42, STDEV=0.58), short-termism (Mean=2.39, STDEV=0.63), activity (Mean=2.35, STDEV=0.71), revision (Mean=2.31, STDEV=0.76), competitiveness to friends (Mean=2.31, STDEV=0.7), and risk-aversion (Mean=1.85, STDEV=0.76).
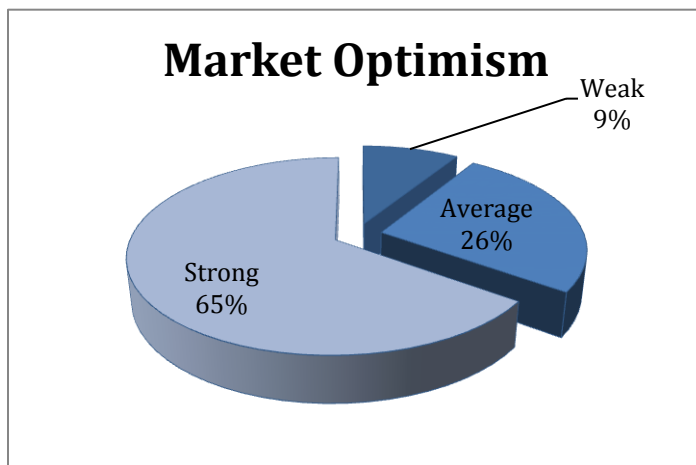
Figure 3. Market optimism among male investors

65% of male investors believed strongly in the strength and profitability of the market in the future, 26% of them thought the market would perform on its average, and only 9% of them had a pessimistic view on the performance of the market.
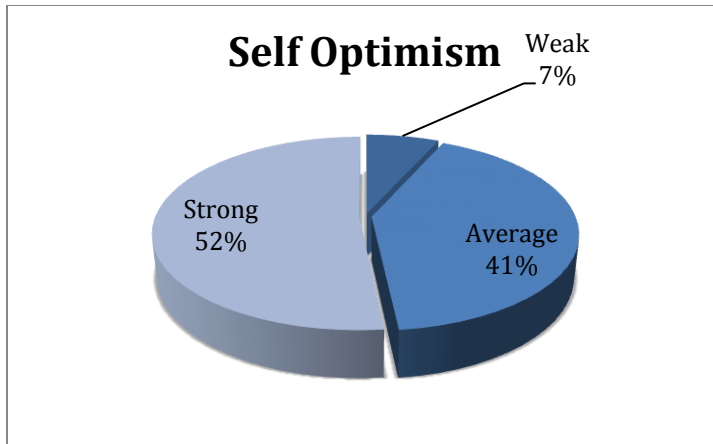
Figure 4. Self-confidence and belief in investment techniques of self

52% of male investors believed strongly in their investment techniques to be above average. 41% of them considered themselves to be an average and 7% of them considered themselves to be weak.
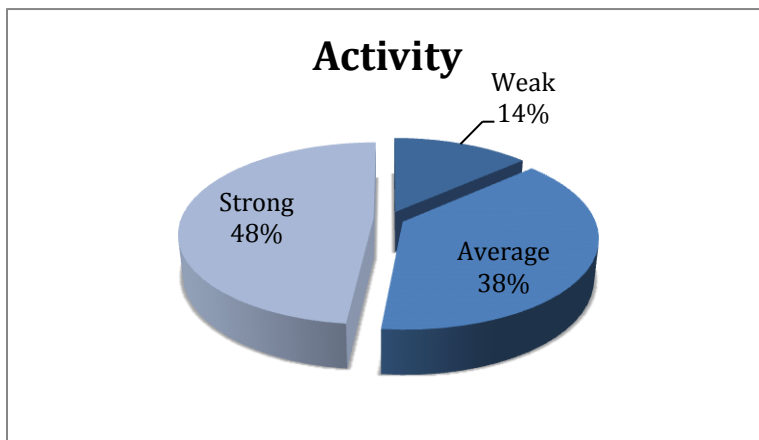
Figure5. Male investors' activity in the market

86% of male investors trade actively on the DFM floor. Of this population, 38% trade actively on average and 48% of them trade more than average. 14% of the investors appear to trade on a weak basis.

