PERFORMANCE OF FEMALE HEDGE FUND MANAGERS

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ABSTRACT

It is often argued that women have a tendency to be more risk averse than men. This thesis looks deeper into this sophisticated relationship between women, men and money, and investigates the gender differences among U.S. hedge fund managers. Prior research has considered the relationship between mutual fund performance and fund manager characteristics focusing on age, tenure, and level of education.

However, none of these previous studies have looked in depth at the hedge fund arena. I hypothesize that female fund managers take less risk and follow less extreme investment styles that remain more constant over time. This suggests that less trading by female managers takes place with lower portfolio turnover, and results in superior net returns. I expected female money managers to be less overconfident and therefore would then trade less. Despite the similarities between female and male managers, I found evidence supporting my hypothesis that gender does indeed influence the decision making process for both investors and the hedge fund management companies.

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CHAPTER I: INTRODUCTION

1.1 Introduction

It is a known fact that women and men are different. Their different responses to risk greatly affect the economy. If women are more sensitive to risk than men, it will be reflected in all aspects of their decision making including their choice of profession which is reflected in their earning potential, investment decisions, and as a consumer what products to buy. Many authors have looked further in detail on the subject such as John Gray and his famous book “Men are from Mars, Women are from Venus”.

If women invest on a more conservative level and all other things are equal a conservative investment strategy results in less investment related income on average than a more aggressive strategy. Consumption in retirement is likely to be even lower since not all things are equal between men and women. Because women have a greater longevity and with even with the same investment strategy, and pension accumulation, retirement wealth must support consumption for a longer period of time because women live longer. Women have lower lifetime earnings, lower earnings growth, lower wealth, and lower pension coverage (Bliss and Potter, 2002).

In reality women do control a significant portion of the investment assets in the United States. Bliss and Potter (2002) concluded that more than 40% of the households with assets greater than $500,000 are headed by women. In 1999, the Federal Reserve stated that women control more than half of all private wealth in the United States and in two decades, women will control two-thirds of all the wealth.

This thesis is concerned with the gender differences in the hedge fund industry and the resulting consequences for the investors and fund families. This industry truly does set an ideal sample to analyze differences because the behavior is not biased by an experimental setting. It is a real-live market that produces performance swings. Behavioral consequences are reflected in quantitative measures that can be statistically analyzed.

1.2 Hedge Fund Industry

The hedge fund industry has experienced extraordinary growth in the 1990s and 2000s. A recent estimation has sized the hedge fund industry at around $1.4 trillion under management with about 6,000 hedge funds in existence. Hedging risk has been a very integral part of the financial markets for many years. Commodity producers and merchants began using forward contracts in the 1800s to protect themselves against unfavorable price changes. An increasing amount of the capital being invested in hedge funds is coming from large investors such as pensions, endowments and fund of funds[1]. Most of the capital is allocated to larger hedge funds because of the lack of regulation which in turn makes the big funds even bigger.

The first hedge fund began in 1949 when Alfred W. Jones decided that he wanted to eliminate a portion of the market risk involved with holding long stock positions by short-selling other stocks. He proceeded to shift a majority of his exposure from market timing to stock picking investments. This made him a pioneer when it came to short selling, leverage and incentive fee combinations. A few years later in 1952, he changed his general

[1] According to Wikipedia, Fund of Funds are an investment fund that uses an investment strategy of holding a portfolio of other investment funds rather than investing directly in shares, bonds or other securities. For example holdings of another hedge fund, or investment trust.

partnership to a limited partnership and managed to bring in a few independent portfolio managers and created the first multi-manager hedge fund. It was later in the 1950s when other hedge funds began to form in the marketplace and they too were using short selling techniques (Cottier, 2007).

It wasn't till about 1966 when Fortune magazine published an article about a "Hedge fund" run by Alfred Jones that the investment community was thrown a curve ball. His hedge fund had outperformed all the mutual funds of it's time, even after accounting for his funds extremely large 20% incentive fee (Loomis, 1966). It was after this article that the rush to hedge funds followed and the number of hedge funds increased to over a hundred within a very short time frame. After the 1960s resulted in a slow down and high losses followed across the investment arena, we saw an increase in the bankruptcy of many inexperienced funds across the board.

The years following the slow down and bankruptcies were very quiet for the hedge fund industry. That was until 1986, when another article appeared in the Institutional Investor magazine that reported how well Julian Robertson's fund was performing. Hedge funds then saw a large increase in interest which in turn reflected on amount invested from 1987 to 1993 (Rohrer, 1986). In 1992, it was said that the dropping of the British pound out of the European currency system was believed to have been caused by currency speculators such as George Soros' Quantum Fund. Although research published has shown that there is no evidence of market manipulation or higher market volatility, it still gave hedge funds a bad reputation within the investment world. Later in 1994, hedge funds had problems coping with the increase in United States interest rates and were again hit by the bond

market crash and further bankruptcies. The hedge fund industry was able to recover again in 1995 and 1996 and able to enter into a more mature stage in their life cycle (Cottier, 2007).

1.3 Objective

In this thesis, the role of gender on a hedge funds performance is examined. More specifically, if a hedge fund managed by a woman differs systematically in performance or operationally from those managed by a male. This is important research for many reasons. Existing research in the market shows that men and women view money, risk and investing differently (Barber and Odean, 2001). There is evidence that women may actually be better investors than men. However, none of this has historically mattered in the hedge fund industry because the number of women hedge fund managers was negligible. This percentage has doubled in the last five years and is likely to continue as more women ascend in the ranks of the financial services industry and hedge fund management.

This thesis proceeds as follows. In Chapter II, I give a short review of the related literature. Chapter III introduces the main hypothesis along with models. Chapter IV contains a description of my data and empirical results on the differences in the investment behavior between female and male managed managers, i.e. risk-taking, and trading activity. In addition, resulting consequences of the behavioral differences between female and male managers for investors are analyzed in Chapter IV, and Chapter V provides conclusions along with further research recommendations.

CHAPTER II: LITERATURE REVIEW

2.1 Background of Hedge Funds

This literature review will examine gender and the behavioral differences between men and women. It will provide background information on hedge funds and on the differences between a mutual fund and a hedge fund. I will also give a brief description of the types of hedge funds within the marketplace.

Hedge funds are different than mutual funds. According to the Securities Exchange Commission (*Invest wisely: Mutual funds*) a hedge fund is a private unregistered pool of money that is traditionally limited to wealthy investors. A mutual fund is a financial institution that allows a group of investors to pool together their money with a predetermined investment goal. A commonality between both a hedge fund and a mutual fund is that there is a fund manager who is responsible for investing the pooled money into securities which are commonly stocks and bonds. The largest difference between a mutual fund and a hedge fund is that with a mutual fund you are buying into shares or portions of the mutual fund and you then become what is known as a stakeholder (SEC). The differences between hedge funds and mutual funds include the fee structure, leveraging, pricing, liquidity, the amount of regulation they are subject to, and lastly the typical makeup of their investors.

