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[A Test of Market Timing Skills in Hedge Funds]

A dissertation submitted in partial fulfilment of the requirements of the Royal Docks Business School, University of East London for the degree of [Msc. Finance and Risk Management]

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I declare that no material contained in the thesis has been used in any other submission for an academic award

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A TEST OF MARKET TIMING SKILLS IN HEDGE FUNDS

By

U1226372

A DISERTATION SUBMITED TO THE

UNIVERSITY OF EAST LONDON

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTERS IN FINANCE AND RISK MANAGEMENT

2013

ABSTRACT

This paper investigates the timing skills in hedge funds using the Treynor and Mazuy Model (1966). 13 hedge funds investment style were studied and analysed from the period 2004-2013.

In order to properly test for market timing skills in hedge funds, three hedge funds styles which exhibit timing skills were analysed, they include emerging market, managed futures, and fixed income arbitrage. All test result show that all three funds style had no market timing skills. In addition the hedge funds benchmark index (credit Suisse Hedge fund index) was tested using a broader market index (S&P 500). Results shows that the hedge funds index as an entity had no timing skills.

Hedge funds claim that their timing skills are magnified during financial crisis. To test for this, this research paper used analysed 13 hedge funds investment style against two market index (credit Suisse and S&P 500) during the pre-financial crisis (2004-2006), financial crisis (2007-2009), and post financial crisis (2010 -2013). Results show that in all this periods, including the financial crisis period the 13 investment styles exhibit no magnified market timing skills.

Key words: Hedge funds, hedge funds investment style, market timing skills, benchmark.

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CHAPTER 1: INTRODUCTION

Investors are constantly searching for the best investment vehicle that delivers positive returns with minimum risk. Hedge funds promise to deliver to the investor superior risk adjusted returns. As a result of this, hedge funds are an investor's preferred choice among various investment vehicles. Despite the rejection by the Cypriot parliament in March 19, 2013 to confiscate 9.9 percent of bank deposit to help pay for a bailout, investors around the world are now sensitive to deposits in banks. This has spurred some investors to invest their funds in hedge funds rather than save them in the banks. In addition, it is well known that hedge funds outperform mutual funds (Ackermann et al., 1999). The dominance of hedge funds cannot be overemphasised, by 2004 the amount of funds managed by hedge funds have increased to $1 trillion from $100 billion in 1994 (Journal of Economics Perspective). The numbers of hedge funds have increased from 1000 to 8000 in the last ten years (Journal of Economics Perspective). Since hedge funds are not as regulated like mutual funds, this enables hedge funds to use more aggressive strategies like short selling, leverage, derivatives, trading programs and swaps. Recent events have shown that 56% of investors are willing to increase their investments in hedge funds (Journal of Economics Perspective) and that investors allocate funds across hedge funds based on past performance. If this is the case, it means that there is a serial correlation in hedge funds returns between past performance and future performance and that the market is not weak form efficient. We know that this is not the case, and that indeed markets are weak form efficient. In September 29, 2006, the $6.6 Billion hedge fund Amaranth advisors set an industry record for the largest hedge fund collapse. Hence it is difficult to post consistent returns though luck except through skills. This is the rationale behind choosing the hedge funds industry as an object of study.

The question of skills or luck in delivering consistent returns should be the foundation for an investor's choice of funds allocation and not based on past

performance. Hedge funds that exhibit skills are said to be good market timers and hence they seek to generate positive alpha. This concept of market timing skills has attracted interest from both academics and practitioners. Following the brilliant pioneering work of Treynor and Mazuy (1966), many academic efforts have focused on the timing ability of professional portfolio managers especially for mutual funds and pension funds. However, very few have focused their research on hedge funds. (e.g., Farma & French (2010) and barras et al. (2009)) conclude that mutual funds do not deliver consistent positive alpha.

This research paper aims to contribute to the determination of market timing skills in hedge funds. This is vital for investors in selecting the best hedge fund in terms of skill and not from historical performance.

Therefore, this research paper will answer the investor's questions: *The Absolute returns declared by hedge funds are they as a result of skill?* This is the first research question for this paper. The second research question is : *During the recent financial crisis of 2007-2009 did hedge funds skill magnify?*

To properly measure between skill and luck and to answer both research questions, the Treynor and Mazuy model (1966) will be used. This model used a quadratic version of the CAPM (Capital Asset pricing Model), which avails us a better framework for evaluating a managers market timing ability. Managers who anticipate changes in markets correctly will lower their portfolio's beta in bearish markets, hence realising lower losses. More so, when they anticipate a rise in the market, they increase their portfolio's beta, therefore realising higher returns. This research paper will focus on funds whose managers are likely to exhibit market timing skills, this funds promise their investors a high level of liquidity. Long-short equity funds and funds of hedge funds are the two hedge funds strategies focused on. These funds returns will be drawn from four major hedge funds databases: Credit Suisse/Tremont Hedge fund index, and Hedge funds research. Bloomberg and Thomson Reuters will be used where applicable as well especially for the benchmark return and the risk free rate which is the monthly US10 year Treasury bill rate. These hedge funds will be selected from both on shore

and offshore with Dollars as the trading currency. To test for market timing skills of managers and to proffer answers to the research questions, the periods 2004-2013 shall be examined. For research question 1, three hedge funds styles which include (Managed futures, emerging market and emerging market index) will be used as sample. To answer research question 2, the financial crisis period is examined, these are periods during which the managers of these funds are likely to magnify their presumed skills. The idea of choosing the financial crisis period also stems from the fact that hedge funds returns are serially correlated during stable market conditions since they promise positive returns overtime. To eliminate this correlation the research paper will focus on performance of 13 hedge funds styles during the pre-financial (2004-2006), the financial crisis (2007-2009) and the post financial crisis (2010 – 2013). The financial crisis period is a period of high volatility and separating these time frames in this way helps to address time varying volatility in the risk exposures. This will produce encouraging empirical results.

The absence of a benchmark serves as a limitation to this work, however to properly address this issue, a benchmark which comprise of hedge funds investment style relevant with this research paper will be used. More so, this work will focus on the time period 2007-2009, the idea is to focus only in periods of high volatility to measure hedge funds performance in terms of skill, and to eliminate the serial correlation in hedge funds returns. Any period outside of this time frame will defeat the investigation. Furthermore, the percentage of graveyard funds in hedge funds data base presents difficulties in analysing the time series of returns to determine the relevant coefficients that indicate market timing skills. Lastly, hedge funds are privately organised entities and are not obligated to disclose information to the public. The returns disclosed by hedge fund data vendors are voluntarily disclosed by the hedge funds.

The rest of this paper proceeds as follows:- Chapter 2 will provide relevant literature on hedge funds and market timing skills; this will include definitions of hedge funds and various types of hedge funds, definition of

market timing skills as well as mention various relevant works on market timing skills. Chapter 3 describes the methodology, data handling, the focus will be on Hedge funds investment styles both off shore and onshore trading with the US Dollars, chapter 3 also will present the Treynor and Mazuy model. Chapter 4, Data Analysis, and testing with empirical results, and finally Chapter 5 will provide a conclusion and recommendation.

CHAPTER 2: LITERATURE REVIEW

Hedge funds frequently make headlines in the investment world because of impressive losses or impressive gains. Hedge funds are mostly regulated. These funds can only issue securities privately. Chances are that you personally cannot invest in hedge funds, most US investors cannot. Hedge fund's investors has to be individuals or institutions who meet the requirements set out by the Security and Exchange Commission ensuring that the investors are knowledgeable and can bear significant loss.(Journal of Economic Perspectives).

2.1 Hedge Funds Defined

Hedge funds are privately organised, loosely regulated and professionally managed pools of capital not available to the public. (Francois- Serge Lhabitant, 2004). According to the report "Understanding Hedge Fund Performance" written by (Thomas Schneeweis et al, 2001), " As many definitions of hedge fund exist, they are basically loosely regulated private pools of investment capital that can invest in both cash and derivative markets on a leveraged bases for the benefits of their investors."

A more pragmatic definition of hedge fund was adopted by (Brentani, 2004) " hedge funds feature two important aspect: firstly they main objective is to generate positive absolute return by taking risk and not returns relative to a predetermined index. Secondly, hedge funds try to control losses and avoid negative compounding of capital."

(Bookstaber, 1997) states that hedge funds are difficult to describe and define as they encompass all possible investment vehicles and strategies minus the traditional funds and investment strategies.

(Garbaravicius and Dierick,2005) states that there is no common definition of what constitutes an hedge funds; it can be described as an unregulated or

loosely regulated fund which can freely use various active investment strategies to achieve positive absolute returns.

Since hedge funds have no common definition, one can clearly define them easily based on their characteristics. (Beverly Chandler, 2002) says that "A hedge fund is defined by its common characteristics, rather than by one simple definition." All the above mentioned definition supports the fact that the term hedge fund is used to describe a variety of different types of investment vehicles that share some similar characteristics.

2.1.1 History of Hedge funds

Investors are often surprised to learn that hedge funds existed over 50 years ago as a conservative investment approach designed to protect capital form market downturns. The investment strategy back then involved taking long and short positions in the stock of companies- a strategy that continues till date to be central to many hedge fund managers.

Many have believed that Alfred Winslow Jones set up the first hedge funds in 1949; however there were others who preceded Jones. Benjamin Graham operated an investment fund that utilized long and short positions and charged an incentive fee. In 1926, Graham formed a partnership with Jerome Newman which combined hedge and naked strategies, such as convertible arbitrage and distress securities. Overtime it became widely accepted that Alfred Winslow Jones partnership should be considered the first hedge fund as it combined leverage long stock positions with a portfolio of short stock position in an investment fund, hence making it more dynamic and versatile in its trading strategies (longo, 2009).

The prospects of better return increased the popularity of hedge funds during the periods 1960 and 1970. During this period, hedge fund managers changed their investment approach and started leveraging, they took more risk by leveraging instead of hedging their positions. When markets were volatile, these risky strategies did not pay off and hedge funds during this

period had difficulties. Popular participants during this period include Warren Buffet and George Soros according to (Robert Jagger, 2003).

Futures trading started becoming popular among investors between 1970 and 1980. According to (Robert Jagger,2003), investors could gain access to diversified futures portfolio that could take short positions against rising inflation and interest rate.

Between 1980 and 1990, derivatives started gaining popularity in the investment world and new styles of managements were developed. Hedge funds started to offer greater selection of products and sophisticated strategies. This was the start of hedge funds growth where hedge funds became the most popular investment vehicle. Over the years hedge funds have become vital participants in most global futures exchanges. According to (William Fung and David Hsieh, 1999), there were 231 hedge funds with US$6.5 billion of assets under management in 1990 and the industry has grown to 987 hedge funds with about US$65 billion asset under management at the end of 1997. Many traditional money managers were becoming hedge fund managers.

The technology bubble burst and the subsequent market meltdown in the year 2000 separated true hedge fund managers from the rest. According to (Francois- Serge Lhabitant 2004), the motive of investing has changed drastically, investors have been looking for an effective means of diversification to protect their capital from falling equity markets and depressed bond yields.

The current year, hedge funds have become more matured and promise to deliver absolute returns through shifting market conditions. This contributed to the growth of hedge funds as investors diversify their funds to hedge funds for management.

2.1.2 Characteristics of Hedge funds

Clearly from the wide definition of hedge funds it is clearly accepted that the best definition will be the definition that looks critically at the characteristics of hedge funds. (Beverly Chandler, 2002) says that "A hedge fund is defined by its common characteristics, rather than by one simple definition."

Return objective: Hedge funds aim to generate positive absolute returns in any market condition. Typically managers of hedge funds commit their own capital to ensure that investment decisions meet with what was promised to the investors. Therefore the preservation of capital becomes the primary objective.

Investment Strategies: hedge funds take positions in a wide range of market conditions they are free to choose among various complex and sophisticated investment techniques such as leverage, short selling, and derivatives

Incentive structure and life cycle: hedge funds typically charge 1-2% management fee and up to 20 % performance fee. The average life span of a hedge fund is around 3.5 years (Koh, Lee, and Phoon, 2001). A high water mark clause is used as a performance measurement tool. Performance compensation fee is paid only when the hedge fund manager exceeds the present target. Underperforming funds that cannot meet the target, management will structure lower incentives to sustain this particular hedge fund. Because it would be more difficult to reach the target in the forth coming period, it is preferred to close down the hedge fund and introduce a new one, with the hope of attracting new investors

Subscription and withdrawal: In order to preserve the financial stability of hedge funds if they decide to invest in illiquid assets, hedge funds have lock up periods up to a year until first redemption. Many hedge funds maintain the right to suspend redemptions under exceptional circumstances if large capital withdrawals can endanger the financial stability and existence of the funds.

Investors: Hedge funds are not widely available to the public. Their investors are mainly high net worth individuals and institutional investors. This is

because of the high minimum level of funds that is required to invest in hedge funds.

Regulation and Disclosure: Depending on their onshore and offshore residence, hedge funds are loosely or not regulated. However, Europe applies currently an increased level of regulation and high degree of transparency. Hedge funds adhere to voluntary disclosure requirement unlike traditional investment funds.

Domicile: Hedge fund can be domiciled in onshore or offshore locations. Around half of the number of hedge funds was registered off shore at the end of 2007. The most popular off shore location has been the Cayman Islands (57% of offshore funds), followed by British virgin Islands (16%) and Bermuda (11%). The US was the most popular onshore location, accounting for about two-thirds of onshore funds with European countries accounting for the remainder. (IFSL Research).

2.1.3 Hedge fund Investment styles

The degree of investment tools available to hedge fund managers, due to hedge funds being privately organised and loosely regulated, allows for different styles to be employed. The managerial styles that prevail in an investment scenario are as a result of an undertaken strategy. This strategy determines, the goals of a given fund, the method to achieve them, and opportunities offered from an investor's perspective. This three factors account for the difference in volatility and returns among the various styles. This research paper studies the performance of 13 of this hedge funds investment style which were collected as samples as explain in chapter 3.

Tactical Trading: Hedge funds that use the tactical trading investment style are arguably the largest funds in terms of (Asset under Management) AUM. They attract most of the media attention and coverage. Example include: Quantum fund, co-founder George Soros. Strategy under this investment style includes Global macro and managed futures and commodity trading advisors. Under the global macro, Hedge funds make leveraged and directional investments in global currency, equity, bond, and commodity

markets on discretionary bases. While for managed futures and commodity trade advisors, hedge funds primary trades listed commodity and financial futures contract on behalf of their clients. (Lhabitant, 2004).

Equity long/short or directional trading: This is the primary strategy that takes advantage of what is perceived to be an element distinguishing hedge funds from traditional investment which is short selling. Various sub strategy include: Global, Regional, sector, Emerging markets, Short-selling, market timing, Futures. (Gaon, 2003)

Event-Driven: Here the funds place interest in debt, equity, and trade claims of companies passing through specific restricting phases of their life cycle. Sub styles include event driven or corporate life cycle, distressed securities, risk arbitrage or merger arbitrage. The dominant styles in this category are distressed securities and risk arbitrage.