Competitiveness to Others

Weak
5%

Strong
46%
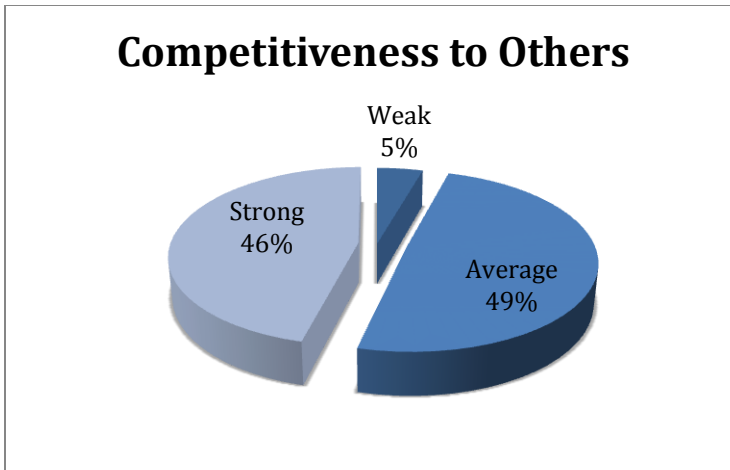
Average
49%

Figure 6. A Male Investor's Comparison of Self to an Average Investor

Around 95% of male investors believe themselves to be equal or greater than an average investor when it comes to investment proficiency and techniques. 49% of them consider themselves to be as good as an average investor, while 46% of them believe to be better. Around 5% of male investors consider themselves to perform poorer relative to average.