Since Hedge funds are private investment pools, there is no limit on the fees that they can charge an investor. It is more than common to see a Hedge fund charge an asset-based fee along with a performance fee (*The differences between mutual funds and hedge funds*), and possibly a sales fee. Typically, these fees are about 1-2% of the assets that you

have invested in the hedge fund. In addition, you are charged a fee based on a percentage of the profits in relation to the fund's performance which can be around 20% (*Hedge funds vs. mutual funds*). Hedge funds and mutual funds are both subject to the same prohibitions against fraud as are other market participants. Managers have the same duties as other investment advisors across the board.

Hedge funds unlike mutual funds are not required to register with the Securities Exchange Commission. Hedge funds will commonly issue "private offerings" that are not registered with the SEC under the securities act of 1933. The Securities Act of 1933 came about after the stock market crash of 1929 and in the midst of the great depression. It was the first major federal regulation for the offer and sale of securities. Prior to that, securities were commonly monitored by state laws. Mutual funds on they other hand must adhere to fairly strict rules set by the SEC. All fees are set under regulatory limits monitored by the North American Securities Dealers Association and their rules. They are required by law to disclose their fee structure. The fee structure of a mutual fund is commonly found in a standard fee table in the prospectus of the mutual fund. All fees are placed into a readable chart so that all investors can understand and are able to compare to other mutual funds in the marketplace.

To simply state it, hedge funds use more leverage than a mutual fund. Leverage is used to increase the potential return of an investment. It is defined as the amount of debt that a firm uses to finance its assets or the type of contract chosen. A firm or hedge fund with more debt than equity is considered to be highly leveraged. For example, let's say that you have $1,000 to invest. This could be invested in 10 shares of General Mills stock, but if

you wanted to increase your leverage you could invest the $1,000 in 5 options contracts (100 lot units). By choosing the latter investment you would then control around 500 shares as opposed to the 10 shares.

Hedge funds have a much larger ability to leverage themselves along with trading higher-risk investment strategies (*The differences between mutual funds and hedge funds*). Mutual funds on they other hand are restricted by the Investment Company Act of 1940 (Wikipedia contributors). This act gives mutual funds some rather stringent restrictions on the amount they are allowed to leverage or borrow against the value of the current securities that they hold in their portfolios. This is where you will commonly see a difference in short selling in a hedge fund and not a mutual fund. Mutual funds are only allowed to have 30% of their profits coming from a short sale of a security. There are still ways that a mutual fund can establish a bear (short fund) but as an investor, this is typically riskier as bear funds are seen as much more aggressive, making it easier to lose money considering the stock market often averages a gain of around 11-12%.

Hedge fund investors commonly are unable to determine the value of their investments on a day to day basis. Mutual funds on they other hand are required by law to determine the value of their shares on a daily basis. This term is commonly known as the Net Asset Value (NAV). NAV is calculated by taking the current value of the specific mutual fund assets taking away their liabilities and dividing that by the current number of shares that are held. All of this is done so that on a daily basis new investors and possible redemptions are made at current prices and all fees are accounted for. Mutual funds by law must be able to let their shareholders redeem their shares at any given point in time (at the

current NAV less any fees and charges associated with early redemption) while hedge funds typically run on more of a monthly or annual schedule (*The differences between mutual funds and hedge funds*).

The typical makeup of investors in mutual funds and hedge funds commonly vary. Hedge funds according to the National Securities Market Improvement Act of 1996 (*SIA primer on securities - national securities markets improvement act.*) have a minimum investment level at around $1 million or more, and commonly have to have around $5 million in total investments. Mutual funds on they other hand have typically a minimum investment of $1,000 but lower is possible (*The differences between mutual funds and hedge funds*). Once a mutual fund account is opened, the investor is not required to make any other investments as mutual funds tend to be more of a long-term strategy. This is one reason why most 401K employee retirement accounts consist of mutual funds. Hedge funds keep strong investment rules to help minimize participation both by investors and the Securities Exchange Commission. If hedge funds remain relatively small and set stipulations such as minimum investment, a limited number of investors, a market cap of around $100 million, and they do not engage in public offerings, they are not subject to the same investment limitations as mutual funds (*Comments of managed funds association for the SEC roundtable on hedge funds*). The one major addendum to the hedge fund rules would be when the funds are located off-shore (outside of U.S.); these are instances when they are typically exempt from the Investment Company Act mentioned above.

2.2 Types of Hedge Funds

Hedge funds use a variety of strategies to establish returns for their investors. It is important to know that not all hedge funds use the same strategies and have the same risk, volatility and investment returns. It is typical to see a hedge fund trading for an expected downturn in the market. As mentioned above, hedge funds are flexible in their investment options and can use short selling, derivatives, puts, calls, options, futures and extensive leveraging that mutual funds cannot. It is common to see hedge funds highly specialized in their trading style as it focuses on the expertise of its management and fund manager's strengths. There are endless strategies for hedge fund managers. The five most common strategies across the marketplace are global/macro funds, market-neutral funds, fundamental funds, quantitative funds, and market-timing funds.

The global/ macro funds tend to focus on changes in the global economy which are typically caused from changes in government policy. These changes in government policy lead to the rise and fall of interest rates. Interest rate fluctuations lead to further significant changes in currency, stocks and bond markets. Commonly a global/macro hedge fund that is looking for high volatility commonly trades all markets. Global/Macro funds commonly use leverage and derivatives to accentuate the impact of market moves. This is a very directional trading strategy, and tends to have very positive or negative results affecting its performance (*Comments of managed funds association for the SEC roundtable on hedge funds*).

The second style of trading is the market neutral stance. Market neutral trading typically is used when the fund is looking for low volatility in the market. This market

strategy generally entails focusing on obtaining returns with very low or no correlation with the stock market. It is common to see an investment equally in long and short portfolios in the same or similar sectors of the market. A sector would then be defined as a subdivision of the market. A good example of this strategy would be using futures to hedge interest rate risk (Wilmington Trust).

Fundamental funds are based on a research driven trading style. It is common in these types of funds to see long and short positions based on a fundamental analysis of how the market is expected to behave. Fundamental analysis in financial markets is defined according to Wikipedia, as a method that uses financial and economical analysis to predict the movement of security prices. For example, long positions would be used when one believed that a specific security had a greater intrinsic value than the current market value of the stock (Wilmington Trust). According to Investopedia, Intrinsic Value is the actual value of security based on its true value (including all aspects of the business and tangible/intangible aspects of the company or asset). A fundamental fund would then use a short position when they believed that a specific security has an intrinsic value lower than the current market value of that stock (Wilmington Trust).

Quantitative funds in the financial markets use quantitative tools to evaluate investments. It is common with this type of hedge fund to see mathematical and statistical modeling based on extensive research. This type of hedge fund is similar to fundamental hedge funds as they establish long or short positions in a security (Wilmington Trust). With quantitative funds, a fund manager tries to replicate reality by using mathematical

equations. It is very common to see this practice used in valuing the performance of a stock, estimating its share price, and option pricing (Investopedia).