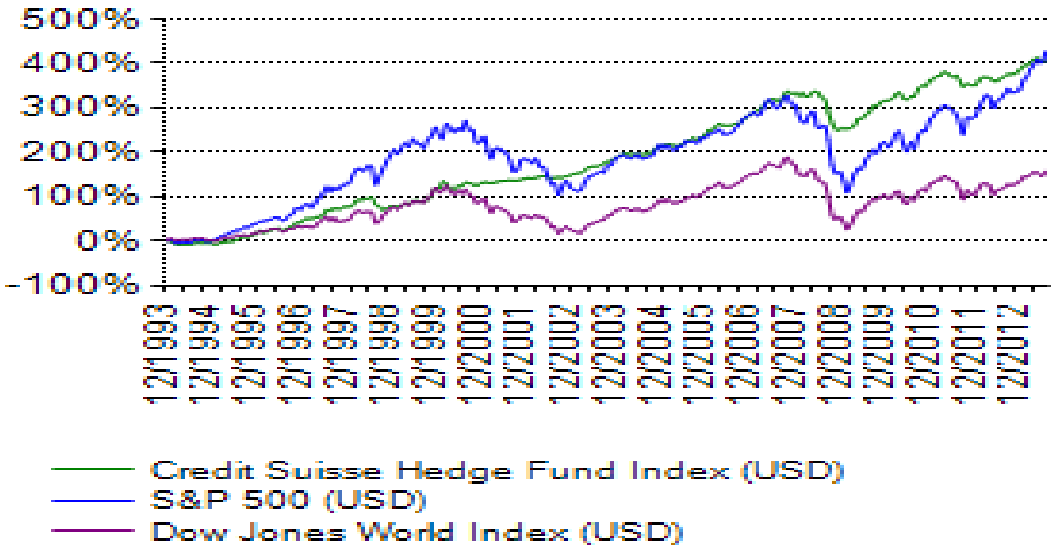
Relative value arbitrage: Managers interested in this strategy trade in a wide range of securities, equity, options and futures. The idea is that there are pricing discrepancies between similar securities. Fundamental and technical analysis is used to identify the mispricing and then assets that are undervalued are bought and those over priced are sold short. Sub strategies include Event driven/multi strategy, convertible arbitrage, fixed income arbitrage, market neutral arbitrage, and market neutral securities hedging. . (Gaon, 2003)

Funds of funds and multi-strategy: Fund of funds invests in multiple managers through a fund or a managed account. Funds of funds managers have discretion to choose which strategy to invest in and may allocate funds to numerous managers within a single strategy or to numerous managers in multiple strategies. Multi- strategy on the other hand, employs various strategies simultaneously to realize short and long term gains. These strategies include system trading like trend following and other technical strategies. (Lhabitant, 2004)

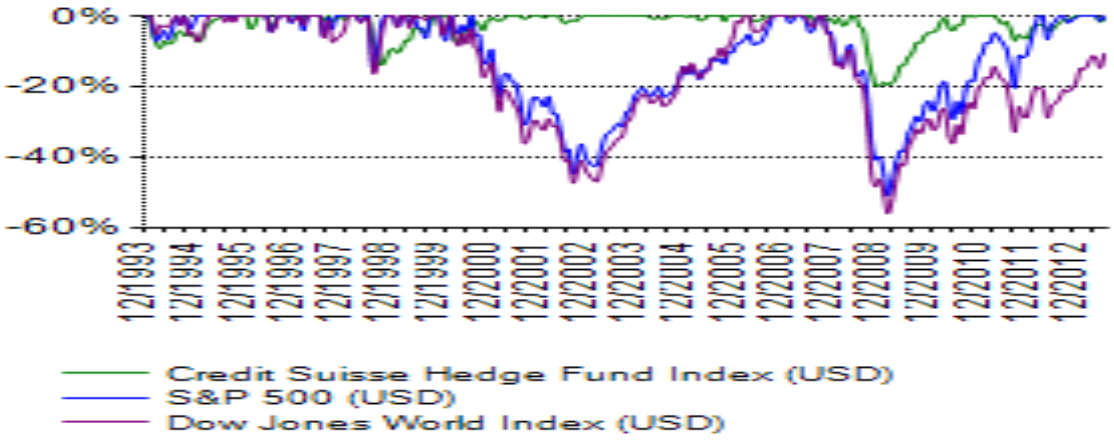
2.1.4 Hedge Fund Index providers.

Hedge funds index providers are different in terms of their style of calculations based on weighting methods. They also differ in terms of how they control for survivorship biases. This research paper uses the credit Suisse hedge fund index to collect data for 13 hedge funds styles. Below is a graph showing the cumulative returns and the drawdown of the credit Suisse index in comparison with the S&P 500 index and the Dow Jones world index.

Cumulative returns graph: Source- Hedge index



Drawdown graph: source- Hedge index



The two graphs above shows that the credit Suisse hedge fund index over the years from 1993 to 2012 has had a higher cumulative returns and lower drawdown compared to S$P 500 index and Dowjones world index.

This research paper investigates to find out if hedge funds realise abnormal returns as reported by them.

Credit Suisse Hedge Fund Index: The Credit Suisse Hedge Fund Index is compiled by Credit Suisse Hedge Index LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index uses the Credit Suisse Hedge Fund Database, which tracks approximately 9,000 funds and consists only of funds with a minimum of US$50 million under management, a 12-month track record, and audited financial statements. The index is calculated and rebalanced on a monthly basis, and reflects performance net of all hedge fund component performance fees and expenses.

Hedge Funds Research: One of the most popular indexes among investors is the Hedge Funds Research (HFR). It was established in 1992 and is a Chigaco based index and advisory provider. HFR claims to have the most detailed classification system as it supplies over 100 indices. HFR indecies are net of fees and since 1994 free of survivorship bias (Lhabitant, 2006). The construction of the indices is made on equal weighted basis: there is no minimum required asset size and no minimum track record for including a particular fund. Database consists of over 6500 funds consisting of both the US and offshore funds.

Morning Star Morgan Stanley Capital Indices: Morgan Stanley capital Indices (MSCI) is a popular provider of fixed income and equity indices worldwide. It has been involved in the hedge fund indexing since 2002, but the hedge fund section was purchased in 2008 by Morningstar. The number of indices available from MSCI as of 2009 was 193.

Standard and Poor: Started its hedge fund indices since 2002. S&P offers investors a hedge fund portfolio. The hedge fund evaluator forecast the performance of the portfolio by finding an existing, public index having a high correlation with the analysed portfolio and projecting its potential performance.

Dow Jones Credit Suisse Hedge Fund Indexes (DJCS): Former Credit Suisse/ Tremont Hedge fund indexes. It was changed after credit Suisse Index Co merged with Dow Jones Indexes in June 2010. Methodologies and rules for each index remain unchanged. A major difference between DJCS index and other indexes is that it was the first to construct its index on an asset weighted basis. This assures a more accurate representation of the markets. Indices are constructed from a representative selection of hedge funds from a database consisting of over 5000 funds. To minimise survivorship bias, funds are not removed from the index until they are fully liquidated or fail to meet the financial reporting requirements.

2.2 Market timing Skills Defined.

Evaluating the performance of a manager has received wide attention in the finance literature. Market timing is exhibited by skilled managers; it is the ability of a fund manager to produce a better return distribution by forecasting market wide movements (William Breen et al, 1986). Managers who anticipate market evolutions correctly will lower their beta when the market falls. Therefore their portfolio will depreciate less than if they had not made the adjustment. More so, when they anticipate when they anticipate a rise in the market they increase their portfolio's beta, which enables them to make higher profits.

2.3 Empirical Work on Hedge funds

Study of hedge funds in academics is a recent development. The attention on research on hedge funds stems from the Asian and Long Term Capital

market (LTCM) Crisis. Most work on hedge fund has been carried out on three main categories:

1. Performance Attribution (Modelling Returns)
2. Performance Evaluation
3. Characteristics of hedge funds and Impact on the financial markets.

2.3.1 Performance Attribution (Modelling Returns)

Attribution analysis attempts to find out the factors affecting hedge fund return. A limited number of academic researchers have focused on investigating the sources of hedge funds return. Research in this area can be divided into three groups: Modelling hedge funds performance as a group, extracting strategies from observed returns, and modelling particular hedge fund strategy.

(Schneeweis and Spurgin, 1998) use a multifactor analysis to explain the performance of Commodity Trading Advisors (CTAs), hedge funds and mutual funds. Research has shown that Multi factor model often provide improved explanatory power regarding the return structure for bond and stock mutual fund investors. However, hedge funds and Commodity trading advisors have different trading style like long and short positions as well as leverage compared to the traditional stock and bond mutual fund managers. They concluded that the factors that include the possibility of trending prices up and down, short sales, and volatility should better capture the return characteristics of these alternative investments

(Ackermann and Ravencraft, 1999) attempted to isolate the hedge fund characteristics that might explain the performance and volatility of hedge funds. They regressed risk-adjusted performance and volatility on four characteristics (management fee, incentive fee, age, US versus offshore, and six dummy variables for hedge fund categories) of hedge funds. They used the dependent variable as the natural log of standard deviations of hedge fund total monthly returns. This is because natural log yields a more normally distributed dependent variable and improved explanatory power.

They concluded that no particular hedge fund category dominates in returns, there is weak evidence that US funds out perform off shore funds and that the age of hedge funds has no effect on risk adjusted returns.

Brown and Goetzmann (2003) studied the monthly returns of hedge fund over the period January 1989 to January 2000 using TASS data base. They used a systematic quantitative approach to using both the return history and the self reported style information to understand and characterise the major categories of hedge fund style during the sample period.

Fung and Hsieh (1997) extended Sharpe's model (style regressions) for analysing investment management styles of traditional managers (relative return targets) to alternative managers with absolute return strategies.

2.3.2. Performance evaluation

This involves comparing the returns achieved by hedge funds with the return earned on some other standard investment asset. Academic research in this area can be divided into: Benchmarking, performance persistence, market timing skills and security selection, time varying volatility of returns, performance in a portfolio context.

Treynor and Mazuy (1966): takes into account adjustment on portfolio beta, hence measuring a manager's market timing skills. Managers who anticipate market changes will lower their portfolio betters when market falls and increase portfolio betters when market rises. They proposed a quadratic regression model, betas increases as market return is large.

Jensen (1972): The above model by treynor and mazuy (1966), was validated theoretical by Jensen (1972). Jensen concluded that manger's skill can be measured by observing the correlation between the market timer's forecast and the realised returns on the market. Jensen assumed that the forecasted return and the actual return on the market have a joint normal distribution. He stated that under this method, the separate contributions of selectivicity

and timing cannot be identified unless for each period the managers forecast and the consensus expected return on ht market portfolio are known.

Bhattacharya and Pfleiderer (1983): made changes in the Jensen Model(1972). They introduced measurement of adjusted forecast to minimise forcast errors. They showed that a simple regression technique can be used to measure for market timing and selection. Jensen assumed that the manager uses the unadjusted forecast of the market return in the timing decisions. Bhattacharya and Pfleiderer assumes that the manager adjust forecasts to minimize the variance of the forecast error.

Henrikson and Merton (1984): introduced option theory in market timing. A manger will timing abilities will shift his portfolio between risk assets and a risk free asset. They developed two test of timing skill which are- non parametric test and parametric test. For non-parametric test, the timers forecast of the market is very vital, while for parametric test, the returns generated by the market timer is important. A perfect pure market timer should have a market coefficient of one and a timing coefficient of one.

Chang and Lewellen (1984): they used the Henriksoon and Merton modelby ignoring the presence of heteroscedasticity. They didn't find evidence that funds could time the market.

Admati,Bhattacharya,Pfleiderer,and Ross (1986), they improved the treynor-mazuy (1966) model, showing the importance of investors optimal portfolio weights,by assuming normal distributions and managers have exponential utility functions.

Jagannathan and Korajczyk (1986), introduced an artificial market timing effects from stocks showing option like features in returns. They argue that it may be as a result of nonlinear payoffs structure due to the inclusions of options and or leveraged assets in funds. Jagnnathan and Korajczyk explained that small stocks show option like features that can cause false positive timing ability.

Ferson and Schadt (1994) introduced an important innovation in performance measurement by introducing time varying conditional betas to

ensure that the managers portfolio response to be a function of economic conditions. Ferson and Schadt, test if managers are shifting their portfolio mix with economy information and if they were isolating the information which has the most impact on portfolio rebalancing. They also proposed test to check if managers use information above the assumed market information in setting their market mix.

Graham and Harvey (1996) examined market timing skills by regressing future returns on current changes in asset allocation recommendation. Graham and Harvey didn't require simultaneous estimation of stock-selection and market timing skills.

Goetzmann,Ingersoll and Ivkovich (2000) introduced an argument based on downward bias in return based measures. This is so when returns are measured on a monthly frequency. Investment managers normally are involved in active timing and trade more frequently than monthly.

Bollen and Busse (2001) by using frequent daily returns they test market timing skills using frequent daily returns and Found positive timing ability from a sample of 230 domestic equity funds.

2.3.3 Characteristics and impact on financial markets.

Categories under this academic research include financial stability, financial market and liquidity provision, short selling and price discover.

Goetzmann, Ingersoll and Ross (1998) examine the cost and benefit of high water mark compensation. They investigate the reason for the existence of performance based fee structure in the management of hedge funds. They developed a valuation equation based on Black Schole's option valuation model to estimate the division of wealth that an investor implicitly makes with the portfolio manager, upon entering the contract. They concluded that the trade off between the fixed fee and the high water mark fee (incentive fee) depends upon the volatility of the portfolio and investor withdrawal policy.

Brown Goetzman and park (2000) conducted a test that hedge funds contributed to the 1997 crash of the Asian currency. The method they employed was the sharpe's style analysis which separates returns as a result of skill and style. They concluded that there was little evidence that the funds contributed to the collapse.

Sharma (2004) explains the possible dangers associated with leverage and the evident relationships between counterparty risk, leverage and market risk. Leverage magnifies the possibility of large investment losses because the excess increase in assets beyond Investor capital magnifies the beta of the investment portfolio. Leverage and counterparty risk are a dangerous mix because the main broker sets the credit limit for each hedge fund. Leverage also increases the vulnerability to margin calls and forced liquidations.

CHAPTER 3: METHODOLOGY AND DATA COLLECTION

This research seeks to investigate timing skills in hedge funds. In other to achieve this objective, two hypotheses will be tested using the popular Treynor and Mazuy model (1966).

Hypothesis 1: Hedge funds absolute returns are as a result of luck and not skill.

This hypothesis will be tested so as to answer the research question 1: The Absolute returns declared by hedge funds are they as a result of skill?

Hypothesis 2: Hedge funds skills are not magnified during financial crisis of 2007-2009.

The second hypothesis was formulated in order to answer research question2: During the recent financial crisis of 2007-2009 did hedge funds skill magnify?

The two hypotheses tested will be the null hypothesis Ho.

3.1 Specification of the Model

Markowitz (1952) laid the foundations of modern portfolio theory and paved the way for Sharpe(1964) and Lintner's (1965) capital asset pricing model (CAPM) and Ross' (1976) arbitrage pricing theory (APT). Performance measurement for funds became popular with Jensen's Alpha (1968) model. But it was Treynor and Mazuy (1966) and Henriksson and Merton (1981) that introduced the concept of timing ability and selection skills of fund managers. To date, these are the only two return–based approaches that has been used regularly for the testing of market timing skills in funds. As a result they have become the foundation on which other academic literature on timing and selection skills are based upon.

Treynor and Mazuy Model (1966)

Where:

represents the portfolio return vector for the period studied;

denotes the vector of the market returns for the same period, measured with the same frequency as the portfolio returns;

indicates the rate of the risk-free asset over the same period.

Excess return on the firm and market is denoted by

The, , and coefficients in the equation are estimated through regression. If is positive and significantly different from zero, we can conclude that the manager has successfully practised a market timing strategy.

This model used a quadratic version of the CAPM, which provides us with a better framework for taking the adjustments made to the portfolios beta into account, and thus for evaluating a manager's market timing capacity. Managers who anticipates market evolutions correctly will lower their portfolio's beta when the market falls. Their portfolio will thus depreciate less than if they had not made the adjustment. Similarly, when they anticipate a rise in the market, they increase their portfolio's beta, which enables them to make higher profits. The relationship between the portfolio return and the market return, in excess of the risk-free rate, should therefore be better approximated by a curve than by a straight line.

Portfolio managers have two types of ability which are selectivity (stock picking ability) and market timing ability. Selective ability is involved with picking stocks with positive "alpha" (example using the Jesen's Model). Market timing skills however requires the manager to adjust beta in responds to forecast about the market. ( )

This model is specifically designed with the magnitude timer in mind, strictly specified with the magnitude timer as the focal point. A fund manager chooses beta that is linear to her forecast:

δ is a constant

Substituting equation (1) in (2) we derive

3.1.1 Limitations and Justification of the Model

As highlighted by Ingersoll et al. (2007), it is enormously easy to manipulate the performance measures introduced by Trenor and mazuy by altering the distribution of returns, or by dynamically trading securities to curb the distribution of returns. To better identify pure market timers, three types of corrections have been proposed: a variance correction approach (Grinblatt and Titman, 1994); an approximation based on the squared benchmark returns (Bollen and Busse, 2004); and a synthetic option pricing approach (Merton, 1981).

All three proposed methods, however, remain prone to manipulations because a manager who has access to a complete derivatives market can easily alter the market timing coefficient without affecting the regression intercept (alpha) to a proportional extent (Ingersoll et al. (2007)
Therefore all attempts to correct the Treynor and mazuy model with proposed adjustment methods have failed drastically. The estimates have been exaggerated, leaving negative timers with positive adjusted performance.
Another limitation to the model is the use of a multifactor. Multifactor means to use more than one benchmark in the model for a particular investment style. To avoid this, different regression was run against each benchmark.