Competitiveness to Friends

Weak
13%

Strong
45%
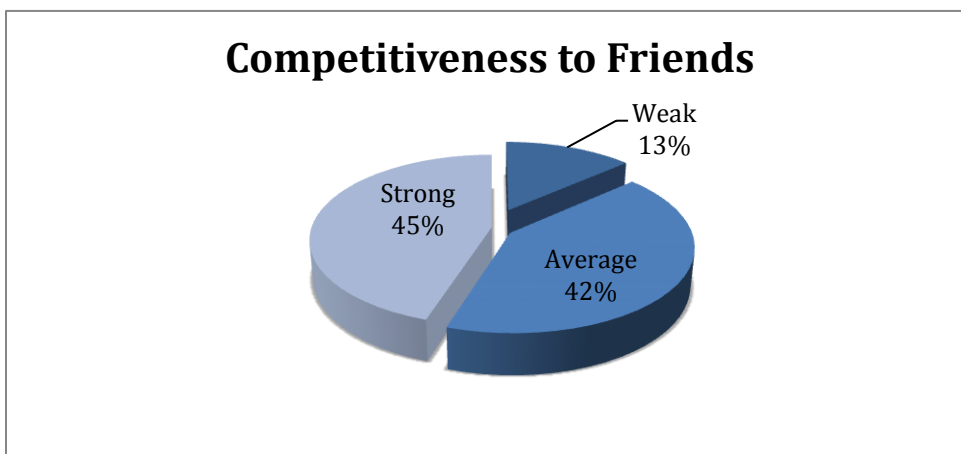
Average
42%

Figure 7. An investors' self-portrayed comparativeness to his friends

42% of male investors considered themselves to be performing as good as their friends, while 45% of them believed to be above the average. 13% of the investors considered themselves to be poorer investors compared to their friends.
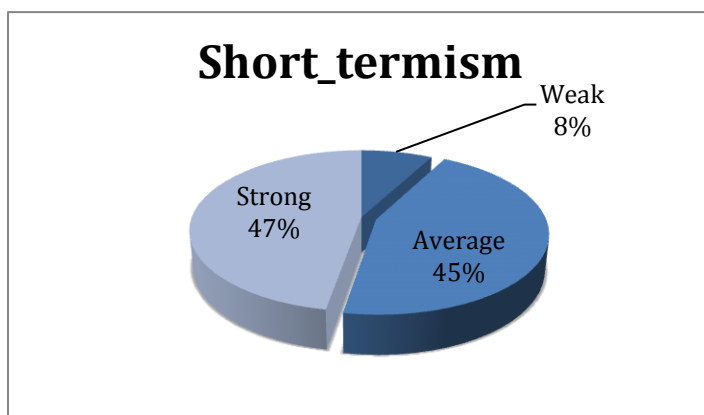
Figure 8. Investors' Preference for Short Term Investment

Many of the traders at Dubai Financial Market favor short-term investment. 47% of male investors are strong fans of short-termism, while 45% of them argue for a mediocre level of investment in short term instruments. 8% of them appose short-term investment, and favor long-term investments.
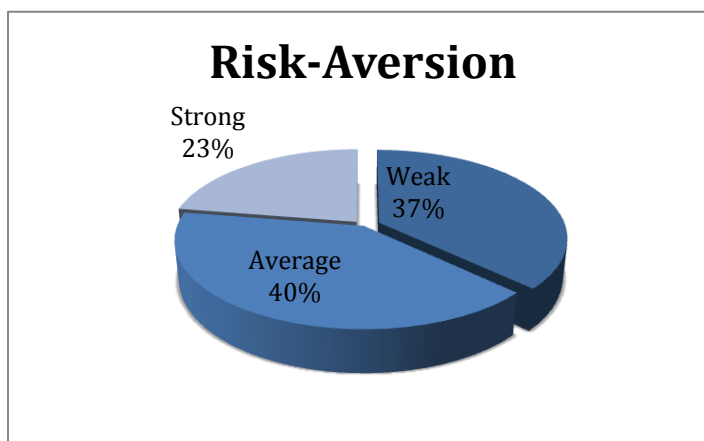
Figure 9. Risk Aversion of DFM Male Investors

Male investors are 40% moderate risk takers, 37% are active risk seekers, and around 23% of them avoid risk in a normal situation. (Note: The survey question asked about their risk aversion strength.)
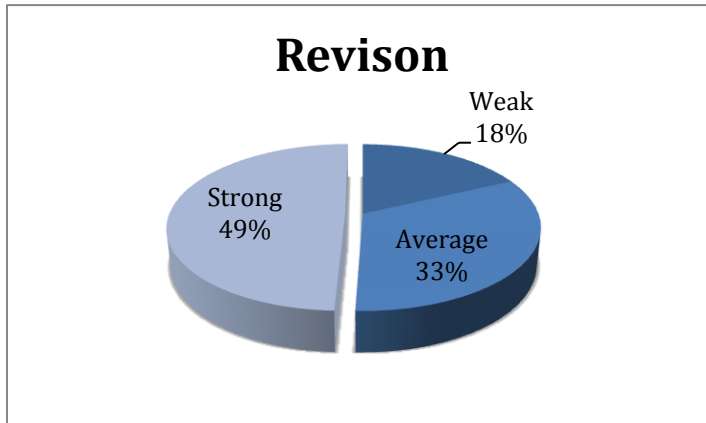
Figure 10. Investors' Degree of Revision of Past Portfolios

A thought provoking statistic obtained from the survey suggests that 49% of male investors actively review their old portfolios. 33% of them carry an average extent of revision on the previously held portfolios, and only 18% of them rarely revise their old investments.