The last major type of hedge fund is a market-timing fund. This style of hedge fund is one that aggressively moves in and out of commodities, stocks, bonds, and etc in anticipation of a market change (Wilmington Trust). These types of funds are typically very volatile because they trade using an economic or market outlook. It is common to see them trading on a daily, hourly, and even minute by minute swing. This frequent trading commonly creates difficulty with the timing of entry and exit in a market based on market movements and market volatility (Hedge Fund Association).

The above strategies are only a few of the types of hedge funds. These five types have been condensed into a basic explanation of what and how they invest. From these explanations, not all hedge funds are global, leveraged, or use derivatives as a method of hedging.

2.3 Gender Differences

Gender differences are evident in the financial world but as the female presence continues to increase, more females manage hedge funds. With the increasing participation of women in the trading world, it leads to the question whether gender affects a hedge fund's performance. Within this study of gender, does it affect what a fund manager purchases and how aggressive they are? Due to the small amount of research on this topic, further research on the factors that contribute to their decisions is an important topic.

The research that closely relates to this topic examines gender differences within mutual funds. Niessen and Ruenzi (2005) find that male and female fund managers differ in the ways that they manage their portfolios which in turn affects their fund performance and inflow of money. Their first hypothesis was that women tend to take less risk. They conclude that women take less systematic risk and less small firm risk while their overall return risk does not vary as extensively. Niessen and Ruenzi (2005) indicate that male fund managers tend to have more of an active trading strategy which is reflected in a significantly higher turnover ratio as compared to those strategies of female fund managers. Turnover ratios are typically interpreted as an indication of confidence, with a higher turnover ratio indicating overconfidence (Barber and Odean (2001). Niessen and Ruenzi (2005) state that because of these behavioral differences between male and female fund managers, investors seeking moderate to stable investment styles may want to invest in female managed funds. Investors interested in riskier trading styles and that can tolerate less stable investments may want to choose male managed funds.

Performance is ultimately the measurement that fund investors base their decisions on. If stability of return is an indicator of performance; less stable investments would then lead to inferior performance. Niessen and Ruenzi (2005) found that the market for fund managers is actually fairly efficient as there were no outliers that returned abnormal returns. This indicates that finding an excellent fund manager by looking at gender is not easy. Since investors are most occupied with a fund's performance, it is fitting that the fund company is concerned with the continued inflow of money into their fund. Niessen and

Ruenzi (2005) found that the influence of gender on the inflow of monies into a fund managed by a woman was 18% less than those of male managed funds.

Bliss and Potter (2002) found that relevant characteristics of a fund manager affect the funds performance. These relevant characteristics are the manager's age, tenure, academic performance and their highest level of education. Golec (1996) conducted an evaluation using the S & P 500 as a benchmark and found that the younger the manager, the higher the level the education, and longer the length of tenure, typically the better risk-adjusted performance. A possible explanation for this result includes the possibility that education correlates to how a fund manager selects stocks (Chevalier and Ellison (1999)). It is also possible that these institutions offer a better education, possible career networks that carry many benefits, and access to fund companies that only hire from specific schools.

An important aspect that both Golec (1996) and Chevalier and Ellison (1999) did not include in their analysis was the gender of the fund manager. This could be because of data related reasons and the lack of funds having gender differences. Bliss and Potter (2002) suggest that this information was not included because of the lack of female fund managers in the market at the time these studies were conducted. For the purpose of this thesis, we examine the gender of the fund manager and how it in turn relates to the fund performance.

A possible implication of my study may be that female and male managed funds need to be increasing the amount of education they extend to their clientele and investors. As an investor, it is important to know that female managed products do not under-perform

though there may be a difference in volatility. Another possible implication could be the wealth restrictions that hedge funds have since investors typically have investment constraints.

CHAPTER III: HYPOTHESIS AND TESTING METHODS

3.1 Introduction

The purpose of this thesis is to examine whether there are any differences in the amount of risk that fund managers take in relation to the gender of the fund manager. By looking at the literature that currently exists relating to mutual funds, there are reasons to hypothesize that there are differences in risk taking, and those differences are related to gender. Women on average invest in more risk averse funds than men when it comes to decision making based on asset allocations for 401K retirement plans (Balkin (2000)). Barber and Odean (2001) used data from a discount brokerage house of 35,000 households and found that women investors also took less risk. Household holdings of risky assets are significantly lower for single women than for single men and women tend to take less risky positions within their common stock portfolios (Niessen and Ruenzi (2005)). If women do indeed make less risk averse investment decisions, then the gender of a hedge fund manager may affect the fund's performance.

Since there have been a large number of studies in the last ten years finding that women are more risk averse than men, my first hypothesis is that female fund managers take less risk than their male counterparts. Another study has found evidence that women are less likely than men to engage in risky behavior such as drug use and criminal activity (Eckel and Grossman). However, Eckel and Grossman make it clear that risk attitudes vary over environments and have low levels of correlation across different tasks and measures. There have been other studies that used gambling experiments and experiments involving risky decisions such as insurance and investments. Eckel and Grossman found that males

exhibit a greater preference for risk from the onset of adolescence to around the mid-forties. The difference in risk reaches it's peak around the age of 30. They also found that men typically engage in riskier behavior during the period in which they are trying to attract mates; and women tend to be more risk-averse during their child-bearing years.

This thesis examines risk behavior as it relates to investment choices. It is however very important that we look further into risk aversion. According to Wikipedia, risk aversion is a concept that explains the behavior of investors under uncertainty. Risk aversion is the reluctance of a person to accept a proposition with an uncertain payoff rather than another proposition with a certain but lower payoff (Wikipedia contributors). For example, historically women tended to smoke less, and wear seatbelts more. In the labor market, women tend to work in safer industries and have safer jobs within the industry that they are employed (Hersch (1996, 1998)). It is from these statements that we accept the premise that women are more risk averse than men and use it as a testable hypothesis.

3.2 Hypothesis

Hypothesis 1: Female hedge fund managers take less risk than male hedge fund managers.

If female hedge fund managers take less risk than male hedge fund managers, it is important for an investor to know whether gender differences in investment styles exist. Investors typically have a preference as to what investment style best fits their personal needs. Its key for an investor to know what the style of that fund manager is, the risk propensity of the fund manager, and whether it is a broad market portfolio that is traded

frequently or a fund that takes large bets but sits on them and trading does not take place as much.

In 1989, the Federal Reserve conducted a survey that found about 63 percent of single females were not willing to take any financial risk with their investments versus 43 percent for men (Bliss and Potter (2002)). After further research, they found that women's holdings were more equally weighted between risk-free assets such as stocks and bonds, while men held more of their wealth in stocks. An interesting note was when Bajtelsmit and VanDerhei (1996) looked more in depth into the pension plans of 20,000 management-level investments. They found that women were less likely to hold the stock of their employer. When the Federal Reserve conducted this report, gender came in as the third most important determinant of investment style and was more important than occupation and education. This is expected to stay true throughout the hedge funds.