The most valid limitation with this model remains the fact that the absence of benchmark makes the use of this model hardly applicable. How can a manager time

a market index, if one does not know what market to time? To properly address this issue, this paper will select appropriate market proxy for each hedge funds style analysed. This will be provided in a tabulated form under the section data collection. Fung, Hsieh, Naik and Ramadorai (2008) investigate whether risk exposures of hedge funds change over time by running regressions over different time intervals. Therefore, to factor in the concept of time variation in hedge fund returns, this research paper will investigate hedge funds timing skills from 2004 to 2006 (pre financial crisis period), 2007 to 2009 (financial crisis period), 2010 to 2013 (post financial crisis period).

3.2 Data Collection

This research paper follows the fund style classification methodology of the credit Suisse Tremont hedge fund index and hedge funds research index. Sharma (2004) reports that HFR and Credit Suisse/ Tremont have minimal survivorship bias because these data bases retain the returns of liquidated funds in their index calculations. The Credit Suisse Hedge Fund Index is compiled by Credit Suisse Hedge Index LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index uses the Credit Suisse Hedge Fund Database, which tracks approximately 9,000 funds both onshore and offshore and consists only of funds with a minimum of US$50 million under management, a 12-month track record, and audited financial statements. The index is calculated and rebalanced on a monthly basis, and reflects performance net of all hedge fund component performance fees and expenses.

The sample for this research consists of 10 hedge fund style index returns with 3 sub categories. The appropriate market proxy consists of 6 appropriate benchmarks consistent with each fund's investment style. The return for these benchmarks was collected from Bloomberg. Funds of funds

were removed from the sample list because it is a strategy that involves holding portfolio of other investment funds, while long/short equity funds, managed futures, and multi-strategy was included in the sample because they are the most popular investment style and claim to have market timing skills.

To account for survivorship bias, the returns of each hedge fund investment style were computed from Credit Suisse hedge fund data base. The Credit Suisse Hedge Fund Index uses a rules-based construction methodology, identifies its constituent funds, and minimizes subjectivity in the index member selection process as a result of the rules-based method. It aims to achieve maximum representation of the index universe. To minimize survivorship bias, funds are not removed from the index until they are fully liquidated or fail to meet the financial reporting requirements.

3.2.1 Limitations

One of the major limitations of this research is survivorship bias which was addressed using credit Suisse data base. Another limitation is the non disclosure of hedge funds and their returns as they are not regulated. This promoted the use of the various hedge fund investment style indexes, which represents all hedge funds both on and offshore, existing or dead funds under the credit Suisse hedge fund data base. The last limitation was finding the appropriate benchmark for each hedge fund investment style. To address this issue, each hedge fund investment style is matched with its appropriate benchmark based on the type of security the fund trades.

NO	HEDGE FUND INVESTMENT STYLE	BENCHMARK
1	Convertible Arbitrage	S&P 500, and Credit Suisse index
2	Dedicated short Bias	S&P 500, and Credit Suisse index
3	Emerging market	Emerging market Index

4	Equity Market Neutral	S&P 500, and Credit Suisse index
5	Event Driven	S&P 500, and Credit Suisse index
6	Event driven distressed	S&P 500, and Credit Suisse index
7	Event driven Multi-strategy	S&P 500, and Credit Suisse index
8	Event driven risk Arbitrage	S&P 500, and Credit Suisse index
9	Fixed Income Arbitrage	Dow Jones corporate bond index
10	Global macro	S&P 500, and Credit Suisse index
11	Long/short equity index	S&P 500, and Credit Suisse index
12	Managed Futures	Goldman Sachs commodity index
13	Multi-strategy	S&P 500, and Credit Suisse index

3.2.2 Method of Analysis and Interpretation

This paper will compare the timing ability of each investment funds mentioned above. This is done by running a regression using the specified model . IF the timing is positive and significantly different from zero, then the hedge fund investment style has positive timing skills, if found negative then the investment style has negative timing skills.

3.2.3 Eviews for Regression

To find out if the coefficient is positive or negative, OLS (ordinary Least squares) regression was run using a popular and modern regression software called Eviews by using a combination of time series and panel data techniques. The technique used for the panel data involved the fixed for fixed method. A Fixed effect technique is a method that involves the fixing of the cross sections (hedge fund style), and the time periods (year of study). To determine if the effect is necessary or not, a redundant fixed effect test is carried out. The dependent variable is the excess return of the hedge funds over the risk free rate, . While

the explanatory variable is the adjusted excess return of the benchmark markets over the risk free rate and a quadratic function for the timing coefficient . A monthly return of each investment style in the sample was collected from credit Suisse data base. While the monthly returns for each benchmark index was collected from Bloomberg and calculated using the capital gain method The appropriate risk free rate derived from Bloomberg was the US 10 year US Treasury bill rate measured monthly, denoted as used.

In other to proffer an answer to research question1, time series regression from 2004-2013 was run for the samples, these samples includes: benchmark to benchmark (Credit Suisse hedge fund index and S&P 500) and Investment style to appropriate market index (Managed futures and Goldman sachs commodity index, emerging market and emerging market index, fixed income arbitrage and Dow Jones Corporate bond index). This regression was done specifically to determine timing skills in the above mentioned fund's specific traded market, because the Market proxy for the rest of the investment style is S&P 500. To answer research question 2, Panel data regression was run using fixed effect for the sample, these includes: the pre financial crisis (2004 to 2006), financial crisis (2007 to 2009), and post financial crisis (2010 to 2013) for all the hedge fund investment style in the sample against two separate benchmark index (Credit Suisse Hedge fund index and S&P 500 index). The panel data regression and time series regression that was run against these two benchmarks was not a multifactor Trenor and Mazuy model. A multifactor model is where more than one benchmark is used simultaneously to run the regression. It is well known from academic research that multifactor regression can contaminate the quadratic term of the model (Sougne 2011). Therefore, regression against each benchmark was done separately.

Below is a summary of the regression run between each investment style and benchmarks.

INVESTMENT STYLE/BENCHMARK	BENCHMARK	TYPE OF REGRESSION
Credit Suisse hedge fund index (benchmark)	S&P 500	Time series Regression

Managed Futures	Goldman-Sachs commodity index	Time series Regression
Emerging market	Emerging market Index	Time series Regression
Fixed Income Arbitrage	Dow Jones corporate bond index	Time series Regression
All investment style	Credit Suisse hedge fund index & S&P 500	Panel Data Regression (pre crisis)
All investment style	Credit Suisse hedge fund index & S&P 500	Panel Data Regression (financial crisis)
All investment style	Credit Suisse hedge fund index & S&P 500	Panel Data Regression (post crisis)

3.2.4. Reliability and Validity of Data and Analysis.

When running a regression using OLS (ordinary least square), certain properties of the estimators α (must be met and are therefore known as the Best Linear Unbiased Estimators (BLUE). These estimators are BLUE only if assumptions concerning disturbing terms are met. (Brooks 2008).
Below are some of the disturbing terms and how this research paper would correct each of them if violated.

- Heteroskedasticity and Homoskedasticity

Some of the disturbing terms include Heteroskedasticity, where var(ut) = $\sigma 2 < \infty$. The variance of the errors is constant and finite over all values of *xt. This implies Homoskedasticity and the OLS estimators are no longer BLUE.* Hedge funds returns are most likely to exhibit heteroskedasticity, due to this a test for Heteroskedasticity will be conducted using two test, first is the ARCH test and the second is the popular White's test. If Heteroskedasticity is found, we shall correct this in Eviews using the Heteroskedasticity consistent coefficient standard error estimates. This correction method is popularly known for correcting the observed standard errors and at the same time leaving the estimated coefficients unchanged.

- Autocorrelation

Hedge fund returns are prone to be serially correlated, if this is the case it means that the assumption cov(ui , $u\ j$) = 0 (The errors are linearly independent of one another has been violated). A serial correlation test will be carried out on the residuals using Breusch-Godfrey Serial Correlation LM Test, the lags used is 12 Lags because the returns are monthly. *DW (Durbin Watson)* is a test only of whether consecutive errors are related to one another. So, not only can the *DW* test not be applied if a certain set of circumstances are not fulfilled, there will also be many forms of residual autocorrelation that *DW* cannot detect (Brooks 2008.pp 148.).If the assumption cov(ui , $u\ j$) = 0 has been violated, this means that the error terms are correlated. This violation will be corrected in Eviews using the popular Newey-west correction test.

- Unit root and Stationary

Unit root and stationary test will be carried out using the Augmented Dickey-Fuller test in Eviews. A spurious regression problem can occur if we use non stationary data. Therefore the stationary constituent of a series can greatly influence its properties. If the data has unit roots, the error term will likely have a unit root. This test will be carried out using Dickey fuller test in Eviews

- PANEL DATA FIXED TEST

The methodology for the regression for the pre financial crisis, financial crisis and post financial crisis using panel data involves the use of the fixed effects for the period and cross section. The regression result will provide the estimates of the coefficients for the fixed period and for the fixed hedge funds in the sample. A test of the fixed effect known as the redundant fixed effect test will be done. The test shows if the fixed effect techniques used is necessary or not.

- Normality Test

Markowitz framework omitted three very vital aspects in terms of hedge funds performance. Hedge funds return exhibit existence of statistical movements of higher order (Skewness and Excess kurtosis). These two factors distort the returns of hedge funds. Hence hedge funds returns appear attractive to investors. Normality test will be conducted using Bera—Jarque test in Eviews. If errors in normality are found in the data, dummy variables will be used to cancel out these observations.

- Hypothesis testing

This is the focal point of this research paper, as conclusions on the analysis will be drawn from the hypothesis testing. The timing coefficient is , therefore a statistically significant positive value of will signify market timing skills of the investigated fund style.

The test statistics is: : = 0

: ≠ 0

The significance level will be carried out at 5%, 10% and 1 %. If the P value from the regression result is ≤ any of the above mentioned significance level, we reject the null hypothesis : = 0 and accept the alternative hypothesis. Also funds with positive timing skills and negative timing skills will be identified by looking at the timing skill coefficient .

CHAPTER 4: EMPIRICAL RESULT AND ANALYSIS

In this chapter, empirical results will be analysed, inferences will be made based on the test statistics in terms of the different regression that was run

for this research using Eviews for the timing skills model (Treynor and Mazuy). This is the first research paper to carry out two separate types of regression (time series and panel data) and to use for the panel data regression two different benchmarks for the hedge fund investment style. The reason for this is because of the criticism with the timing skills model used.

This section will first analyse the results from the data reliability tests and correct for errors observed. The first regression is time series regression and the second is the panel data regression. To ensure the reliability of regression result, the following test where carried out for the time series regression: Normality test, Heteroskedasticity test, Unit root test and Autocorrelation test. However, for the panel data regression, we observed that each of these tests generated a non singular matrix error report. This could be as a result of the number of years observed, which is not quite large.

4.1 Time Series Regression

Time series regression was run because three funds style had to be tested separately first due to their unique proxy markets. These funds styles are: managed futures, emerging market and fixed income arbitrage. Also another time series regression was run for the entire hedge fund benchmark (Credit Suisse Hedge fund index) against a broader market index which is the S&P 500 index.

Below is table showing the investment style, their unique benchmarks and the type of regression.

DEPENDEDNT VARIABLE AND INDEPENDENT VARIABLE

HEDGEFUND STYLE/BENCHMARK	BENCHMARK (X VARIABLE)	REGRESSION

(Y VARIABLE)		
Credit Suisse hedge fund index (benchmark)	S&P 500 Index	Time series Regression
Managed Futures	Goldman-Sachs commodity index	Time series Regression
Emerging market	Emerging market Index	Time series Regression
Fixed Income Arbitrage	Dow Jones corporate bond index	Time series Regression

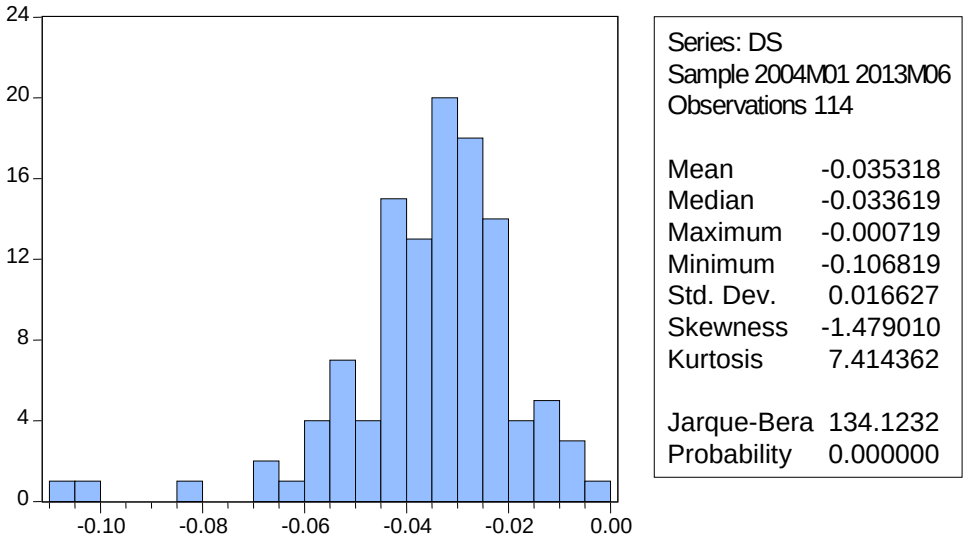
4.1.1 Normality Test

Normality test for each of the above mentioned regressions was carried out using the using Bera—Jarque test. The test measures the standard deviation, mean, skewness and excess kurtosis.

- Credit Suisse Hedge fund index/ S&P 500 Index

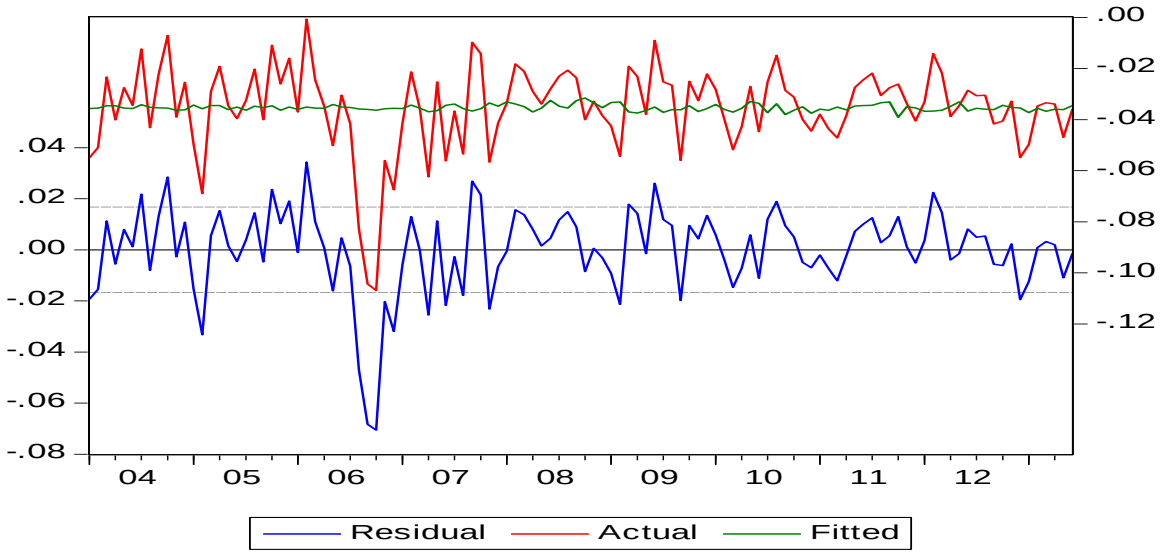
The table below is a histogram chart on the normality test carried out using credit Suisse hedge fund index as the regressand and S&P 500 index as the regressor. The assumption of normality is violated as can clearly be observed by the excess kurtosis of 7.4. The mean is -0.0353, while the standard deviation and skewness is 0.017 and -1.48 respectively. The histogram above should be bell-shaped if the residuals are normally distributed. Also the Bera--Jarque statistic would not be significant if the residuals were normally distributed.