Females:
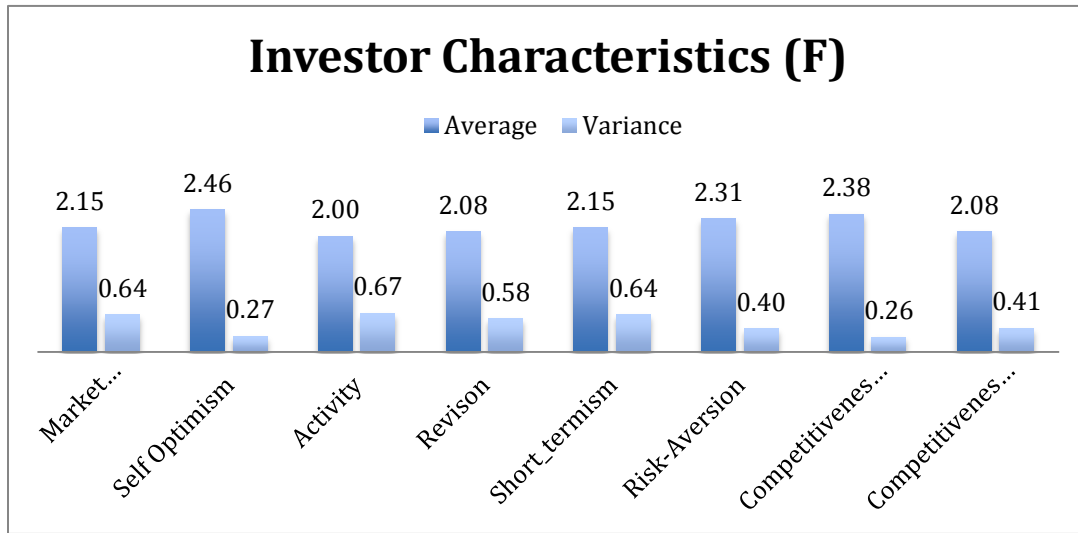
Figure 11. Investor's Characteristics, Mean Strength and Standard Deviation

Among the varying factors under study, female investors showed to be strongest when it came to self-optimism (Mean=2.46, STDEV=0.27) and weakest in trading activity (Mean=2.00, STDEV=0.67). The next strong factor among female investors was their competitiveness to an average investor (Mean=2.38, STDEV=0.26). Risk aversion (Mean=2.31, STDEV=0.4), short-termism (Mean=2.46, STDEV=0.27), Market optimism (Mean=2.46, STDEV=0.27), revision habit of past portfolios (Mean=2.46, STDEV=0.27), and perceived competitiveness to friends (Mean=2.46, STDEV=0.27).
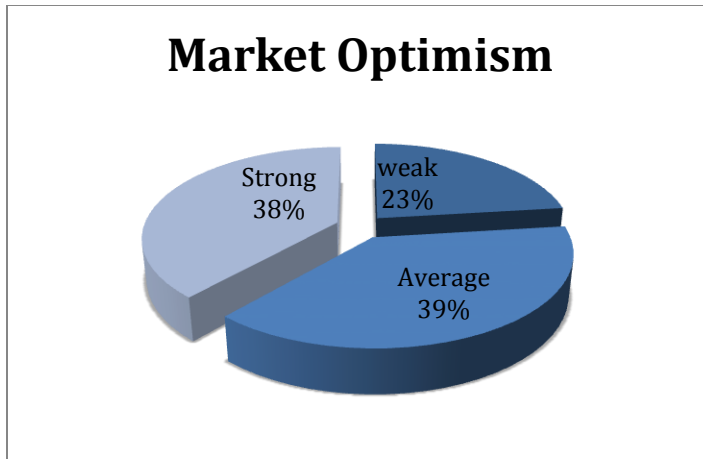
Figure 12. Market optimism among female investors