Hypothesis 2: Female hedge fund managers trade less than male fund managers.

It is important to examine how trading can affect financial and investment decisions. The hypothesis suggests that females take less risk and have less extreme investment styles displayed in their portfolios than men. A characteristic of a less risky investment style is that women trade less within their portfolios than males.

The financial markets provide a marketplace for hedge fund managers to make decisions on a daily basis. Odean (1998) stated that overconfident investors tend to trade too much and typically overspend when they do. It is because of this that Odean concluded that typically their investment results suffer. Barber and Odean (2000) found in their study

of around 60,000 individual trading accounts that a clear negative relationship between turnover and returns existed.

Hypothesis 3: Female hedge fund managers have better performance than male managed hedge funds.

Individual investors and hedge funds ultimately seek the same goal. That goal is the maximum performance for a given level of risk. For this hypothesis if accepted, since women trade less, women will have better returns than men.

3.3 Testing Model

If investment behavior truly does differ between female and male fund managers then we should expect to see female managed hedge funds managed more conservatively. However Atkinson, Baird, and Frye (2003) argue that risk tolerance is not attributable to gender and suggest that there may be no difference between the risk taking behavior of male and female managed funds. They in turn attribute the differences in the management styles of male and females to experience and familiarity with the activity that they are investing in.

When analyzing a hedge fund's performance, differences in the turnover ratio may be able to show the different investment behaviors by males and females. Barber and Odean (2001) go as far as to say that men are more overconfident than women about their ability to trade and make investment decisions. When they looked further into brokerage account data, they found that men traded 45% more than women did. They also found that with the limited data they were not able to account for investment experience and the

amount of wealth each individual investor had. The turnover ratio gives an indication of whether an investor prefers a buy and hold strategy or an investment with a considerable amount of trading.

Further analysis of expense ratios may also help to explain the hypothesis of risk preference. Since expenses of a hedge fund typically are deducted from a fund's income payment, funds with high costs commonly could be making riskier investments decisions when they trade (Atkinson, Baird, and Frye, 2003).

I will test these hypotheses using data for the U.S. Hedge fund market and the methodology described in the following chapter.

CHAPTER IV: DATA AND RESULTS

4.1 Data and Procedures

Hedge funds have been an expanding industry in the last twenty years, thus gathering reliable data is challenging because many firms do not report performance data. Data were gathered from multiple sources. These sources play a significant role in the financial industry as well. Daily, monthly, and annual data were analyzed when it was available.

Many industry observers say that women seem to bring certain crucial attributes to the industry, among them multitasking ability and patience, both vital traits. It is a common perception that women tend to be less inclined to take risk. Hinz, McCarthy, and Turner (1997) support this statement when they stated that men in defined contribution plans are more likely to hold risky assets. They also indicated that women allocate retirement assets to more conservative investment choices.

First, analysis was conducted by studying the basic relationships between the hypothesis and related variables discussed in Chapter 3. This was completed by examining the correlation among variables. Knowing the relationships that exist between the different variables and the performance of hedge funds in relation to female managed money is important to understanding the hedge fund industry and the financial markets.

Next, analysis was completed by analyzing the female managed hedge funds and male managed separately for a 1 and 3 year time span using the risk analysis return measures like the standard deviation and Sharpe ratio. This allows for the analysis of the measure the risk premium. The standard deviation of the returns will show the how the data

are dispersed from the mean. The more dispersion the higher the standard deviation will be. When you look at the standard deviation in terms of hedge funds it gives you an indication of the investment's volatility. When the data are largely dispersed it indicates that the hedge fund is deviating from the expected normal returns. When looking at standard deviation, it will give future investors a good indication of what future expected volatility could be. The Sharpe ratio is used to characterize how well the return of an asset compensates the investor for the risk taken. It is most commonly used to rank the performance of a portfolio manager.

Further analysis using the risk analysis return standard deviation for both female and male managed funds will be used by looking at indicators of normal distribution. This will allow us to understand the investment's volatility and risk. Since a volatile portfolio has a high standard deviation looking at the skewness will help to give another indicator of the asymmetry of the distribution. Kurtosis will then describe the distribution of the observed data around the mean. It is another way of saying that you are looking at the volatility of the volatility. Commonly within the financial markets, kurtosis is an indicator of a trend in charting. A high kurtosis measure indicates a distribution with fat tails. A low kurtosis would then indicate a chart with skinny tails and the distribution highly concentrated toward the mean.

This study looks closely at male versus female managed funds using the total returns from 1 month, year to date, 1 year, and 3 years. When analyzing a hedge funds performance, the total return is the actual rate of return on an investment over a given

evaluation period. It is a general rule of thumb that the more risk you take, the greater the potential for higher return or higher loss.

Lastly, a comparison of the total returns and the trailing returns for male and female managed funds will be completed. The total returns are known as calendar year returns and are returns for a specific year such as 2006 or 2007. In contrast, trailing returns are the average annual returns for periods ranging from one to three years if the fund has been in existence that long. The trailing returns are calculated through the previous market day and therefore are more current than the calendar year returns. When using Morningstar they compare the funds performance to the S&P 500 index for the one and three year period. The figure was positive if the fund outperformed the index during the time period and negative if it underperformed.

4.2 Data Summary

The primary data source was Morningstar, augmented with Bloomberg (Morningstar). Morningstar covers U.S. stocks, mutual funds, and hedge funds investment news, reports, and statistics that fit within any of those categories. Bloomberg is an information service, news and media company that provides up to date market reports, prices, and analysis. Using data from Bloomberg and Morningstar allowed a detailed look at the fund management structure, investment objectives, risk analysis, Sharpe and turnover ratios, performance fees, management fees, and other fund characteristics. Data collected for the S&P 500 index were taken from the Morningstar website of which most of the calculations for the trailing returns were already computed.

There is no database that indicates the gender of the hedge fund's manager. However, the first name of the manager is typically given. Data collected for the analysis of the first name of a male hedge fund manager versus a female managed hedge fund name was taken from the Social Security Administration website. The data were compared to the top 1000 names used in the United States from the year 2000 to 2005 and were extracted at the end of February 2006. The most popular 1,000 names were taken from a universe that included 12,485,039 male births and 11,929,533 female births. Around 3% (fifty-two hedge funds) of hedge funds are managed by females. This information came from a universe of approximately, 7,500 hedge funds of which, 1,601 of those funds provide information to Morningstar.

The pool of 1,601 hedge funds that release this data were the database that the first names were drawn from. The Appendix provides the extensive list of names from the Social Security Administration. The gender identification process entailed an individual search within Morningstar and its hedge fund section and then a manual lookup of the first name versus the list. If the name appeared in the list it was then classified as a male or female managed fund. The final list was confirmed by a further search on the internet to confirm the sex of the manager.