TABLE 1: HISTOGRAM (RESULT FOR NORMALITY)



This means that the *p*-value given at the bottom of the normality test screen should be bigger than 0.05 to not reject the null of normality at the 5% level.

TABLE 1.1: RESIDUAL PLOT



To improve the possibility of error normality, the error was corrected using a dummy variable of 1by observing the period where the outlier has been observed. This period was the year 2006 in the month of October.
A new series was created using the dummy variable of 1 for the year 2006 in the month of October, while the rest of the years were left at 0. Below is a residual graph plot showing the outlier.
A new regression was run using the created dummy variable series as an additional explanatory variable and the regression result was observed.

- Managed Futures/ Goldman Sachs Commodity Index

The Normality test was carried out using managed futures as the dependent variable and its unique market proxy (Goldman Sachs Commodity Index) as the explanatory variable.

TABLE 1.2: RESIDUAL PLOT

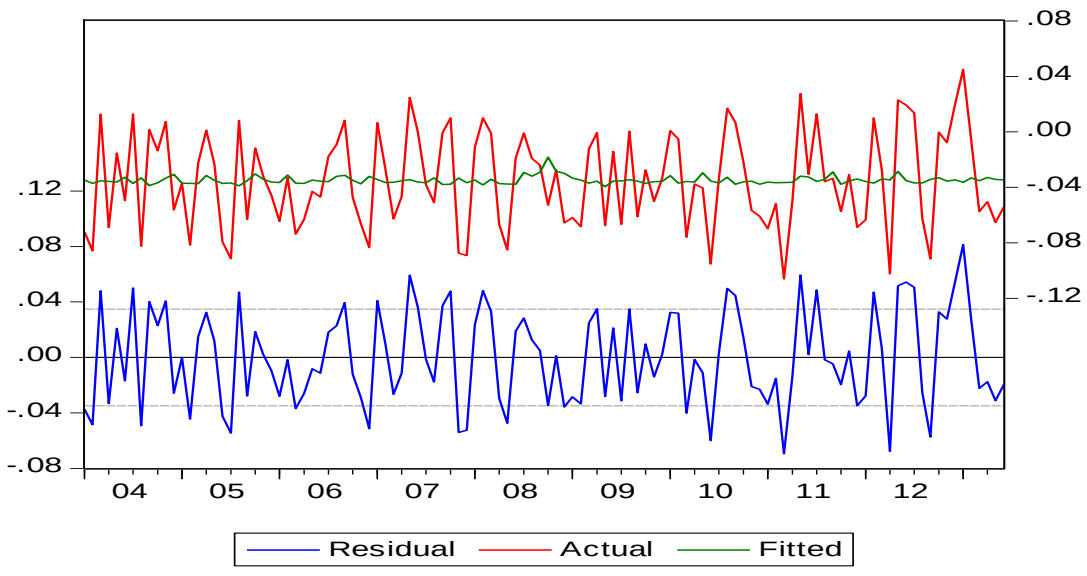
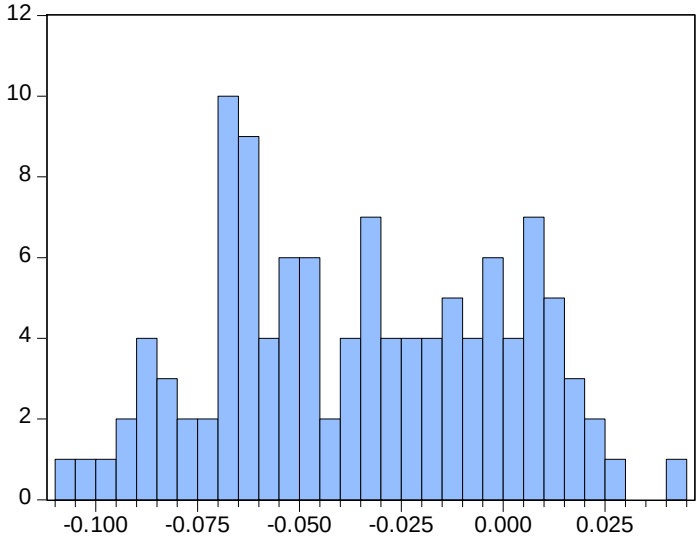


TABLE 1.3: HISTOGRAM (RESULT FOR NORMALITY)



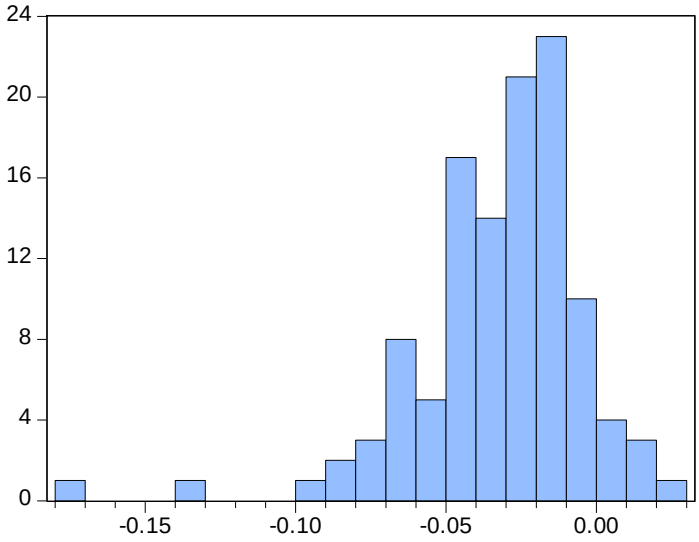
Series: RMGT	
Sample 2004M01 2013M06	
Observations 114	
Mean	-0.034797
Median	-0.035019
Maximum	0.044981
Minimum	-0.105919
Std. Dev.	0.034680
Skewness	0.054907
Kurtosis	2.017473
Jarque-Bera	4.642734
Probability	0.098139

With the above results there clearly is no need to correct for outliers as the residual plots show that no extreme outliers are found.

- Emerging market/emerging market index

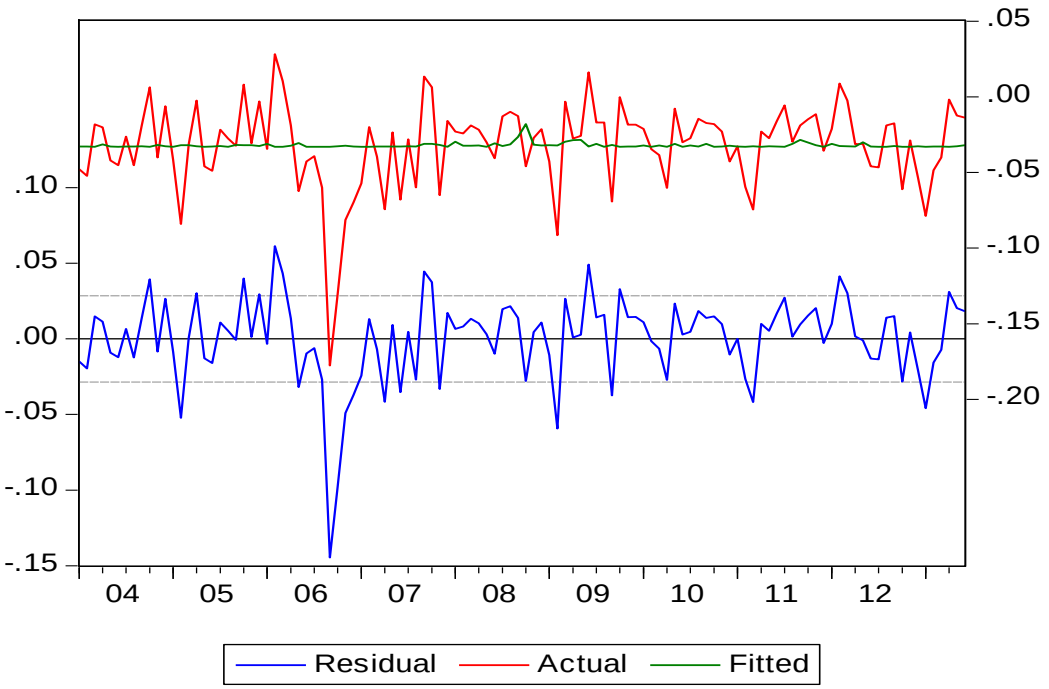
The normality test carried out for this hedge fund index against its market proxy shows that the distribution is not normal and bell shaped. The results show an excess kurtosis of 8.88 and skewness of -1.6. The outlier is in the month of September, 2006 as can be clearly seen from the residual plot in table1.5. This outlier was removed by adding a dummy variable of 1 in the month observed, while the rest of the month is left as 0. This new series was added in the regressed equation as an additional variable, and a new regression was run with a new result.

TABLE1.4: HISTOGRAM (RESULT FOR NORMALITY)



Series: EMR	
Sample 2004M01 2013M06	
Observations 114	
Mean	-0.032093
Median	-0.027519
Maximum	0.028281
Minimum	-0.177619
Std. Dev.	0.028313
Skewness	-1.596193
Kurtosis	8.831402
Jarque-Bera	209.9337
Probability	0.000000

TABLE 1.5: RESIDUAL PLOT



4.1.2 Unit Root Test

The unit root test was carried out using the Augmented Dickey-Fuller test. This is to find out if the time series variable used for the regression is non stationary. No unit root was found in any of the variable tested.

TABLE 2.1 UNIT ROOT TEST (EMERGING MARKET INDEX)

Null Hypothesis: EMR has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=12)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.195563	0.0000
Test critical values:	1% level	-3.489117	
	5% level	-2.887190	
	10% level	-2.580525	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EMR)
Method: Least Squares
Date: 08/16/13 Time: 19:36
Sample (adjusted): 2004M02 2013M06
Included observations: 113 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EMR(-1)	-0.636668	0.088481	-7.195563	0.0000
C	-0.020234	0.003794	-5.332668	0.0000

R-squared	0.318082	Mean dependent var	0.000302
Adjusted R-squared	0.311938	S.D. dependent var	0.032043
S.E. of regression	0.026580	Akaike info criterion	-4.399782
Sum squared resid	0.078421	Schwarz criterion	-4.351509
Log likelihood	250.5877	Hannan-Quinn criter.	-4.380193
F-statistic	51.77612	Durbin-Watson stat	2.045904
Prob(F-statistic)	0.000000		

Table 2.1 above shows that unit root was not present in the tested variable. To measure for accuracy, 12 lags were used and the observed t statistics from the table is -7.196, which is more negative than the significance levels.

TABLE 2.2 UNIT ROOT TEST (MANAGED FUTURES)

Null Hypothesis: RMGT has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic based on SIC, MAXLAG=12)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.594060	0.0000
Test critical values:	1% level	-3.489659	
	5% level	-2.887425	
	10% level	-2.580651	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RMGT)
Method: Least Squares
Date: 08/16/13 Time: 19:45
Sample (adjusted): 2004M03 2013M06
Included observations: 112 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RMGT(-1)	-1.090760	0.126920	-8.594060	0.0000
D(RMGT(-1))	0.173143	0.093412	1.853543	0.0665
C	-0.037133	0.005422	-6.848611	0.0000

R-squared	0.486077	Mean dependent var	0.000283
Adjusted R-squared	0.476647	S.D. dependent var	0.047223
S.E. of regression	0.034163	Akaike info criterion	-3.888946
Sum squared resid	0.127213	Schwarz criterion	-3.816129
Log likelihood	220.7810	Hannan-Quinn criter.	-3.859401
F-statistic	51.54692	Durbin-Watson stat	2.030311
Prob(F-statistic)	0.000000		

From the above table, the Augmented Dickey-Fuller t-statistics using 12 month-lag is -8.59. The significance level of 1% is -3.48. The null hypothesis is rejected at all observed significance level.

TABLE 2.3 UNIT ROOT TEST (FIXED INCOME ARBRITAGE)

Null Hypothesis: RFIN has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=12)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.580236	0.0000
Test critical values:	1% level	-3.489117	
	5% level	-2.887190	
	10% level	-2.580525	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RFIN)
Method: Least Squares
Date: 08/16/13 Time: 19:42
Sample (adjusted): 2004M02 2013M06
Included observations: 113 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RFIN(-1)	-0.438552	0.078590	-5.580236	0.0000
C	-0.016504	0.003370	-4.897596	0.0000

R-squared	0.219074	Mean dependent var	8.58E-05
Adjusted R-squared	0.212039	S.D. dependent var	0.019000
S.E. of regression	0.016866	Akaike info criterion	-5.309526
Sum squared resid	0.031574	Schwarz criterion	-5.261253
Log likelihood	301.9882	Hannan-Quinn criter.	-5.289937
F-statistic	31.13903	Durbin-Watson stat	1.849978
Prob(F-statistic)	0.000000		

Table: 2.3 above shows that the t statistic is more negative than the three significance level of 1%,5% and 10%. The null hypothesis that the dependent variable (Fixed Income Arbitrage) has a unit root is rejected.

TABLE 2.4 (UNIT ROOT TEST CREDIT SUISSE HEDGE FUND INDEX)

Null Hypothesis: ECS has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=12)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.814764	0.0000
Test critical values:	1% level	-3.489117	
	5% level	-2.887190	
	10% level	-2.580525	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ECS)
Method: Least Squares
Date: 08/16/13 Time: 19:20
Sample (adjusted): 2004M02 2013M06
Included observations: 113 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECS(-1)	-0.583684	0.085650	-6.814764	0.0000
C	-0.020443	0.003343	-6.115189	0.0000

R-squared	0.294974	Mean dependent var	0.000168
Adjusted R-squared	0.288622	S.D. dependent var	0.017949
S.E. of regression	0.015139	Akaike info criterion	-5.525584
Sum squared resid	0.025439	Schwarz criterion	-5.477311
Log likelihood	314.1955	Hannan-Quinn criter.	-5.505995
F-statistic	46.44101	Durbin-Watson stat	2.078269
Prob(F-statistic)	0.000000		

The null hypothesis is rejected; the dependent variable credit Suisse index has no unit root. The Dickey-fuller t- statistics compared to the three critical values is more negative.

4.1.3 Heteroskedasticity and Autocorrelation Test

Heteroskedasticity and autocorrelation test conducted using the residuals of for each time series regression showed that the errors did not have a constant variance, and that they were correlated. It is known that the best test is the White test for the Heteroskedasticity test, however when using time series data its best to test for ARCH errors. Therefore white test was only conducted for managed futures to see if the white test is consistent with the results obtained using ARCH. Serial correlation test was conducted using Breusch-Godfrey Serial Correlation LM Test.

TABLE.3 ARCH TEST FOR CREDIT SUISSE/S&P

Heteroskedasticity Test: ARCH

F-statistic	12.27576	Prob. F(5,103)	0.0000
Obs*R-squared	40.70044	Prob. Chi-Square(5)	0.0000

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/16/13 Time: 20:30
Sample (adjusted): 2004M06 2013M06
Included observations: 109 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000146	6.37E-05	2.290378	0.0240
RESID^2(-1)	0.667175	0.097785	6.822904	0.0000
RESID^2(-2)	-0.075568	0.116354	-0.649463	0.5175
RESID^2(-3)	-0.179801	0.115250	-1.560099	0.1218
RESID^2(-4)	0.189737	0.116359	1.630615	0.1060
RESID^2(-5)	-0.127292	0.097834	-1.301110	0.1961

R-squared	0.373399	Mean dependent var	0.000277
Adjusted R-squared	0.342981	S.D. dependent var	0.000696
S.E. of regression	0.000564	Akaike info criterion	-12.06990
Sum squared resid	3.28E-05	Schwarz criterion	-11.92175
Log likelihood	663.8094	Hannan-Quinn criter.	-12.00982
F-statistic	12.27576	Durbin-Watson stat	1.957457

Prob(F-statistic)	0.000000

The test shows that there is Heteroskedasticity in the residuals. The test results show that the observation*R-squared (N) is higher than the F statistics. This must be corrected in other to have a reliable regression result. The correction was done using the Heteroskedasticity consistent coefficient standard error estimates and the results used for final analysis.