77% of female investors believe the market to be doing fairly well, or above the

average. 38% of them expect the market to do great in the near future, 39% expect an

average performance, and 23% of them believe in a poor outlook of market in the future.
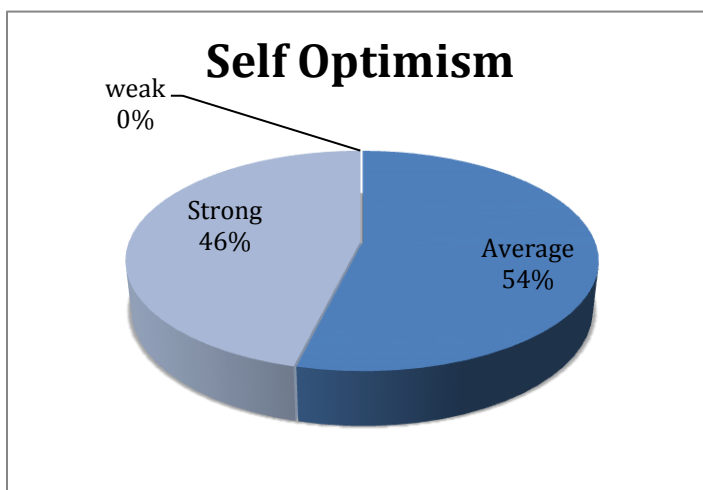
Figure 4. Self-confidence and belief in investment techniques of self

All the women participants were optimistic about their investment capabilities, and

none of them believed to be below the average. Of this figure, 54% of the women

investors believed themselves to be optimistic on average and 46% of them believed in themselves to be above the average.
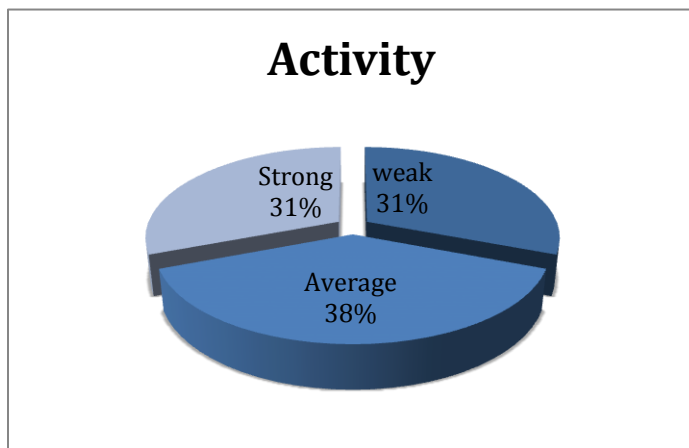

Figure 12. Female investor's activity in the market

31% of female investors had a low rate of activity in the market, 31% appeared to be overly active, and 38% seemed to be trading on an average rate.
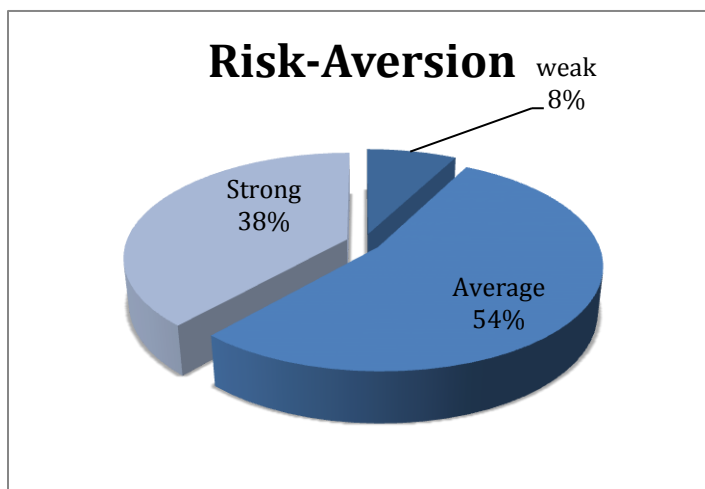