There is no real data on real inflows of new money into individual funds contained in the database. This information is not required to be reported to any exchange which makes obtaining this information rather complicated. Thus, relying on the total returns which take into account the total cash inflows and outflows is the base for this analysis. Total return is the best base for an investor who takes the buy and hold approach during a

certain period of time without making any additional purchases or sales. This was the best measurement that could be used to help in the deduction of cash inflows. Below is the breakdown of the total return calculation.

$$TR = \frac{\text{(Current total net asset-Cash Flow-Previous total net asset)}}{\text{(Previous total net asset)}}$$

Hedge fund performance is calculated using the total returns that correspond to the fund manager's tenure. Morningstar calculates total return by taking each months change in net asset value, reinvesting all income and capital gains distributions during the month, and dividing that by the starting net asset value of the hedge fund. When looking at the total return, it is important to realize that they are not adjusted for sales charges which include redemption fees, front-end fees or deferred fees. However, management and administrative fees are removed from the fund's assets. A final sample of 14 female managed hedge funds was matched up with 14 male managed funds within Morningstar. They were paired by hedge fund size and by the investment style within the hedge fund industry. Table 4.1 shows the breakdown of the 52 female-managed funds by Morningstar category. [2] Each female managed hedge fund was found on Morningstar to distinguish out what their investment strategy was. From there, classification of each female managed hedge fund was placed in its specific investment style.

[2] This table accounts for the number of hedge funds that are female managed as a percentage of the total U.S. Hedge Funds

Table 4.1 Female Fund Managers: Investment Styles in Marketplace

Category	Female Manager	Male and Female Funds	Female Percentage
Convertible Arbitrage	3	41	7.32%
Corporate Event Driven	1	33	3.03%
Emerging Markets	2	28	7.14%
Equity Net Long Exposure	18	530	3.40%
Equity Net Neutral Exposure	2	75	2.67%
Equity Variable Exposure	4	148	2.70%
Fixed Income Arbitrage	1	51	1.96%
Fund of Funds	15	349	4.30%
Managed Futures	2	155	1.29%
Merger Arbitrage	2	17	11.76%
Multi Strategy	2	174	1.15%
Total	52	1601	3.25%

Table 4.1 shows that female hedge fund managers account for a small proportion of fund managers. They are most prevalent in the Merger and Arbitrage category and least prevalent in fixed income arbitrage on a percentage basis. In addition to managing a small number of hedge funds, women on average manage smaller funds in terms of assets managed.

Table 4.2 Summary Statistics for 14 Female Managed Hedge Funds from Morningstar Database of 1601 U.S. Hedge Funds

Variable	Mean	StDev	Minimum	Median	Maximum	Skewness
Assets	64.4	66.5	2.0	45.5	222.0	1.15
SX-1year	8.95	5.98	3.57	7.15	22.48	1.54
SX-3year	8.26	4.80	4.20	5.85	20.09	1.41
Sharpe-1year	0.701	0.887	-0.440	0.530	2.270	0.62
Sharpe-3year	0.924	0.533	0.080	0.870	2.110	0.45
Skewness	-0.331	0.712	-1.510	-0.445	0.580	-0.15
Kurtosis	-0.217	1.036	-1.390	-0.670	2.030	0.93
+Months	8.357	1.646	5.000	8.000	11.000	-0.43
-Months	3.286	1.541	1.000	3.000	7.000	0.91
Perf Fee	17.14	4.69	10.00	20.00	20.00	-1.07
Mgmt Fee	1.0893	0.3039	0.7500	1.0000	2.0000	2.49
Returns-1mo	8.40	8.49	-2.80	7.40	32.52	1.65
Returns-YTD	8.40	8.48	-2.75	7.39	32.50	1.65
Returns-1Yr	9.75	7.57	0.33	8.30	29.37	1.30
Returns-3yr	10.73	4.34	4.54	10.53	22.83	1.58
Trailing Returns-YTD	3.55	7.35	-5.16	2.51	23.88	1.61
TR-3yr	3.00	4.03	-1.64	2.39	14.21	1.61

There were 14 female managed hedge funds used that were found within the U.S. Hedge Fund section of Morningstar. Table 4.2 summarizes the mean, standard deviation, minimum, median, maximum, and the skewness for the 14 female managed hedge funds. The total assets under management were a maximum of $222,000,000, a median at $45,500,000 and a mean of $64,400,000 under management. Performance fees ranged from 10 to 20% with a mean performance fee of 17.14%. Management fees range from 0.75 % to 2.0 % with a mean of 1.09%. The standard deviation of risk return analysis stayed within a range of 3.57 to 22.48 for the 1 and 3 year returns. The average standard deviation for female managed funds for both 1 and 3 years was 8.95 to 8.26, respectively.

Table 4.3 Summary Statistics for 14 Male Managed Hedge Funds from Morningstar Database of 1601 U.S. Hedge Funds

Variable	Mean	StDev	Minimum	Median	Maximum	Skewness
Assets	71.6	68.6	2.0	59.5	212.0	0.76
SX-1year	14.43	14.92	3.88	7.15	51.13	1.66
SX-3year	13.18	13.20	4.22	7.42	48.64	2.02
Sharpe-1year	1.438	1.327	-0.950	1.540	3.170	-0.28
Sharpe-3year	1.058	0.573	-0.130	1.100	1.930	-0.59
Skewness	0.191	0.737	-0.950	0.120	2.210	1.54
Kurtosis	-0.639	3.466	-10.000	-0.625	7.230	-0.71
+Months	8.500	1.951	5.000	9.000	11.000	-0.62
-Months	3.500	1.951	1.000	3.000	7.000	0.62
Perf Fee	17.14	6.99	5.00	20.00	30.00	-0.52
Mgmt Fee	1.250	0.427	1.000	1.000	2.000	1.29
Returns-1mo	20.96	26.98	-6.30	18.90	106.10	2.63
Returns-YTD	21.01	26.98	-6.26	19.17	106.11	2.63
Returns-1Yr	20.27	27.78	-32.10	18.30	99.00	1.41
Returns-3yr	14.22	11.78	-6.67	15.63	46.25	1.38
Trailing Returns-YTD	14.84	29.41	-37.59	12.23	99.14	1.57
TR-3yr	13.23	25.45	-15.29	7.42	92.03	2.56

There were 14 male managed hedge funds that were paired up with the 14 female managed hedge funds. Table 4.3 summarizes the mean, standard deviation, minimum, median, maximum and skewness. The total assets under management were a maximum of $212,000,000, a median at $59,000,000 and a mean of $71,600,000 under management. Performance fees ranged from 5% to 30% with a mean performance fee of 17.14%. Management fees range from 1% to 2% with a mean of 1.25%. The standard deviation of risk return analysis stayed within a range of 14.22 to 21.01 for the 1 and 3 year returns. The average standard deviation for male managed funds for both 1 and 3 years was 13.18 and 14.43, respectively. Looking at the skewness of the returns distribution, the performance fees are negatively skewed at -.0331 for female managed funds and positively skewed (0.191) for male managed funds (Table 4.2 & 4.3).