TABLE.3.1 BREUSCH-GODFREY TEST FOR CREDIT SUISSE/S&P

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	11.84280	Prob. F(2,109)	0.0000
Obs*R-squared	20.35004	Prob. Chi-Square(2)	0.0000

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 08/16/13 Time: 20:40
Sample: 2004M01 2013M06
Included observations: 114
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.000329	0.001700	0.193534	0.8469
C(2)	-6.19E-07	3.22E-05	-0.019236	0.9847
C(3)	-1.40E-07	3.50E-07	-0.398844	0.6908
RESID(-1)	0.391920	0.095588	4.100079	0.0001
RESID(-2)	0.066996	0.096076	0.697325	0.4871

R-squared	0.178509	Mean dependent var	4.26E-18
Adjusted R-squared	0.148363	S.D. dependent var	0.016580
S.E. of regression	0.015300	Akaike info criterion	-5.479019
Sum squared resid	0.025517	Schwarz criterion	-5.359010
Log likelihood	317.3041	Hannan-Quinn criter.	-5.430314
F-statistic	5.921398	Durbin-Watson stat	1.979047
Prob(F-statistic)	0.000238		

The above table3.1 shows that the error terms are correlated. Therefore to correct for the serial correlation we use the Newey-west correction test, before using the regression results for final analysis.

TABLE.3.2 ARCH TEST EMERGING MARKET

Heteroskedasticity Test: ARCH

F-statistic	3.436742	Prob. F(5,103)	0.0065
Obs*R-squared	15.58468	Prob. Chi-Square(5)	0.0081

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/16/13 Time: 20:35
Sample (adjusted): 2004M06 2013M06
Included observations: 109 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000602	0.000243	2.475278	0.0149
RESID^2(-1)	0.396120	0.098227	4.032687	0.0001
RESID^2(-2)	-0.094299	0.105578	-0.893164	0.3739
RESID^2(-3)	-0.013287	0.106001	-0.125343	0.9005
RESID^2(-4)	0.052528	0.105662	0.497134	0.6202
RESID^2(-5)	-0.076505	0.098250	-0.778683	0.4380

R-squared	0.142979	Mean dependent var	0.000818
Adjusted R-squared	0.101376	S.D. dependent var	0.002256
S.E. of regression	0.002138	Akaike info criterion	-9.404152
Sum squared resid	0.000471	Schwarz criterion	-9.256004
Log likelihood	518.5263	Hannan-Quinn criter.	-9.344073
F-statistic	3.436742	Durbin-Watson stat	1.988143
Prob(F-statistic)	0.006512		

Table 3.2 above shows the presence of Heteroskedasticity in the error term. N of 15.58 is larger than the F statistic of 3.436. The correction was done, and the final regression used for analysis.

TABLE.3.3 BREUSCH-GODFREY TEST EMERGING MARKET

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	7.852027	Prob. F(2,109)	0.0007
Obs*R-squared	14.35609	Prob. Chi-Square(2)	0.0008

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 08/16/13 Time: 20:38
Sample: 2004M01 2013M06
Included observations: 114
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.135204	0.259595	-0.520828	0.6035
C(2)	0.274803	0.548335	0.501159	0.6173
C(3)	-0.138793	0.289241	-0.479852	0.6323
RESID(-1)	0.333365	0.096022	3.471771	0.0007
RESID(-2)	0.062252	0.096657	0.644047	0.5209

R-squared	0.125931	Mean dependent var	-1.35E-17
Adjusted R-squared	0.093855	S.D. dependent var	0.028259
S.E. of regression	0.026900	Akaike info criterion	-4.350515
Sum squared resid	0.078873	Schwarz criterion	-4.230506
Log likelihood	252.9793	Hannan-Quinn criter.	-4.301810
F-statistic	3.926013	Durbin-Watson stat	1.995950
Prob(F-statistic)	0.005127		

Serial correlation is observed from the test carried out from the regression using the emerging market fund style as the dependent variable and the

emerging market index as the explanatory variable. This error is corrected using Newey-west.

TABLE.3.4 WHITE TEST MANAGED FUTURES

Heteroskedasticity Test: White

F-statistic	0.294630	Prob. F(4,109)	0.8809
Obs*R-squared	1.219398	Prob. Chi-Square(4)	0.8749
Scaled explained SS	0.587646	Prob. Chi-Square(4)	0.9644

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/17/13 Time: 15:17
Sample: 2004M01 2013M06
Included observations: 114
Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.114929	0.461717	0.248916	0.8039
GDSCI	-0.481006	2.043258	-0.235411	0.8143
GDSCI^2	0.747757	3.356278	0.222794	0.8241
GDSCI*(GDSCI^2)	-0.508520	2.427191	-0.209510	0.8344
(GDSCI^2)^2	0.128100	0.652481	0.196328	0.8447

R-squared	0.010696	Mean dependent var	0.001184
Adjusted R-squared	-0.025608	S.D. dependent var	0.001199
S.E. of regression	0.001214	Akaike info criterion	-10.54647
Sum squared resid	0.000161	Schwarz criterion	-10.42646
Log likelihood	606.1485	Hannan-Quinn criter.	-10.49776
F-statistic	0.294630	Durbin-Watson stat	1.890747
Prob(F-statistic)	0.880907		

Table3.4 shows little evidence of Heteroskedasticity in the residuals when using the white test to test for Heteroskedasticity from the time series

regression (Managed futures as the dependent variable and Goldman Sachs commodity index as the explanatory variable). N is 1.21 which is not so much larger than the F statistics.

TABLE.3.5 BREUSCH-GODFREY TEST MANAGED FUTURES

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.857503	Prob. F(2,109)	0.1610
Obs*R-squared	3.757359	Prob. Chi-Square(2)	0.1528

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 08/17/13 Time: 15:20
Sample: 2004M01 2013M06
Included observations: 114
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.055472	0.326847	0.169718	0.8655
C(2)	-0.127330	0.690158	-0.184494	0.8540
C(3)	0.072022	0.364038	0.197843	0.8435
RESID(-1)	0.091192	0.095246	0.957439	0.3405
RESID(-2)	-0.166753	0.095450	-1.747023	0.0834

R-squared	0.032959	Mean dependent var	3.35E-18
Adjusted R-squared	-0.002528	S.D. dependent var	0.034560
S.E. of regression	0.034604	Akaike info criterion	-3.846820
Sum squared resid	0.130521	Schwarz criterion	-3.726812
Log likelihood	224.2688	Hannan-Quinn criter.	-3.798116
F-statistic	0.928752	Durbin-Watson stat	2.061635
Prob(F-statistic)	0.450111		

The above table shows that N is 3.75 and the f statistics is 1.86, the difference is not too large. However, this means that the error terms are correlated.

TABLE.3.6 ARCH TEST FIXED INCOME ARBRITAGE

Heteroskedasticity Test: ARCH

F-statistic	2.982604	Prob. F(5,103)	0.0148
Obs*R-squared	13.78575	Prob. Chi-Square(5)	0.0170

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 08/16/13 Time: 20:42
Sample (adjusted): 2004M06 2013M06
Included observations: 109 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000313	0.000202	1.548497	0.1246
RESID^2(-1)	0.377550	0.098527	3.831934	0.0002
RESID^2(-2)	-0.117698	0.105308	-1.117662	0.2663
RESID^2(-3)	0.010717	0.105938	0.101158	0.9196
RESID^2(-4)	-0.016602	0.105306	-0.157651	0.8750
RESID^2(-5)	-0.006563	0.098525	-0.066609	0.9470

R-squared	0.126475	Mean dependent var	0.000416
Adjusted R-squared	0.084071	S.D. dependent var	0.002067
S.E. of regression	0.001978	Akaike info criterion	-9.560075
Sum squared resid	0.000403	Schwarz criterion	-9.411927
Log likelihood	527.0241	Hannan-Quinn criter.	-9.499995
F-statistic	2.982604	Durbin-Watson stat	1.999150
Prob(F-statistic)	0.014823		

From the above table, we find evidence of Heteroskedasticity; the lags used are 5 lags which is the default for Eviews. The N is 13.79 which is larger than the f statistics of 2.982.

TABLE.3.7 BREUSCH-GODFREY FIXED INCOME ARBRITAGE

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	25.31244	Prob. F(2,109)	0.0000
Obs*R-squared	36.15499	Prob. Chi-Square(2)	0.0000

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 08/16/13 Time: 20:43
Sample: 2004M01 2013M06
Included observations: 114
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.676185	1.911337	-0.353776	0.7242
C(2)	1.369186	3.981140	0.343918	0.7316
C(3)	-0.692246	2.073392	-0.333871	0.7391
RESID(-1)	0.627607	0.095038	6.603736	0.0000
RESID(-2)	-0.134250	0.094813	-1.415939	0.1596

R-squared	0.317149	Mean dependent var	-4.38E-17
Adjusted R-squared	0.292090	S.D. dependent var	0.020071
S.E. of regression	0.016887	Akaike info criterion	-5.281668
Sum squared resid	0.031084	Schwarz criterion	-5.161659
Log likelihood	306.0551	Hannan-Quinn criter.	-5.232963
F-statistic	12.65622	Durbin-Watson stat	1.959688
Prob(F-statistic)	0.000000		

The residual test or serial correlation from the regression shows that the residuals are correlated. The Observations* R-squared is 36.15, and is larger than the f statistics of 25.31. This error is corrected using Newey-west.

4.2 Panel Data Regression

To test for *Hypothesis 2: Hedge funds skills are magnified during financial crisis,* panel data regression was run in three different time periods for all the 13 hedge funds against their market proxies. The time periods are: pre financial crisis (2004-2006), financial crisis (2007 – 2009) and post financial crisis (2010 – 2013). Since the Treynor and Mazuy model used for timing skills for this research paper is faulted for identifying appropriate benchmark. This research paper unlike any other will run two separate panel data regressions for two different benchmarks (S&P 500 and the Credit Suisse hedge fund index) for the hedge fund styles. The two tests carried out for validity of regression result are: normality test and redundant fixed effects test.

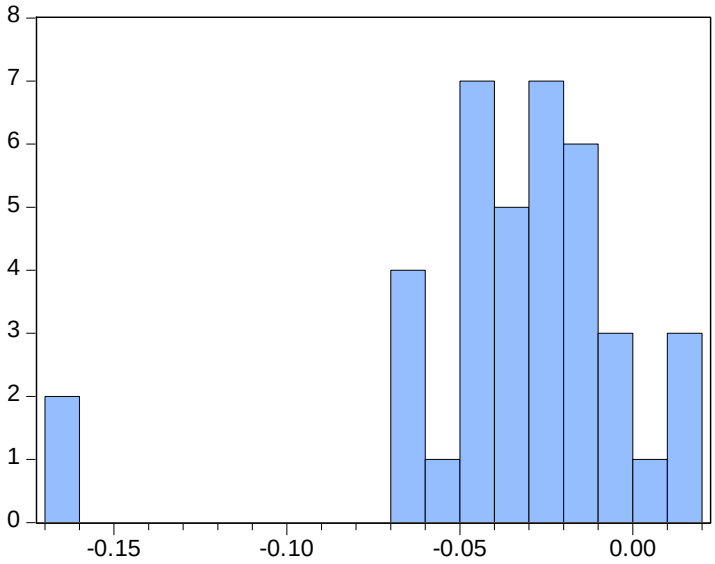
Below is a table showing the hedge fund styles, and their benchmarks.

TABLE 3.8 PANEL DATA REGRESSION VARIABLES

NO	HEDGE FUND INVESTMENT STYLE	BENCHMARK
1	Convertible Arbitrage	S&P 500, and Credit Suisse index
2	Dedicated short Bias	S&P 500, and Credit Suisse index
3	Emerging market	S&P 500, and Credit Suisse index
4	Equity Market Neutral	S&P 500, and Credit Suisse index
5	Event Driven	S&P 500, and Credit Suisse index
6	Event driven distressed	S&P 500, and Credit Suisse index
7	Event driven Multi-strategy	S&P 500, and Credit Suisse index
8	Event driven risk Arbitrage	S&P 500, and Credit Suisse index
9	Fixed Income Arbitrage	S&P 500, and Credit Suisse index
10	Global macro	S&P 500, and Credit Suisse index
11	Long/short equity index	S&P 500, and Credit Suisse index
12	Managed Futures	S&P 500, and Credit Suisse index
13	Multi-strategy	S&P 500, and Credit Suisse index

4.2.1 Normality Test

TABLE 3.9 NORMALITY TEST PRE FINANCIAL CRISIS (2004-2006)

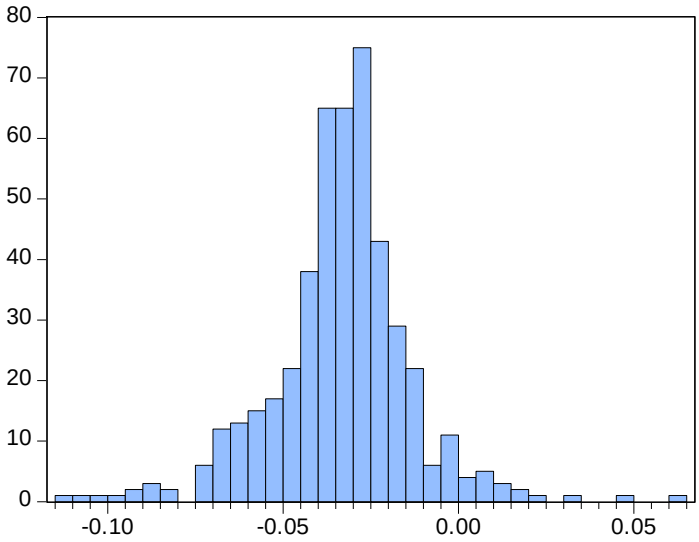


Series: RI_RF	
Sample 2004 2006	
Observations 39	
Mean	-0.035063
Median	-0.029919
Maximum	0.016781
Minimum	-0.167219
Std. Dev.	0.037363
Skewness	-2.032349
Kurtosis	8.461866
Jarque-Bera	75.32484
Probability	0.000000

The normality test above is for the hedge funds return which shows that the standard deviation for the fund styles is low at 0.037, showing little deviation from the mean. With a negative skewness of -2.03, a median value of -0.0299 and an excess kurtosis of 8.46.

TABLE 4 NORMALITY TEST FINANCIAL CRISIS (2007-2009)

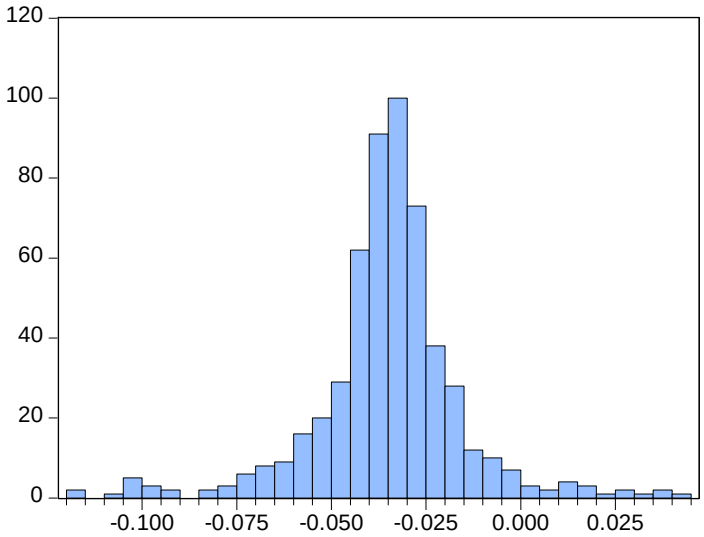
The histogram below for table 4 showing normality test for fund styles between the period 2007-2009, shows that the standard deviation is 0.0196, the mean is -0.033. The maximum and minimum values are 0.0617 and -0.1143 respectively. This shows little fluctuation, as the maximum and minimum values are not excessively far away from each other. There is excess kurtosis of 5.98 and it is negatively skewed at -0.0951119.



Series: RI_RF	
Sample 2007M01 2009M12	
Observations 468	
Mean	-0.033414
Median	-0.032319
Maximum	0.061781
Minimum	-0.114319
Std. Dev.	0.019868
Skewness	-0.095119
Kurtosis	5.983303
Jarque-Bera	174.2576
Probability	0.000000

TABLE 4.1 NORMALITY TEST POST FINANCIAL CRISIS (2010-2013)

The Jarque –Bera normality test for the funds style return shows an excess kurtosis of 6.958, a standard deviation of 0.019, showing little deviation from the mean. The mean is -0.034988, while the maximum and minimum values are 0.0449 and -0.1184 respectively.