Figure 13. Risk aversion of female investors

Female investors are quite risk-averse. 8% of investors have weak aversion, yet 38% of them are risk-averse more than average. 54% of female investors have an average risk aversion.
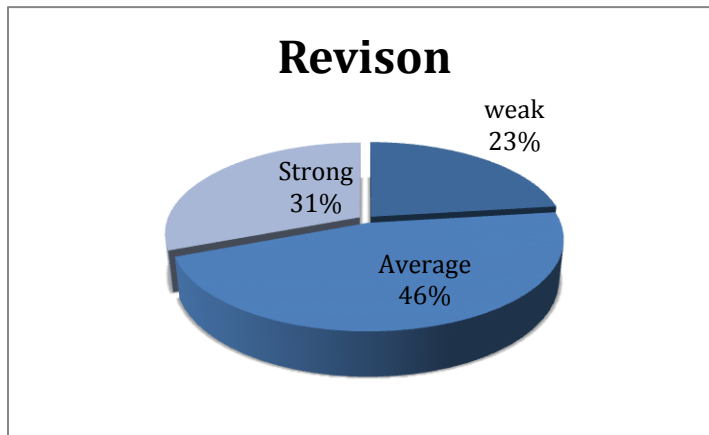

Figure 10. Female Investor's likeliness to Review their Past Portfolios

23% of female investors hardly view the past investment schemes, while 31% of them review it quite attentively. 46% of female investors review their portfolios on an average basis.
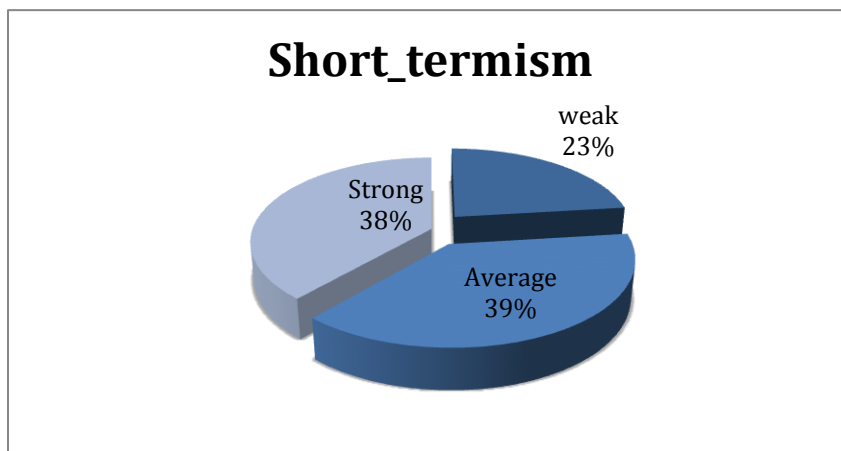

Figure 11. Female Investors' Preference for Short Term Investment

23% of female investors believe more in a long-term basis for investment, while 38% of them opt for a short-term horizon. 39% of them are average followers of short-term schemes.

Competitiveness to Average Investor

weak 0%

Strong 38%
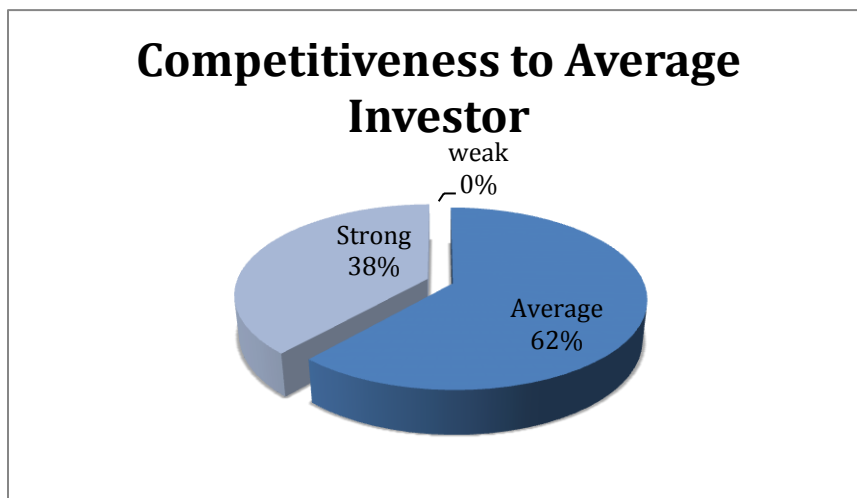
Average 62%

Figure 13. A Female Investor's Comparison of Self to an Average Investor

More than half (67%) of the females in our study considered themselves to be an average compared to a random investor, while 38% of them considered themselves to be above the average.