The standard deviation for one and three years indicated that females do not have as large of a variation as males. Female managed funds have an average standard deviation of

8.95% and males of 14.43%. Morningstar calculates these standard deviations using the trailing monthly total returns for the 1 year or 3 year time span. All of the monthly standard deviations are then annualized.

Hypothesis one looks at the risk female managed hedge funds take compared to male managed hedge funds. Comparing the standard deviation result of the total returns of male managers (26.98%) and female managers (8.49%), male funds have less stability in returns than female funds. These results would suggest that men generally that risk. However, does this result in higher return? It must be stated that males average a higher return than females (20.96%vs. 8.40%).

Hypothesis two states that female hedge fund manager's trade less than male fund manager's do therefore having a lower Sharpe ratio than male hedge fund managers. The Sharpe ratio tells us whether the hedge funds returns are due to smart investment decisions or a result of excess risk. It is measure of excess return per unit of risk in an investment strategy. It is calculated by taking the expected return on a hedge fund and dividing it by the excess return of the standard deviation. Hedge funds recalculate the Sharpe ratio on a monthly basis since it is a measure of the last past 36 month period. The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance. In the case of hedge funds, this measurement is useful to compare directly how much risk two funds to bear to earn excess return over the risk-free rate. The average one year Sharpe ratio for female managed hedge funds was 0.701 and for male managed hedge funds it was 1.438 (Tables 4.2 and 4.3). This means that the 14 male managed funds have a better risk-adjusted performance that the 14 female managed funds.

Hypothesis three looks at female managed funds managers as having better performance than male managed hedge funds. Trailing returns are analyzed in this instance to indicate how each of the 14 hedge funds for both men and women performed relative to their peers over the time period of 1 or 3 years. Using relative returns such as trailing returns is useful as it compares each hedge fund to an appropriate peer group and removes performance factors that are generally beyond the female or male managers' control.

Trailing returns year to date for female managed hedge funds fall at 3.55% above the S&P 500 index with 3 year trailing returns at 3.0%. (Table 4.2) For male managed funds, trailing returns are 14.84% for the year to date measurement and 13.23% above the S&P 500 index for 3 years. It is interesting to note that again the standard deviations for the male managed funds are much larger around 25-29% and females at 4-7%. Risk averse investors may want to avoid funds with standard deviations above 10%, and many investors will rule out funds with values above 20%. This indicates larger ranges from the mean for male managed funds. The range of the returns for males is much larger ranging from -37 to 99% above or below the S&P 500. Female managers had much smaller ranges at -5 to 23% above or below the S&P 500.

One year is a relatively short timeframe for evaluating a funds performance. In this example by looking at the 3 year trailing return you will see that female managed funds have had a much smaller range of -1.64% to 14.21%. Male managed funds range from 15.29% to 92.03% above or below the S&P 500. (Tables 4.2 and 4.3)

Performance fees for male and female funds are the same at 17.14%, and management fees are within the 1% to 1.5% range. With respect to fees, there are no clear patterns as of the funds fell within tenths of a percentage of each other. When looking at Table 4.2 and 4.3, the 14 funds that were analyzed were structurally similar so finding statistical differences is a bit complicated. All differences are not significant at the 1% level, which leads me to the conclusion that there is not a significant difference in the structure between female and male managed funds. At this point in time it is best to state that there is not enough evidence to reject or accept the hypothesis.

4.3 Summarization of Hypothesis

The beginning of this investigation started by examining whether male and female managers manage their funds differently. More specifically, examination of differences in fund manager's behavior with respect to their risk taking, investment style and trading activity.

When analyzing the investment styles between female and male managed hedge funds, it could be argued that women may not hold onto their losers as long as men. The tendency to hold onto losers indicates overconfidence or quite possibly refusing to admit mistakes. Together with the literature reviewed above that men are more overconfident than women, this might explain why women are less prone to holding onto losers. It is important to note however that these findings are in relation to finding the average within hedge funds.

This studies results contrast a bit with the findings of previous research done on mutual funds. Most likely the cause of the differing results is the smaller sample of 14 matching funds and the fact that the previous research was conducted using mutual funds and not hedge funds. A large part of this difference being the access of data since mutual funds are required to report their performance and hedge funds are not. Most previous research uses data from the early 1990s, and it is possible that performance may have changed since then.

Prior literature is mixed in terms of asset size on performance. It is possible that larger funds benefit from economies of scale. This could be broken down to the specific markets that a larger firm is allowed to trade that a smaller fund might not be. At the same time, it is possible that small funds have small advantages over large hedge funds as they can more easily buy and sell the securities and commodities that they are invested in as their market share and size could be smaller. It is also important to look at the flip side of that argument and say that a larger fund might be more advantageous as they could possibly have fewer restrictions.

Examining the differences between the hedge fund manager's initial year and future years as hedge fund data was hard to find in the marketplace. It was fairly complicated to deduce from the information on Bloomberg and Morningstar exactly when the hedge fund manager started in relation to when the actual hedge fund was started.

CHAPTER V: CONCLUSION AND RECOMMENDATION

5.1 Conclusion

According to hedge fund research, women excel at managing money. The Chicago-based fund tracker recently launched a Diversity Index, calculated back to 2003. Hedge funds run by women have an average annualized return of 10.5 percent, net of fees, since 2003, compared with Global Index's average annualized return of 6.5 percent over the same period. The Global Index average includes both female and male managed funds.

The study at least shows that male and female managers may not be similar. It documented several important differences in the way they manage their portfolios and analyze consequences for their fund performance and inflows. Women tend to take less risk and their overall return risk did differ compared to the 14 male managed funds. Barber and Odean (2001) had slightly different findings when it came to individual investors and women in managerial roles. The analysis concluded that male fund managers use a more active trading strategy as compared to female fund managers. As Barber and Odean (2001) stated, a higher turnover ratio can be interpreted as an indication of overconfidence.

Overall, my findings on behavioral differences between female and male managed hedge fund managers suggest that investors who prefer moderate and stable investment styles may want to invest in female managed hedge funds, while the riskier investor interested in funds that take a riskier and more active trading stance should choose male managed funds. Fund investors are ultimately interested in performance and it is safe to say that a less stable investment style can lead to inferior performance.

5. 2 Future Recommendations

The analysis completed in this thesis is one of the many ways that the data could be used to determine the efficiency of female managed hedge funds. There are several characteristics of the data that were not included in the analysis including the investment style, amount of time that the hedge fund has been in existence, the order in female and male management. From fund inception to now who has been the manager and the sequential order along with the sex of the manager.

The timing of the study outside of a three year realm was excluded from this study as data was very difficult to find. The hedge fund industry and its lack of regulation when it comes to reporting makes finding data more than three years old is very complicated. To do an even more detailed study, it would be necessary to have return and turnover ratios from the day of inception up to the current point.