Series: RI_RF	
Sample 2010M01 2013M06	
Observations 546	
Mean	-0.034988
Median	-0.034169
Maximum	0.044981
Minimum	-0.118419
Std. Dev.	0.019799
Skewness	-0.270509
Kurtosis	6.958442
Jarque-Bera	363.1346
Probability	0.000000

4.2.2 Redundant Fixed Effects Test

TABLE 4.2 FIXED EFFECT TEST PRE FINANCIAL CRISIS (2004-2006)

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section and period fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.021255	(12,22)	0.0119
Cross-section Chi-square	37.977748	12	0.0002
Period F	0.343505	(2,22)	0.7130
Period Chi-square	1.199253	2	0.5490
Cross-Section/Period F	2.655205	(14,22)	0.0196
Cross-Section/Period Chi-square	38.587407	14	0.0004

This table above shows the test results for the fixed effect techniques applied in the panel data regression for the period2004- 2006, the two fixed effects used is the entity and time fixed effect. The entity fixed effect which represents the hedge fund styles (entity), and the time period which represents (2004 – 2006). This test shows if the fixed effect technique is necessary or not. The *p*-values from the results for the test statistics are not zero to 4 decimal places, indicating that the fixed effect restriction is supported by the data and that a pooled sample could be used.

TABLE 4.3 FIXED EFFECT TEST FINANCIAL CRISIS (2007-2009)

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section and period fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.896487	(12,418)	0.5506
Cross-section Chi-square	11.892282	12	0.4544
Period F	3.554430	(35,418)	0.0000
Period Chi-square	121.928805	35	0.0000
Cross-Section/Period F	2.875965	(47,418)	0.0000
Cross-Section/Period Chi-square	131.126393	47	0.0000

This table above shows the test results for the fixed effect techniques applied in the panel data regression for the period2007- 2009, the two fixed effects used is the entity and time fixed effect as well. The *p*-values from the results for the test statistics are not zero to 4 decimal places in all cases, indicating that the restriction is supported by the data and that a pooled sample could be used

TABLE 4.4 FIXED EFFECT TEST POST FINANCIAL CRISIS (2010-2013)

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section and period fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.728716	(12,490)	0.0578
Cross-section Chi-square	22.639482	12	0.0309
Period F	1.242950	(41,490)	0.1495
Period Chi-square	54.022154	41	0.0837
Cross-Section/Period F	1.378581	(53,490)	0.0454
Cross-Section/Period Chi-square	75.888161	53	0.0213

The test results for the fixed effect techniques applied in the panel data regression for the period 2010- 2013, the two fixed effects used is the entity and time fixed effect as well. The *p*-values from the results for the test

statistics are zero to 4 decimal places in all cases, indicating that the restriction is supported by the data and that a pooled sample could be used.

4.3 Regression Results and Inferences

Table 4.5 below shows the summary of time series regression result. The regression was run in order to answer the research question The Absolute returns declared by hedge funds are they as a result of skill?

In all the regression results from Eviews the timing skill coefficient is represented as C (3). In this analysis the sign √ is awarded to positive timing skills coefficient at any of the significant level, while the sign × is award when the timing skill coefficient is not significant. The figures used in the summary tables were gotten from the regression results and can be found in appendix 1, under the appendix heading.

TABLE4.5: SUMMARY OF TIME SERIES REGRESSION RESULT

HEDGE FUND STYLE			P-VALUE	SIGNIFICANCE		
				1%	5%	20%
BENCHMARK (CREDIT SUISSE HEDGE FUND INDEX)	-0.035403 (0.002376)	-2.06E-08 (2.49E-07)	0.9343	×	×	×
EMERGING MARKET	0.070026 (0.204398)	0.103694 (0.236621)	0.6621	×	×	×
FIXED INCOME ARBITRAGE	0.121786 (1.041520)	0.071147 (1.041520)	0.9457	×	×	×
MANAGED FUTURES	0.072287 (0.324606)	0.076691 (0.364941)	0.8339	×	×	×

All three fund style (emerging market, fixed income arbitrage and managed futures) has positive . The standard errors of and are in bracket. This positive alpha show selection skill, but this selection skill is not significant at any of the significant level. This research paper will only draw conclusions on timing skills coefficient and not from . Therefore, the p-value of is not included in the above table for analysis.

The hedge fund index with a negative timing skill (-206E-08) and a p value of 0.9343 is not significant at 1%, 5% or 20%. The P value of 0.9343 is higher than all of the significance level. Emerging market with a timing skill coefficient of 0.103694 is not significant, because the p value of 0.6621 is greater than all three significance level. Also fixed income arbitrage and managed futures had an estimated timing coefficient of 0.071147 and 0.076691respectively. However the high p value of 0.9457 for fixed income arbitrage and 0.8339 for managed futures shows that the timing skills for both hedge funds are not significant at any of the levels. The from the regression result for each of this fund style is below 30%, signifying that the benchmark for each of the funds has less explanatory power over the fund's returns. It is critical to also separate the funds in terms of positive timing skills and negative timing skills. Below is a table showing positive and negative timing skills determined from the timing coefficient.

TABLE 4.5: POSITIVE & NEGATIVE MARKET TIMERS

HEDGE FUND STYLE	TIMING SKILL	SIGNIFICANCE		
		1%	5%	20%
BENCHMARK (CREDIT SUISSE HEDGE FUND INDEX)	NEGATIBE (-)	×	×	×
EMERGING MARKET	POSITIVE (+)	×	×	×
FIXED INCOME ARBITRAGE	POSITIVE (+)	×	×	×
MANAGED FUTURES	POSITIVE (+)	×	×	×

The three hedge fund style; emerging market, fixed income arbitrage and managed futures all had positive timing skills while the hedge fund benchmark index (credit Suisse edge fund index) comprising 13 hedge fund style in this index had negative timing skill.

TABLE 4.6: NULL & ALTERNATIVE HYPOTHESIS TIME SERIES

HEDGE FUND STYLE	TIMING SKILL	SIGNIFICANCE			CONCLUSION
		1%	5%	20%	
BENCHMARK (CREDIT SUISSE HEDGE FUND INDEX)	NEGATIVE(-)	×	×	×	
EMERGING MARKET	POSITIVE (+)	×	×	×	ACCEPT
FIXED INCOME ARBITRAGE	POSITIVE (+)	×	×	×	ACCEPT
MANAGED FUTURES	POSITIVE (+)	×	×	×	ACCEPT

Recall the test statistics:

$$: \quad = 0$$

$$: \quad \neq 0$$

The null hypothesis is accepted while the alternative is rejected as can be seen from the above table. The Null hypothesis is accepted because timing skills even though it was positive for all the three hedge fund style, is still not significant at any of the significance level.

The null Hypothesis 1: Hedge funds absolute return is as a result of Luck and not skill is accepted and we reject the alternative that hedge funds declaration of absolute returns is as a result of skill. This answers our research question 1: *The Absolute returns declared by hedge funds are they as a result of skill?*

TABLE4.6: SUMMARY OF PANEL DATA REGRESSION RESULT

TIME PERIOD	CREDIT SUISSE	S&P 500	P-VALUE CREDIT SUISSE	P VALUE S&P	SIGNIFICANCE		
					1%	5%	20%
PRE FINANCIAL CRISIS	-1.772552 (1.692592)	-0.101876 (0.195101)	0.2955	0.6018	×	×	×
FINANCIAL CRISIS	0.400189 (3.997893)	-0.010730 (0.006986)	0.9203	0.1253	×	×	×
POST FINANCIAL CRISIS	5.111031 (7.399224)	-0.003478 (0.017519)	0.4900	0.8427	×	×	×

Table 4.6 above shows a summary of the regression result that was carried out using panel data in Eviews. This regression was done in other to answer the research question: During the recent financial crisis of 2008 did hedge funds skill magnify? And also to test the hypothesis 2: Hedge funds skills are magnified during financial crisis.

The estimated timing skill coefficient represents the timing coefficient for all the hedge funds observed. 13 fund styles were the observations as highlighted in chapter 3, while two benchmarks were used. These benchmarks are S&P 500 and credit Suisse hedge fund index. The idea behind this is that the timing model used

in this research paper is widely criticized for lack of finding appropriate benchmark. Therefore, regression was carried out using a broader index (S&P 500) and a narrower index specific to the funds (Credit Suisse hedge fund index). The different time periods are the post, financial and post financial crisis.

TABLE 4.7: POSITIVE & NEGATIVE MARKET TIMERS PANEL DATA

TIME PERIOD	CREDIT SUISSE	S&P 500	TIMING SKILLS CREDIT SUISSE	TIMING SKILLS S&P 500
PRE FINANCIAL CRISIS	-1.772552 (1.692592)	-0.101876 (0.195101)	NEGATIVE (-)	NEGATIVE (-)
FINANCIAL CRISIS	0.400189 (3.997893)	-0.010730 (0.006986)	POSITIVE (+)	NEGATIVE (-)
POST FINANCIAL CRISIS	5.111031 (7.399224)	-0.003478 (0.017519)	POSITIVE (+)	NEGATIVE (-)

The idea of using the broad index (S&P 500) and a narrower index (Credit Suisse Hedge fund Index) is concrete as can be seen from table 4.7 above. Regression results show that the 13 hedge funds style have positive market timing skills during the financial crisis and post financial crisis, while the timing skill is negative for all three periods when the regression was carried out using S&P 500 index as the benchmark. The explanation for this is quite simple, the 13 fund style are constituent of the Credit Suisse hedge fund Index. Since hedge funds don't declare their returns to the public one should expect that the data base site (Credit Suisse) will post all exaggerated returns of all the 13 fund style to the site. But the question is how significant are these timing skills? This question is answered in table 4.8 below.

TABLE 4.8: NULL & ALTERNATIVE HYPOTHESIS PANEL DATA

HEDGE FUND STYLE	TIMING SKILL CRDIT SUISSE	SIGNIFICANCE			CONCLUSION
		1%	5%	20%	
PRE FINANCIAL CRISIS	POSITIVE (-)	×	×	×	ACCEPT
FINANCIAL CRISIS	POSITIVE (+)	×	×	×	ACCEPT
POST FINANCIAL CRISIS	POSITIVE (+)	×	×	×	ACCEPT

The null hypothesis is accepted because the p- value for the positive timing coefficient for the 13 hedge funds in each period is greater than 1%, 10%, and 20% significance level. Recall the test statistics:

$$: = 0$$

$$: \neq 0$$

The null hypothesis is accepted while the alternative is rejected as can be seen from the above table. The Null hypothesis is accepted because even though timing skills was positive for all the 13 hedge fund style using credit Suisse as the benchmark for the period of financial crisis and post financial crisis , it still is not significant at any of the significance level.

The second hypothesis was formulated in order to answer research question2: During the recent financial crisis of 2007-2009 did hedge funds skill magnify?

The null Hypothesis 2: *Hedge funds skills are not magnified during financial crisis.* Is accepted and we reject the alternative that hedge funds skills are magnified during financial crisis. This answers our research question 2: *During the recent financial crisis of 2007-2009 did hedge funds skill magnify?*

CHAPTER 5: CONCLUSION AND RECOMMENDATION

This research paper in trying to answer the research questions:

During the recent financial crisis of 2007-2009 did hedge funds skill magnify? And The Absolute returns declared by hedge funds are they as a result of skill?, used a timing skill model first developed by Treynor and Mazuy (1966) and later adopted by so many others. Yearly returns from 2004 – 2013 of 13 Hedge funds style were collected from Credit Suisse Tremont hedge fund index. Regression using the Treynor and Mazuy model was done using panel data to investigate research question 2 and time series for research question 1.

To validate the regression result for this research paper, the regression results from the time series regression was tested for the presence of heteroskedasticity, autocorrelation, unit root. Normality test was also done. Heteroskedasticity was tested using the ARCH test and White test and it was found present. However it was corrected by using Heteroskedasticity consistent coefficient standard error estimates. Autocorrelation was tested with Breusch-Godfrey Serial Correlation LM Test, the errors were serial correlated and was corrected using Newey-west correction test. Also unit root was tested using Dickey fuller test and there was no unit roots found. Normality test was also carried out and outliers were removed where it was found present by the use of dummy variables.

From the empirical analysis in chapter 4, the deduction from this research paper is that hedge funds have no market timing skills, and even where they have exhibited positive market timing skills in the financial crisis and post financial crisis, it is still not statistically significant. The weak form efficiency of the market makes it difficult to post continuously positive returns. If hedge funds claim that they have market timing skills and can generate abnormal positive returns then it means that market is not week form. Several tests have been carried out in academic research to determine if markets are weak form, semi strong form or strong form. The conclusion drawn from this market efficiency test shows that indeed market is week form even if one should apply any filter rule, you cannot make abnormal

returns as exaggerated by hedge funds. Filter rules are trading strategies where technical traders set rules for entry and exits for their trades. This strategy is very common with hedge funds, but it cannot guarantee absolute returns.

The Treynor and Mazuy model (1966) used in this research paper may not have taken into account public information announcement and option trading but it justifies through empirical analysis that there are no market timing skills in hedge funds. If this research paper had introduced a vector representing public information in the Treynor and Mazuy equation as was done by Ferson and Schadt (1966), then this clearly is not a skill. Because having access to public information which is available to all investors and using it for trading is no longer a market timing skills. Also it is agreeable that market is in most cases not semi strong form efficient as most test conducted reveals. Investors who are constantly searching for the best investment vehicle to invest their money should critically access the abnormal returns claimed by hedge funds before committing their funds. If investors must invest in hedge funds, it is advisable to diversify their portfolio to include government bonds and equities. This is important because hedge funds collapse.

- Background and list of collapsed hedge funds: A lesson for investors.

Hedge funds have shown that they always had a recognisable level of failure rate. Managed futures given the riskiness in their style of business are prone to collapse. Since speculation and high leverage is common with hedge funds, it becomes inevitable that failure will exist at some point in a funds lifecycle.

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Amaranth Advisors

One of the most remembered collapse of hedge fund, which occurred around 2006, even after accumulating a net worth of $9 billion in asset under

management. As winter conditions worsens and serious hurricane set in, this company had lost about $6billion from investing in natural gas. If this fund had market timing skills it would have taken the situation into control.

Bailey Coates Cromwell Fund

Recognised in 2004 as the promising new equity fund and remembered in 2005 (one year later) as the hedge fund which collapsed. Bad debt from US stock movements due to bad decision making from leveraging cut off 1.3billion in managed portfolio.

Marine Capital

Traded mostly in convertible bonds but as share prices drops tremendously, the fund lost its capital. After the downgrade to junk status of the General Motors bonds, the fund collapsed and was closed down in 2005.

Aman Capital

A promising hedge fund in Singapore set up in 2003 by traders in UBS. These traders specialise in derivatives and leveraged most of their trades. This excessive leverage led to a significant loss, and investors had to redeem their assets. In June 2005, the fund collapsed and was closed.

Tiger Funds

These funds combined a trading strategy of betting that involved buying when the stocks have potential to perform well in the market, and short sell when the stock show no sign of potential performance. This fund collapsed and was closed as this strategy bounced back against its owners.

Long - Term Capital Management.

Coughing out $1 billion of capital from investor to start up the hedge fund business with the promise of delivering returns to the investors. LTCM used arbitrage strategy that tried to reduce its risk. But when the financial market of Russia collapsed, the fund started betting on the quick reversal of the

Russian financial market. But when the government debt was defaulted in 1998, LTCM lost a significant amount as they had investment in Russian bonds (GKO). In 2000, due to assistance from the US government, th fund was able to liquidate.

In conclusion, investors should therefore be wise and should not put all of their investment in hedge funds. A careful study of the fund before investment is done is a good way to start. Do not invest in the fund if you do not understand the returns they promise and how they intend to achieve it. Also pay attention most importantly to the risk as well. Look at your risk preference and decided how much you are willing to lose.

It is always more profitable to diversify your investment as abnormal and consistent returns in never achievable given that market is efficient.

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APPENDICES

The complete explanations of all the data and calculations of the hedge fund investment style returns as well as market index return comprising of S&P 500 and Credit Suisse index. Also in this appendix is the regression results not attached in the data analysis. All above mentioned are found in the appendices of this research paper.