Competitiveness to friends

Strong 23%

weak 15%

Average 62%
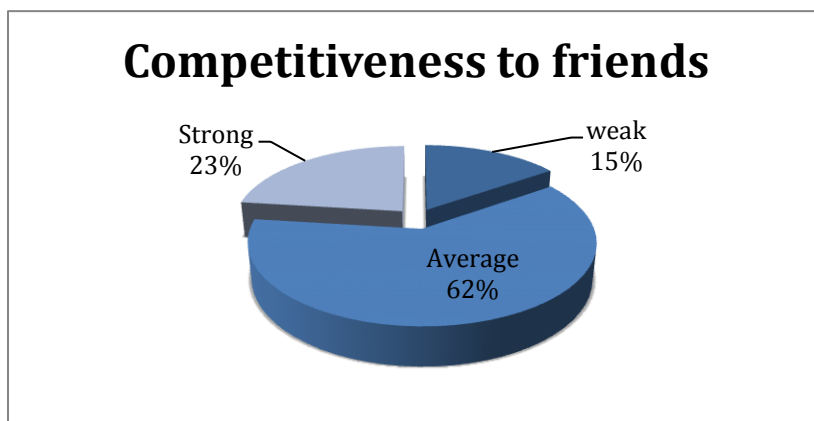
Figure 14. A Female Investor's Comparison of Self to a Friend

When it came to friends, females showed an increased rate of modesty in their analysis of self. They considered themselves to be 62% as good as their friends, 23% better than their friends, and 15% worse than their friends when it came to investment techniques.

Summary and Analysis of Findings

A cross comparison of gender and optimism in the market, a cross comparison of gender and optimism in self, a cross comparison of gender and investment activity, cross comparison of gender and risk averseness, cross comparison of gender and competitiveness with respect to friends, cross comparison of gender and competitiveness with respect to an average investor was conducted following the completion of the survey. The resulting statistics revealed that:

1.   The masculine breakdown of investors' population (more than three quarters) reinforces that certain characteristics specifically designated to males must play an important role in UAE markets. These publicly thought characteristics such as aggression greed, overconfidence, risk taking and assertiveness have not been necessarily approved by psychologists and behavioralists, yet cultural understandings stand for its own arguments, even in today's modern world. Our analysis of the men and women in Dubai Financial Market proved us otherwise, that the culturally known characteristics are not necessarily practiced by men only, but by women also (and in some points practiced more frequently and stronger by women than by men).

2. My study showed that men have higher market optimism, perceived competitiveness to an average investor, and a lower risk aversion compared to women investors in DFM. With an optimism of 65% in the market for males, this statistic does not include their preference for short-term or long-term investment yet. Self-optimism however was highest and market activity was lowest among women traders. This suggests that the women taking part in financial investments in DFM are quite confident of self, or else they would not be trading.

3. None of the female investors believed to be pessimistic about their skills. This is either because female investors in UAE are generally overconfident, or that only those who are confident enough to take financial risks actually end up in the market.

4. Only half of the male investors believed their investment skills to be strongest.

5. If we were scientifically allowed to call those investors who observe themselves to be weakly competitive to others as those with low self-confidence, only 5% of male investors would have belonged to this category.

6. How an investor compares himself to other (average) investors is different from his comparison of self to his friends. A male investor considers himself to be 42% as good as his friends, 45% better than his friends and 13% weaker than his friends in some occasions.

7. The proportion of super-active traders (48%) was greater than that of active-traders (38%) in men. 69% of female investors are known to trade on average or more, and 31% are below the average.