Another area for future research would be to further analyze the breakdown of the actual investment styles to further investigate what percent of the funds is equities, commodities, etc. So from within each Morningstar category of the fund strategy like fund of funds or equity net long, what is the actual breakdown of the fund with percent of equities, bonds, treasuries? It would be beneficial to look into what they are investing in within those categories. For example, a fund like Pomegranate Capital was established by a female hedge fund manager with the intention to only invest in female managed equity companies. Another example would be a hedge fund that has restrictions on investing in belief based or human vice related industries: the cigarette, casino, or alcohol industries.

Another aspect that was briefly mentioned within this paper, but not analyzed in detail is education. The level attained in education by fund managers, the school they attended, and their degree option could have a large effect on their performance and trading style.

Inflows and outflows of money into hedge funds is another area that it would be interesting to examine. Female managed hedge funds have more of a challenge when it comes to attracting new investors and new inflows of money. It would be beneficial to compare this to male managers that have the same investment styles and match fund performance up to each other side by side.

Research where there is a strong negative correlation with female managers and inflow of money into funds would important to understanding management structures. Why would funds employ women at all for fund management? It could be argued that not hiring women might expose a hedge fund to discrimination lawsuits. Is there a relationship between the larger firms and the hedge funds that are managed by women? Are larger firms putting females in fund management positions to avoid discrimination lawsuits and are smaller firms not concerned with that? It might also be fruitful to look at the locations of these hedge funds being managed by women.

These characteristics of hedge funds and female managed hedge funds could be analyzed in the future within the context that female managed hedge funds perform similarly if not the better than male managed hedge funds.

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APPENDIX I

Most Popular Names of 2000s – Social Security Administration

(Example of the data used to designate the names; only 100 used in this chart. 1000 names were actually used.)

Most Popular Names of the 2000s

	Male			Female		
Rank	Name	Number	Percent-a	Name	Number	Percent-b
1	Jacob	179,896	1.4409	Emily	149,420	1.2525
2	Michael	165,257	1.3236	Madison	123,729	1.0372
3	Joshua	151,094	1.2102	Hannah	110,081	0.9228
4	Matthew	148,038	1.1857	Emma	106,428	0.8921
5	Andrew	131,862	1.0562	Ashley	91,644	0.7682
6	Christopher	129,095	1.034	Abigail	89,848	0.7532
7	Joseph	126,394	1.0124	Alexis	89,512	0.7503
8	Daniel	125,929	1.0086	Olivia	88,971	0.7458
9	Nicholas	123,580	0.9898	Samantha	88,669	0.7433
10	Ethan	119,697	0.9587	Sarah	85,747	0.7188
11	William	119,430	0.9566	Elizabeth	84,242	0.7062
12	Anthony	117,368	0.9401	Alyssa	75,085	0.6294
13	Ryan	112,818	0.9036	Grace	72,180	0.6051
14	David	111,952	0.8967	Isabella	70,749	0.5931
15	Tyler	111,136	0.8902	Lauren	69,329	0.5812
16	John	105,165	0.8423	Jessica	69,240	0.5804
17	Alexander	104,903	0.8402	Taylor	68,290	0.5724
18	James	100,743	0.8069	Brianna	65,570	0.5496
19	Brandon	96,345	0.7717	Kayla	65,541	0.5494
20	Zachary	95,749	0.7669	Anna	59,154	0.4959
21	Jonathan	91,717	0.7346	Victoria	56,048	0.4698
22	Dylan	90,660	0.7261	Sophia	55,346	0.4639
23	Christian	87,497	0.7008	Natalie	53,828	0.4512
24	Samuel	85,914	0.6881	Sydney	53,414	0.4477
25	Justin	84,561	0.6773	Chloe	51,266	0.4297
26	Benjamin	83,598	0.6696	Megan	51,141	0.4287
27	Nathan	81,086	0.6495	Jasmine	50,978	0.4273
28	Austin	77,654	0.622	Rachel	49,896	0.4183
29	Noah	76,969	0.6165	Hailey	49,671	0.4164
30	Logan	74,896	0.5999	Morgan	48,454	0.4062
31	Jose	73,835	0.5914	Destiny	47,382	0.3972
32	Kevin	70,856	0.5675	Julia	47,027	0.3942

33	Robert	70,174	0.5621	Jennifer	46,602	0.3906
34	Gabriel	68,003	0.5447	Kaitlyn	45,779	0.3837
35	Thomas	67,216	0.5384	Katherine	43,231	0.3624
36	Caleb	66,143	0.5298	Haley	42,392	0.3554
37	Jordan	62,953	0.5042	Alexandra	40,837	0.3423
38	Hunter	62,033	0.4969	Nicole	40,088	0.336
39	Cameron	61,843	0.4953	Mia	38,674	0.3242
40	Elijah	59,348	0.4754	Savannah	38,608	0.3236
41	Jason	57,064	0.4571	Maria	37,221	0.312
42	Kyle	55,554	0.445	Ava	36,374	0.3049
43	Jack	54,849	0.4393	Mackenzie	36,195	0.3034
44	Connor	52,837	0.4232	Allison	35,998	0.3018
45	Aaron	52,811	0.423	Amanda	35,556	0.2981
46	Isaiah	52,736	0.4224	Stephanie	35,253	0.2955
47	Luke	52,486	0.4204	Brooke	33,302	0.2792
48	Evan	51,287	0.4108	Makayla	32,479	0.2723
49	Angel	50,793	0.4068	Jenna	32,047	0.2686
50	Isaac	50,766	0.4066	Faith	31,923	0.2676
51	Mason	47,929	0.3839	Jordan	31,433	0.2635
52	Jackson	47,922	0.3838	Mary	31,322	0.2626
53	Eric	47,049	0.3768	Rebecca	31,228	0.2618
54	Brian	47,043	0.3768	Katelyn	31,008	0.2599
55	Juan	46,933	0.3759	Andrea	30,873	0.2588
56	Adam	45,370	0.3634	Kaylee	30,705	0.2574
57	Charles	44,975	0.3602	Paige	30,340	0.2543
58	Luis	44,827	0.359	Gabrielle	30,001	0.2515
59	Aidan	44,311	0.3549	Madeline	29,860	0.2503
60	Gavin	43,391	0.3475	Ella	29,493	0.2472
61	Sean	41,206	0.33	Michelle	29,271	0.2454
62	Alex	40,041	0.3207	Trinity	29,187	0.2447
63	Nathaniel	39,997	0.3204	Kimberly	29,182	0.2446
64	Carlos	38,570	0.3089	Sara	28,750	0.241
65	Bryan	38,521	0.3085	Zoe	28,542	0.2393
66	Ian	37,773	0.3025	Caroline	27,347	0.2292
67	Jesus	37,278	0.2986	Kylie	27,339	0.2292
68	Steven	36,213	0.2901	Amber	27,210	0.2281
69	Adrian	35,216	0.2821	Vanessa	26,925	0.2257
70	Timothy	35,182	0.2818	Sierra	26,213	0.2197
71	Lucas	34,967	0.2801	Alexa	25,551	0.2142
72	Cole	34,708	0.278	Lily	25,513	0.2139
73	Cody	34,503	0.2764	Danielle	25,478	0.2136
74	Seth	33,635	0.2694	Erin	24,405	0.2046
75	Devin	32,995	0.2643	Angelina	24,238	0.2032