APPENDIX 1: PANEL DATA REGRESSION RESULTS FOR PRE, FINANCIAL & POST FINANCIAL CRISIS & TIME SERIES REGRESSION

Regression result for Emerging market (After correcting for Heteroskedasticity, Serial correlation and Normality)

Dependent Variable: EMR
Method: Least Squares
Date: 08/22/13 Time: 17:09
Sample: 2004M01 2013M06
Included observations: 114
Newey-West HAC Standard Errors & Covariance (lag truncation=4)
EMR=C(1)+C(2)*EMIR+C(3)*EMIR^2+C(4)*SEP06DUM

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.070026	0.204398	0.342598	0.7326
C(2)	-0.205068	0.441000	-0.465008	0.6428
C(3)	0.103694	0.236621	0.438228	0.6621
C(4)	-0.146316	0.003425	-42.72608	0.0000

R-squared	0.237412	Mean dependent var	-0.032093
Adjusted R-squared	0.216614	S.D. dependent var	0.028313
S.E. of regression	0.025059	Akaike info criterion	-4.500672
Sum squared resid	0.069077	Schwarz criterion	-4.404665
Log likelihood	260.5383	Hannan-Quinn criter.	-4.461708
F-statistic	11.41522	Durbin-Watson stat	1.604709
Prob(F-statistic)	0.000001		

Regression result for Benchmark (After correcting for Heteroskedasticity, Serial correlation and Normality)

Dependent Variable: ECS
Method: Least Squares
Date: 08/22/13 Time: 16:58
Sample: 2004M01 2013M06

Included observations: 114
Newey-West HAC Standard Errors & Covariance (lag truncation=4)
ECS=C(1)+C(2)*ES_P+C(3)*ES_P^2+C(4)*OCT06DUM

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.035403	0.002376	-14.90157	0.0000
C(2)	-2.73E-05	3.60E-05	-0.757021	0.4507
C(3)	-2.06E-08	2.49E-07	-0.082625	0.9343
C(4)	0.028815	0.002588	11.13268	0.0000

R-squared	0.032039	Mean dependent var	-0.035318
Adjusted R-squared	0.005640	S.D. dependent var	0.016627
S.E. of regression	0.016580	Akaike info criterion	-5.326725
Sum squared resid	0.030240	Schwarz criterion	-5.230718
Log likelihood	307.6233	Hannan-Quinn criter.	-5.287761
F-statistic	1.213643	Durbin-Watson stat	1.154311
Prob(F-statistic)	0.308254		

Regression result for FIXED INCOME ARBRITAGE (After correcting for Heteroskedasticity, Serial correlation and Normality)

Dependent Variable: RFIN
Method: Least Squares
Date: 08/22/13 Time: 17:25

Sample: 2004M01 2013M06
Included observations: 114
Newey-West HAC Standard Errors & Covariance (lag truncation=4)
RFIN=C(1)+C(2)*RDJCB_I+C(3)*RDJCB_I^2+C(4)*SEP09DUM

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.121786	0.984997	0.123641	0.9018
C(2)	-0.233279	2.027114	-0.115080	0.9086
C(3)	0.071147	1.041520	0.068311	0.9457
C(4)	-0.144565	0.002315	-62.45457	0.0000

R-squared	0.460860	Mean dependent var	-0.037770
Adjusted R-squared	0.446156	S.D. dependent var	0.020198
S.E. of regression	0.015032	Akaike info criterion	-5.522858
Sum squared resid	0.024855	Schwarz criterion	-5.426851
Log likelihood	318.8029	Hannan-Quinn criter.	-5.483894
F-statistic	31.34291	Durbin-Watson stat	1.485290
Prob(F-statistic)	0.000000		

Regression result for MANAGED FUTURES (After correcting for Heteroskedasticity, Serial correlation and Normality)

Dependent Variable: RMGT
Method: Least Squares
Date: 08/22/13 Time: 16:00
Sample: 2004M01 2013M06

Included observations: 114
White Heteroskedasticity-Consistent Standard Errors & Covariance
RMGT=C(1)+C(2)*GDSCI+C(3)*GDSCI^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.072287	0.324606	0.222692	0.8242
C(2)	-0.185218	0.688836	-0.268885	0.7885
C(3)	0.076691	0.364941	0.210147	0.8339

R-squared	0.006876	Mean dependent var	-0.034797
Adjusted R-squared	-0.011018	S.D. dependent var	0.034680
S.E. of regression	0.034870	Akaike info criterion	-3.848393
Sum squared resid	0.134970	Schwarz criterion	-3.776388
Log likelihood	222.3584	Hannan-Quinn criter.	-3.819170
F-statistic	0.384262	Durbin-Watson stat	1.834668
Prob(F-statistic)	0.681855		

Result for pre-financial crisis (benchmark credit Suisse)

Dependent Variable: RI_RF
Method: Panel Least Squares
Date: 08/16/13 Time: 17:56
Sample: 2004M01 2006M12
Periods included: 36
Cross-sections included: 13

Total panel (balanced) observations: 468
RI_RF=C(1)+C(2)*R_CSRF+C(3)*R_CSRF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.012165	0.004325	-2.812586	0.0051
C(2)	0.627649	0.187888	3.340553	0.0009
C(3)	-1.772552	1.692592	-1.047241	0.2955

R-squared	0.306596	Mean dependent var	-0.040320
Adjusted R-squared	0.303613	S.D. dependent var	0.035014
S.E. of regression	0.029219	Akaike info criterion	-4.221589
Sum squared resid	0.397000	Schwarz criterion	-4.194996
Log likelihood	990.8518	Hannan-Quinn criter.	-4.211125
F-statistic	102.8022	Durbin-Watson stat	1.785118
Prob(F-statistic)	0.000000		

Result Pre_financial crisis (Benchmark S&P 500)

Dependent Variable: RI_RF

Method: Panel Least Squares

Date: 08/16/13 Time: 17:08

Sample: 2004M01 2006M12

Periods included: 36

Cross-sections included: 13

Total panel (balanced) observations: 468

RI_RF=C(1)+C(2)*RSP__RF+C(3)*RSP__RF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-12.24825	127.6415	-0.095958	0.9236
C(2)	9.007682	10.10582	0.891336	0.3733
C(3)	-0.101876	0.195101	-0.522171	0.6018

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.347082	Mean dependent var	-0.040320
Adjusted R-squared	0.270544	S.D. dependent var	0.035014
S.E. of regression	0.029905	Akaike info criterion	-4.080897
Sum squared resid	0.373820	Schwarz criterion	-3.637684
Log likelihood	1004.930	Hannan-Quinn criter.	-3.906494
F-statistic	4.534759	Durbin-Watson stat	1.844300
Prob(F-statistic)	0.000000		

Result financial crisis Benchmark S&P

Dependent Variable: RI_RF

Method: Panel Least Squares

Date: 08/16/13 Time: 16:33

Sample: 2007M01 2009M12

Periods included: 36

Cross-sections included: 13

Total panel (balanced) observations: 468

RI_RF=C(1)+C(2)*RSP__RF+C(3)*RSP__RF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	24.85495	22.84459	1.088002	0.2772
C(2)	-2.136289	1.485763	-1.437840	0.1512
C(3)	-0.010730	0.006986	-1.535962	0.1253

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.250262	Mean dependent var	-0.033414
Adjusted R-squared	0.162374	S.D. dependent var	0.019868
S.E. of regression	0.018184	Akaike info criterion	-5.075858
Sum squared resid	0.138215	Schwarz criterion	-4.632645
Log likelihood	1237.751	Hannan-Quinn criter.	-4.901455
F-statistic	2.847510	Durbin-Watson stat	1.850422
Prob(F-statistic)	0.000000		

Result Financial Crisis (benchmark Credit Suisse)

Dependent Variable: RI_RF

Method: Panel Least Squares

Date: 08/16/13 Time: 17:00

Sample: 2007M01 2009M12
Periods included: 36
Cross-sections included: 13
Total panel (balanced) observations: 468
RI_RF=C(1)+C(2)*R_CS___RF+C(3)*R_CS___RF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.011737	0.004829	-2.430553	0.0155
C(2)	0.682624	0.292458	2.334093	0.0200
C(3)	0.400189	3.997693	0.100105	0.9203

R-squared	0.201481	Mean dependent var	-0.033414
Adjusted R-squared	0.198047	S.D. dependent var	0.019868
S.E. of regression	0.017793	Akaike info criterion	-5.213678
Sum squared resid	0.147208	Schwarz criterion	-5.187086
Log likelihood	1223.001	Hannan-Quinn criter.	-5.203214
F-statistic	58.66417	Durbin-Watson stat	1.786116
Prob(F-statistic)	0.000000		

Result post financial crisis benchmark S&P

Dependent Variable: RI_RF
Method: Panel Least Squares
Date: 08/16/13 Time: 17:42
Sample: 2010M01 2013M06

Periods included: 42

Cross-sections included: 13

Total panel (balanced) observations: 546

RI_RF=C(1)+C(2)*R_SP_RF+C(3)*R_SP_RF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	9.304517	50.03393	0.185964	0.8525
C(2)	-0.020578	2.332030	-0.008824	0.9930
C(3)	-0.003478	0.017519	-0.198549	0.8427

Effects Specification

Cross-section fixed (dummy variables)

Period fixed (dummy variables)

R-squared	0.138969	Mean dependent var	-0.034988
Adjusted R-squared	0.042323	S.D. dependent var	0.019799
S.E. of regression	0.019376	Akaike info criterion	-4.952700
Sum squared resid	0.183951	Schwarz criterion	-4.511406
Log likelihood	1408.087	Hannan-Quinn criter.	-4.780194
F-statistic	1.437914	Durbin-Watson stat	1.537191
Prob(F-statistic)	0.025836		

Result post financial crisis (benchmark Credit Suisse)

Dependent Variable: RI_RF

Method: Panel Least Squares

Date: 08/16/13 Time: 17:49
Sample: 2010M01 2013M06
Periods included: 42
Cross-sections included: 13
Total panel (balanced) observations: 546
RI_RF=C(1)+C(2)*R_CS_RF+C(3)*R_CS_RF^2

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.008260	0.008817	-0.936860	0.3492
C(2)	0.961652	0.519511	1.851071	0.0647
C(3)	5.111031	7.399224	0.690752	0.4900

R-squared	0.080775	Mean dependent var	-0.034988
Adjusted R-squared	0.077390	S.D. dependent var	0.019799
S.E. of regression	0.019017	Akaike info criterion	-5.081439
Sum squared resid	0.196383	Schwarz criterion	-5.057798
Log likelihood	1390.233	Hannan-Quinn criter.	-5.072198
F-statistic	23.85765	Durbin-Watson stat	1.474480
Prob(F-statistic)	0.000000		

Appendix 2: DATA USED IN EVIEWS

Excess return of the 13 investment style index and excess returns on benchmarks

INVESTMENT STYLE	DATE	Ri-RF	R CS - RF	R S&P -RF	R GSCI - RF	R EM - RF	R DJCB I - RF
Credit Suisse Convertible Arbitrage Hedge Fund Index	1/31/2004	-0.0499	-0.0549	19.1844	0.9569	0.9912	0.9665
	2/29/2004	-0.0411	-0.0509	13.7844	1.0301	1.0036	0.9639
	3/31/2004	-0.0407	-0.0233	-18.7557	0.9711	0.9677	0.9638
	4/30/2004	-0.0474	-0.0401	-18.9352	0.9849	0.8741	0.9203
	5/31/2004	-0.0123	-0.0275	13.3553	0.9998	0.9359	0.9458
	6/30/2004	-0.0197	-0.0344	20.1353	0.9087	0.9609	0.9594
	7/31/2004	-0.0297	-0.0123	-39.1449	1.0324	0.9377	0.9662
	8/31/2004	-0.0409	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0215	-0.0221	10.3161	1.1012	1.0142	0.9610
	10/31/2004	-0.0302	-0.0070	15.5961	1.0105	0.9805	0.9650
	11/30/2004	-0.0278	-0.0390	43.5961	0.9228	1.0508	0.9433
	12/31/2004	-0.0191	-0.0254	38.0757	0.8652	1.0054	0.9717
	1/31/2005	-0.0412	-0.0497	-30.6748	1.0264	0.9589	0.9638
	2/28/2005	-0.0664	-0.0689	22.3058	1.0322	1.0442	0.9471
	3/31/2005	-0.0244	-0.0289	-23.0342	1.0367	0.8907	0.9385
	4/30/2005	-0.0207	-0.0191	-23.7638	0.8806	0.9282	0.9651
	5/31/2005	-0.0366	-0.0345	34.6267	0.9621	0.9891	0.9703
	6/30/2005	-0.0316	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0191	-0.0325	42.8265	1.0172	1.0248	0.9433
	8/31/2005	-0.0333	-0.0202	-13.8738	1.1158	0.9648	0.9722
	9/30/2005	-0.0197	-0.0400	8.4566	0.9682	1.0496	0.9331
	10/31/2005	-0.0090	-0.0109	-21.8234	0.8593	0.8923	0.9375
	11/30/2005	-0.0074	-0.0260	42.4472	0.9422	1.0406	0.9608
	12/31/2005	0.0167	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0008	-0.0370	31.7668	1.0101	1.0681	0.9527
	2/28/2006	0.0168	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	0.0039	-0.0245	14.1468	1.0228	0.9660	0.9367
	4/30/2006	-0.0299	-0.0348	15.7566	1.0316	1.0269	0.9493
	5/31/2006	-0.0338	-0.0501	-40.5434	0.9582	0.8511	0.9499
	6/30/2006	0.0159	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0511	-0.0416	6.4374	0.9867	0.9698	0.9692
	8/31/2006	-0.0601	-0.0828	27.1376	0.8937	0.9815	0.9743
	9/30/2006	-0.1672	-0.1043	32.0073	0.8775	0.9652	0.9658
	10/31/2006	-0.1639	-0.1068	42.0670	0.9614	1.0053	0.9641
	11/30/2006	-0.0479	-0.0560	22.6667	1.0389	1.0319	0.9684
	12/31/2006	-0.0627	-0.0674	17.6466	0.8940	1.0028	0.9428
	1/31/2007	-0.0449	-0.0413	19.9166	0.9439	0.9464	0.9555
	2/28/2007	-0.0263	-0.0213	-31.4435	1.0085	0.9521	0.9759
	3/31/2007	-0.0302	-0.0356	14.0172	1.0024	0.9961	0.9460
	4/30/2007	-0.1006	-0.0624	61.4872	0.9722	1.0027	0.9633
	5/31/2007	-0.0542	-0.0252	48.2267	0.9506	1.0049	0.9421
	6/30/2007	-0.0466	-0.0561	-27.2938	0.9980	1.0029	0.9493
	7/31/2007	-0.0453	-0.0366	-48.1033	1.0134	1.0088	0.9556
	8/31/2007	-0.0561	-0.0534	18.6977	0.9187	0.9355	0.9649
	9/30/2007	-0.0195	-0.0097	52.7375	1.0613	1.0672	0.9594
	10/31/2007	-0.0216	-0.0142	22.6069	1.0561	1.0688	0.9652
	11/30/2007	-0.0521	-0.0566	-68.2631	0.9231	0.8872	0.9603
	12/31/2007	-0.0524	-0.0413	-12.8022	1.0144	0.9615	0.9579
	1/31/2008	-0.0385	-0.0335	-89.8320	0.9557	0.8327	0.9705
	2/29/2008	-0.0294	-0.0182	-47.9405	1.0760	1.0312	0.9495
	3/31/2008	-0.0357	-0.0211	-7.9495	0.9427	0.9047	0.9499
	4/30/2008	-0.0345	-0.0289	62.8706	1.0366	1.0374	0.9615
	5/31/2008	-0.0297	-0.0339	14.7697	1.0495	0.9742	0.9431
	6/30/2008	-0.0293	-0.0280	-120.4005	1.0556	0.8571	0.9484
	7/31/2008	-0.0264	-0.0230	-12.6386	0.8398	0.9170	0.9486
	8/31/2008	-0.0307	-0.0206	15.4315	0.8902	0.8765	0.9617
	9/30/2008	-0.0345	-0.0236	-116.4890	0.8374	0.7816	0.8944
	10/31/2008	-0.0298	-0.0400	-197.6268	0.6810	0.6837	0.9018
	11/30/2008	-0.0312	-0.0328	-72.5216	0.8278	0.8823	1.0020
	12/31/2008	-0.0334	-0.0384	7.0004	0.8522	1.0347	1.0349