8.   Only 8% of male investors believe that UAE market is safe for long-term investment. 92% of them believed the short-term investment to be a better option. It follows our behavioral/cultural understanding of women to have a higher percentage that favor long-term investment, now that this is also true in case of DFM women investors. 23% of them prefer long-term investments and only 77% (compared to the 92% of male investors) favor short-term investments.

9.   Around 82% of male investors reviewed their past portfolios regularly. Unlike my expectations, this figure was less in women (close to 77%). 23% of the female investors claimed to hardly ever reviewing their past portfolios and trading schemes.

I have also used the results of the survey to map UAE investor's situation in each of the four pillars of behavioral finance discussed earlier in text. The results were as follows.

10.   Over confidence: UAE investors are rather over confident in their choices, judgments, and abilities.

11.   Financial Cognitive Dissonance: UAE investors experience a rich cognitive dissonance as they review their old techniques and try to learn from their mistakes. The short history of trade and possible experience of investors in DFM leads to lower level of anxiousness compared to other financial markets where competition and new tools and techniques pop up any minute.

12.   Regret Theory: UAE investors faced regret during the collapse of global markets, yet this was not strong enough to deviate investors' optimism in capabilities of the market.

13.   Prospect Theory: Prospect theory applies to DFM investors, but to a very poor extent as the investors in this market still seem to have a high appetite for risk (compared to other markets in the world) and maintain a rather moderate to positive outlook to the market.

14.   Passive investors at DFM are quite inferior, because they prefer to be passive in a safer market environment. Little percentage of participants chose long-term investments, due to the uncertainty of the region, the market and the global economic situation that is yet in doubt and struggle, recovering from huge losses.

Conclusion and Recommendations

Investors have to find a way to be aware of their biases in decision-making. To have a healthy financial market, I suggest the finance authorities to distribute brochures and maintain workshops to increase the awareness of the investors about their own investment psychology and recent techniques to educate them.

Keeping record of investment goals, taking into account factors such as the time horizon, expected return, the degree of risk aversion as market moves up and down and the expected reaction (in terms of buy, sell, or hold) of investors towards differing scenarios, and referring back to it every once in a while during the holding period of the portfolio will teach traders lots about themselves, the psychology of their decision making

and the right way of approaching investment. Being aware of their 'mental errors', over/under reactivity, and bias in investment decisions will lead to a safer portfolio. For those investors with increased reactivity, I advise a longer-term portfolio and a holding period, as opposed to spontaneous selling and buying over present market information.

The acceptability of advice from brokers is not as high as it is in other western countries, which relates to the short history of trading in UAE and also the psychology of investors. Arab investors are often more determined towards their ideas and are less likely to be tilted over with negative remarks. This is not to say that they are ignorant but the percentage of sensitivity to the broker's advice in DFM is not too high.

It should be noted that the use of alpha, more frequent revision of past portfolios and performances, more frequent use of technical/fundamental analysis and less reliance on market noise can pull the market to greater health and stability.

After all, it is true to say that irrational investors, or over-responsive ones are also survivors and make money. That is, while irrationality has the potential of making mistakes and creating losses, it might as well lead to more risk taking and higher realized returns. What is important is to be prepared for both the negative scenario in terms of loss and positive scenario in terms of making profits.

Citation

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Academic Survey

1. What is your gender? Male Female

2. Which Emirate are you coming from? Dubai Abu Dhabi Other Emirates

3. Which sector are you employed in? Financial Services Real Estate Industrials Others

4. How optimistic are you about the direction of the market? 1 2 3

5. How optimistic are you about the direction of your investments? 1 2 3

6. How actively do you trade? 1 2 3

7. How often do you review your past investments? 1 2 3

8. How much preference do you have for short term investment? 1 2 3

9. How risk-averse are you? 1 2 3

10. Compared to your friends, how do you rate your investment skills? 1 2 3

11. Compared to an average investor, how do you rate yourself? 1 2 3