76	Richard	31,830	0.2549	Gabriella	23,812	0.1996
77	Julian	31,775	0.2545	Riley	23,749	0.1991
78	Chase	30,749	0.2463	Autumn	23,686	0.1985
79	Patrick	30,347	0.2431	Jada	23,652	0.1983
80	Blake	30,118	0.2412	Leah	23,585	0.1977
81	Owen	29,361	0.2352	Lillian	22,787	0.191
82	Sebastian	29,111	0.2332	Jacqueline	22,399	0.1878
83	Jayden	29,010	0.2324	Bailey	22,324	0.1871
84	Jared	28,515	0.2284	Melissa	22,245	0.1865
85	Antonio	28,426	0.2277	Marissa	22,185	0.186
86	Jeremiah	28,331	0.2269	Shelby	22,141	0.1856
87	Trevor	28,065	0.2248	Ariana	21,713	0.182
88	Miguel	27,498	0.2202	Isabel	21,585	0.1809
89	Diego	27,248	0.2182	Maya	21,480	0.1801
90	Xavier	27,073	0.2168	Courtney	21,215	0.1778
91	Aiden	27,033	0.2165	Audrey	21,054	0.1765
92	Jesse	27,009	0.2163	Leslie	20,942	0.1755
93	Dominic	26,652	0.2135	Claire	20,864	0.1749
94	Alejandro	26,557	0.2127	Angela	20,689	0.1734
95	Hayden	26,358	0.2111	Sofia	20,439	0.1713
96	Garrett	26,093	0.209	Jocelyn	20,156	0.169
97	Jaden	25,540	0.2046	Evelyn	20,135	0.1688
98	Mark	25,349	0.203	Catherine	20,110	0.1686
99	Jake	24,632	0.1973	Aaliyah	20,100	0.1685
100	Victor	24,631	0.1973	Mariah	20,082	0.1683

Data

Assets	Sex	SX-1year	SX-3year	Sharpe-1year	Sharpe-3year	Skewness	Kurtosis	+Months	-Months	Perf Fee	Mgmt Fee	Returns-1mo	Returns-YTD	Returns-1Yr	Returns-3yr	Trailing Returns-YTD	TR-3yr
145	1	22.48	20.09	1.04	0.92	0.14	-1.25	8	4	20	1	32.52	32.5	29.37	22.83	23.88	14.21
82	1	5.37	4.57	-0.03	0.76	-1.26	0.52	9	3	20	1	3.73	3.73	4.66	7.89	-0.83	-0.73
135	1	4.54	4.88	0.95	1.32	0.44	-1.39	6	3	10	0.75	7.6	7.63	9.45	11.14	3.96	2.52
40	1	6.47	5.38	0.95	1.12	-1.2	0.19	10	2	10	1	9.1	9.07	11.3	10.64	3.58	5.81
21	1	5.29	6.17	2.25	1.32	-1.51	2.03	11	1	10	1	13.2	13.22	18.19	12.98	7.73	4.36
24	1	4.87	4.89	1.72	1.3	-0.66	-0.65	9	2	20	1	12.5	12.53	13.92	10.88	8.43	2.26
2	1	9.64	10.12	-0.44	0.3	-0.5	-0.69	8	4	20	1	-2.8	-2.75	0.33	6.98	-5.16	-1.64
102	1	7.84	7.18	0.24	0.82	0.58	-0.8	7	5	20	1.5	4.9	4.88	6.64	10.38	-0.61	1.76
68	1	3.68	4.2	2.27	2.11	-0.39	-0.9	10	2	10	1	11.4	11.44	13.9	13.82	8.41	5.2
222	1	20.98	13.89	0.21	0.08	-0.79	-0.29	8	4	20	2	7.2	7.15	7.15	4.54	0.18	0.18
51	1	3.57	4.57	0.55	1.27	0.55	0.92	10	2	20	1	5.2	5.19	6.93	10.42	1.44	1.8
2	1	8.8	5.53	0.51	0.71	0.51	1.19	8	3	20	1	10	10.02	9.52	8.31	4.53	4.03
2	1	9.64	10.12	-0.44	0.3	-0.5	-0.69	8	4	20	1	-2.8	-2.75	0.33	6.98	-5.16	-1.64
6	1	12.19	14	0.04	0.6	-0.05	-1.23	5	7	20	1	5.8	5.8	4.78	12.47	-0.71	3.85
145	2	13.82	10.9	1.61	1.1	-0.31	-0.89	8	4	20	2	23.8	23.81	29.63	16.83	29.63	16.83
87	2	6.85	5.44	-0.04	0.33	-0.26	-1.4	7	5	20	1	2.7	2.73	4.45	6.11	-2.76	-2.51
170	2	6.21	5.53	3.16	1.93	0.29	0.19	11	1	10	1	25.2	25.22	27.27	15.85	21.78	7.23
45	2	4.61	4.31	3.17	1.41	0.32	0.4	11	1	10	1	19.2	19.72	21.2	10.69	14.23	2.07
23	2	6.11	4.77	2.29	1.47	-0.18	-1.07	9	3	5	1	18.6	18.63	20.4	11.72	14.91	3.1
23	2	7.44	7.5	0.44	1.41	0.18	-1.52	7	5	20	1	3.2	3.18	8.3	15.63	2.81	7.01
2	2	51.13	48.64	0.4	0.93	0.97	-0.2	5	7	20	1	27.6	27.62	15.72	46.25	10.23	37.63
116	2	15.5	13.29	1.31	0.88	0.17	-0.98	8	4	20	2	25.7	25.66	27.01	16.23	21.52	7.61
74	2	3.88	7.34	1.47	1.61	0.56	0.36	9	3	5	1	7.3	7.27	10.96	17.03	5.47	8.41
212	2	31.66	21.02	2.22		0.07	-10	10	2	30	1	106.1	106.11	99		99.14	92.03
92	2	7.74	9.35	3	1.46	-0.26	-0.36	10	2	20	1.5	28.6	28.6	31.64	18.88	26.15	10.26
2	2	38.03	35.02	-0.95	-0.13	-0.95	-1.28	5	7	20	1	-6.3	-6.26	-32.1	-6.67	-37.59	-15.29
6	2	4.51	7.14	-0.16	0.61	-0.14	0.57	9	3	20	1	2.7	2.67	4.09	8.71	-1.4	0.09
6	2	4.57	4.22	2.21	0.74	2.21	7.23	10	2	20	2	9.1	9.13	16.2	7.63	3.64	10.71

1 = female
2 = male