	1/31/2009	-0.0378	-0.0424	-77.3802	0.9219	0.8925	0.9615
	2/28/2009	-0.0337	-0.0543	-90.7974	0.9588	0.9016	0.9331
	3/31/2009	-0.0338	-0.0191	62.7776	1.0250	1.1002	0.9468
	4/30/2009	-0.0264	-0.0231	74.9344	0.9791	1.1214	0.9838
	5/31/2009	-0.0295	-0.0379	46.3212	1.1697	1.1252	0.9945
	6/30/2009	-0.0138	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0317	-0.0252	68.1482	0.9747	1.0673	0.9992
	8/31/2009	-0.0456	-0.0265	33.1259	0.9508	0.9533	0.9683
	10/31/2009	-0.0420	-0.0559	36.4435	0.9784	1.0475	0.9706
	9/30/2009	-0.0303	-0.0250	-20.9076	1.0323	0.9589	0.9605
	11/30/2009	-0.0341	-0.0325	59.4226	0.9904	1.0012	0.9659
	12/31/2009	-0.0242	-0.0221	19.4502	0.9822	0.9968	0.9425
	1/31/2010	-0.0317	-0.0282	-41.2503	0.8853	0.9022	0.9693
	2/28/2010	-0.0568	-0.0398	30.5997	1.0231	0.9612	0.9581
	3/31/2010	-0.0726	-0.0517	64.9181	0.9832	1.0382	0.9560
	4/30/2010	-0.0576	-0.0428	17.2371	0.9960	0.9683	0.9717
	5/31/2010	-0.0444	-0.0270	-97.3030	0.8464	0.8669	0.9480
	6/30/2010	-0.0493	-0.0447	-58.7212	0.9730	0.9496	0.9757
	7/31/2010	-0.0344	-0.0252	70.8701	1.0185	1.0387	0.9759
	8/31/2010	-0.0305	-0.0148	-52.2910	0.9098	0.9371	0.9728
	9/30/2010	-0.0442	-0.0285	91.8501	1.0526	1.0674	0.9601
	10/31/2010	-0.0420	-0.0312	42.0388	0.9918	0.9868	0.9552
	11/30/2010	-0.0385	-0.0399	-2.7317	0.9794	0.9316	0.9467
	12/31/2010	-0.0433	-0.0444	77.0687	1.0559	1.0289	0.9461
	1/31/2011	-0.0489	-0.0379	28.4575	0.9958	0.9306	0.9562
	2/28/2011	-0.0546	-0.0436	41.0774	1.0130	0.9486	0.9584
	3/31/2011	-0.0367	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0371	-0.0385	37.7572	1.0044	0.9870	0.9728
	5/31/2011	-0.0384	-0.0273	-18.4330	0.8908	0.9287	0.9698
	6/30/2011	-0.0271	-0.0243	-24.5825	0.9044	0.9401	0.9454
	7/31/2011	-0.0343	-0.0218	-28.3821	0.9844	0.9513	0.9808
	8/31/2011	-0.0288	-0.0305	-73.4113	0.9421	0.8668	0.9564
	9/30/2011	-0.0246	-0.0275	-87.4900	0.8346	0.8109	0.9572
	10/31/2011	-0.0216	-0.0261	121.8617	1.0551	1.0888	0.9759
	11/30/2011	-0.0504	-0.0337	-6.3602	0.9742	0.8917	0.9336
	12/31/2011	-0.0448	-0.0405	10.6200	0.9388	0.9458	0.9786
	1/31/2012	-0.0475	-0.0330	54.7901	0.9831	1.0711	0.9790
	2/29/2012	-0.0237	-0.0142	53.2496	1.0235	1.0176	0.9648
	3/31/2012	-0.0271	-0.0217	42.7689	0.9377	0.9235	0.9461
	4/30/2012	-0.0318	-0.0387	-10.5816	0.9531	0.9439	0.9659
	5/31/2012	-0.0274	-0.0345	-87.6011	0.8292	0.8420	0.9623
	6/30/2012	-0.0111	-0.0285	51.8106	0.9641	0.9929	0.9629
	7/31/2012	-0.0247	-0.0306	17.1398	1.0194	0.9748	0.9880
	8/31/2012	-0.0221	-0.0304	27.2401	1.0203	0.9533	0.9571
	9/30/2012	-0.0310	-0.0417	34.0699	0.9449	1.0171	0.9633
	10/31/2012	-0.0276	-0.0405	-28.5304	0.9166	0.9514	0.9670
	11/30/2012	-0.0353	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0568	-0.0548	9.9913	0.9533	1.0065	0.9556
	1/31/2013	-0.0446	-0.0497	71.9012	1.0032	0.9718	0.9471
	2/28/2013	-0.0390	-0.0346	16.5506	0.9185	0.9452	0.9644
	3/31/2013	-0.0292	-0.0334	54.4904	0.9692	0.9400	0.9540
	4/30/2013	-0.0415	-0.0339	28.3598	0.9120	0.9631	0.9731
	5/31/2013	-0.0728	-0.0469	33.1499	0.9443	0.9293	0.9303
	6/30/2013	-0.0301	-0.0359	-24.4803	0.9519	0.8907	0.9290
Credit Suisse Dedicated Short Bias Hedge Fund Index	1/31/2004	-0.0256	-0.0549	19.1844	0.9569	0.9912	0.9665
	2/29/2004	-0.0193	-0.0509	13.7844	1.0301	1.0036	0.9639
	3/31/2004	-0.0680	-0.0233	-18.7557	0.9711	0.9677	0.9638
	4/30/2004	-0.0591	-0.0401	-18.9352	0.9849	0.8741	0.9203
	5/31/2004	-0.0750	-0.0275	13.3553	0.9998	0.9359	0.9458
	6/30/2004	-0.0496	-0.0344	20.1353	0.9087	0.9609	0.9594
	7/31/2004	-0.0999	-0.0123	-39.1449	1.0324	0.9377	0.9662
	8/31/2004	-0.0649	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0773	-0.0221	10.3161	1.1012	1.0142	0.9610
	10/31/2004	-0.1541	-0.0070	15.5961	1.0105	0.9805	0.9650
	11/30/2004	0.0102	-0.0390	43.5961	0.9228	1.0508	0.9433
	12/31/2004	-0.0765	-0.0254	38.0757	0.8652	1.0054	0.9717

	1/31/2005	0.0132	-0.0497	-30.6748	1.0264	0.9589	0.9638
	2/28/2005	0.0171	-0.0689	22.3058	1.0322	1.0442	0.9471
	3/31/2005	-0.0802	-0.0289	-23.0342	1.0367	0.8907	0.9385
	4/30/2005	-0.1074	-0.0191	-23.7638	0.8806	0.9282	0.9651
	5/31/2005	-0.0733	-0.0345	34.6267	0.9621	0.9891	0.9703
	6/30/2005	-0.0386	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0839	-0.0325	42.8265	1.0172	1.0248	0.9433
	8/31/2005	-0.0712	-0.0202	-13.8738	1.1158	0.9648	0.9722
	9/30/2005	0.0066	-0.0400	8.4566	0.9682	1.0496	0.9331
	10/31/2005	-0.0940	-0.0109	-21.8234	0.8593	0.8923	0.9375
	11/30/2005	-0.0582	-0.0260	42.4472	0.9422	1.0406	0.9608
	12/31/2005	-0.1139	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0609	-0.0370	31.7668	1.0101	1.0681	0.9527
	2/28/2006	-0.0468	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.1370	-0.0245	14.1468	1.0228	0.9660	0.9367
	4/30/2006	-0.0960	-0.0348	15.7566	1.0316	1.0269	0.9493
	5/31/2006	-0.0091	-0.0501	-40.5434	0.9582	0.8511	0.9499
	6/30/2006	-0.0044	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0581	-0.0416	6.4374	0.9867	0.9698	0.9692
	8/31/2006	-0.0109	-0.0828	27.1376	0.8937	0.9815	0.9743
	9/30/2006	0.0553	-0.1043	32.0073	0.8775	0.9652	0.9658
	10/31/2006	-0.1021	-0.1068	42.0670	0.9614	1.0053	0.9641
	11/30/2006	-0.0863	-0.0560	22.6667	1.0389	1.0319	0.9684
	12/31/2006	-0.0115	-0.0674	17.6466	0.8940	1.0028	0.9428
	1/31/2007	0.0489	-0.0413	19.9166	0.9439	0.9464	0.9555
	2/28/2007	-0.0327	-0.0213	-31.4435	1.0085	0.9521	0.9759
	3/31/2007	-0.1143	-0.0356	14.0172	1.0024	0.9961	0.9460
	4/30/2007	0.0073	-0.0624	61.4872	0.9722	1.0027	0.9633
	5/31/2007	-0.0502	-0.0252	48.2267	0.9506	1.0049	0.9421
	6/30/2007	0.0155	-0.0561	-27.2938	0.9980	1.0029	0.9493
	7/31/2007	-0.0407	-0.0366	-48.1033	1.0134	1.0088	0.9556
	8/31/2007	0.0618	-0.0534	18.6977	0.9187	0.9355	0.9649
	9/30/2007	-0.0662	-0.0097	52.7375	1.0613	1.0672	0.9594
	10/31/2007	-0.0907	-0.0142	22.6069	1.0561	1.0688	0.9652
	11/30/2007	-0.0527	-0.0566	-68.2631	0.9231	0.8872	0.9603
	12/31/2007	0.0301	-0.0413	-12.8022	1.0144	0.9615	0.9579
	1/31/2008	-0.0293	-0.0335	-89.8320	0.9557	0.8327	0.9705
	2/29/2008	-0.0633	-0.0182	-47.9405	1.0760	1.0312	0.9495
	3/31/2008	-0.0687	-0.0211	-7.9495	0.9427	0.9047	0.9499
	4/30/2008	-0.0475	-0.0289	62.8706	1.0366	1.0374	0.9615
	5/31/2008	-0.0336	-0.0339	14.7697	1.0495	0.9742	0.9431
	6/30/2008	-0.0264	-0.0280	-120.4005	1.0556	0.8571	0.9484
	7/31/2008	-0.0350	-0.0230	-12.6386	0.8398	0.9170	0.9486
	8/31/2008	-0.0959	-0.0206	15.4315	0.8902	0.8765	0.9617
	9/30/2008	-0.0838	-0.0236	-116.4890	0.8374	0.7816	0.8944
	10/31/2008	-0.0724	-0.0400	-197.6268	0.6810	0.6837	0.9018
	11/30/2008	-0.0485	-0.0328	-72.5216	0.8278	0.8823	1.0020
	12/31/2008	-0.0124	-0.0384	7.0004	0.8522	1.0347	1.0349
	1/31/2009	0.0102	-0.0424	-77.3802	0.9219	0.8925	0.9615
	2/28/2009	0.0126	-0.0543	-90.7974	0.9588	0.9016	0.9331
	3/31/2009	-0.0488	-0.0191	62.7776	1.0250	1.1002	0.9468
	4/30/2009	-0.0745	-0.0231	74.9344	0.9791	1.1214	0.9838
	5/31/2009	-0.0373	-0.0379	46.3212	1.1697	1.1252	0.9945
	6/30/2009	-0.0711	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0609	-0.0252	68.1482	0.9747	1.0673	0.9992
	8/31/2009	-0.0538	-0.0265	33.1259	0.9508	0.9533	0.9683
	10/31/2009	-0.0149	-0.0559	36.4435	0.9784	1.0475	0.9706
	9/30/2009	-0.0113	-0.0250	-20.9076	1.0323	0.9589	0.9605
	11/30/2009	-0.0165	-0.0325	59.4226	0.9904	1.0012	0.9659
	12/31/2009	-0.0579	-0.0221	19.4502	0.9822	0.9968	0.9425
	1/31/2010	-0.0434	-0.0282	-41.2503	0.8853	0.9022	0.9693
	2/28/2010	-0.1004	-0.0398	30.5997	1.0231	0.9612	0.9581
	3/31/2010	0.0144	-0.0517	64.9181	0.9832	1.0382	0.9560
	4/30/2010	-0.0067	-0.0428	17.2371	0.9960	0.9683	0.9717
	5/31/2010	-0.0073	-0.0270	-97.3030	0.8464	0.8669	0.9480
	6/30/2010	0.0283	-0.0447	-58.7212	0.9730	0.9496	0.9757
	7/31/2010	-0.0900	-0.0252	70.8701	1.0185	1.0387	0.9759
	8/31/2010	-0.1184	-0.0148	-52.2910	0.9098	0.9371	0.9728
	9/30/2010	-0.0591	-0.0285	91.8501	1.0526	1.0674	0.9601
	10/31/2010	-0.0604	-0.0312	42.0388	0.9918	0.9868	0.9552
	11/30/2010	-0.0286	-0.0399	-2.7317	0.9794	0.9316	0.9467
	12/31/2010	0.0399	-0.0444	77.0687	1.0559	1.0289	0.9461
	1/31/2011	-0.0538	-0.0379	28.4575	0.9958	0.9306	0.9562
	2/28/2011	-0.0337	-0.0436	41.0774	1.0130	0.9486	0.9584
	3/31/2011	0.0010	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0669	-0.0385	37.7572	1.0044	0.9870	0.9728
	5/31/2011	-0.0379	-0.0273	-18.4330	0.8908	0.9287	0.9698
	6/30/2011	-0.0586	-0.0243	-24.5825	0.9044	0.9401	0.9454
	7/31/2011	-0.0811	-0.0218	-28.3821	0.9844	0.9513	0.9808
	8/31/2011	-0.0602	-0.0305	-73.4113	0.9421	0.8668	0.9564
	9/30/2011	-0.1169	-0.0275	-87.4900	0.8346	0.8109	0.9572
	10/31/2011	-0.0455	-0.0261	121.8617	1.0551	1.0888	0.9759
	11/30/2011	-0.0557	-0.0337	-6.3602	0.9742	0.8917	0.9336
	12/31/2011	-0.0619	-0.0405	10.6200	0.9388	0.9458	0.9786
	1/31/2012	-0.1014	-0.0330	54.7901	0.9831	1.0711	0.9790
	2/29/2012	-0.0958	-0.0142	53.2496	1.0235	1.0176	0.9648
	3/31/2012	-0.1049	-0.0217	42.7689	0.9377	0.9235	0.9461
	4/30/2012	-0.0290	-0.0387	-10.5816	0.9531	0.9439	0.9659
	5/31/2012	-0.0586	-0.0345	-87.6011	0.8292	0.8420	0.9623
	6/30/2012	-0.0686	-0.0285	51.8106	0.9641	0.9929	0.9629
	7/31/2012	0.0000	-0.0306	17.1398	1.0194	0.9748	0.9880
	8/31/2012	-0.1002	-0.0304	27.2401	1.0203	0.9533	0.9571
	9/30/2012	-0.0479	-0.0417	34.0699	0.9449	1.0171	0.9633
	10/31/2012	0.0397	-0.0405	-28.5304	0.9166	0.9514	0.9670
	11/30/2012	-0.0571	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	0.0028	-0.0548	9.9913	0.9533	1.0065	0.9556
	1/31/2013	0.0350	-0.0497	71.9012	1.0032	0.9718	0.9471
	2/28/2013	-0.0294	-0.0346	16.5506	0.9185	0.9452	0.9644
	3/31/2013	-0.0208	-0.0334	54.4904	0.9692	0.9400	0.9540
	4/30/2013	-0.0959	-0.0339	28.3598	0.9120	0.9631	0.9731
	5/31/2013	-0.0120	-0.0469	33.1499	0.9443	0.9293	0.9303
	6/30/2013	-0.0311	-0.0359	-24.4803	0.9519	0.8907	0.9290

Credit Suisse Emerging Markets Hedge Fund Index	1/31/2004	-0.0478	-0.0549	19.1844	0.9569	0.9912	0.9665
	2/29/2004	-0.0523	-0.0509	13.7844	1.0301	1.0036	0.9639
	3/31/2004	-0.0181	-0.0233	-18.7557	0.9711	0.9677	0.9638
	4/30/2004	-0.0201	-0.0401	-18.9352	0.9849	0.8741	0.9203
	5/31/2004	-0.0420	-0.0275	13.3553	0.9998	0.9359	0.9458
	6/30/2004	-0.0452	-0.0344	20.1353	0.9087	0.9609	0.9594
	7/31/2004	-0.0263	-0.0123	-39.1449	1.0324	0.9377	0.9662
	8/31/2004	-0.0451	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0192	-0.0221	10.3161	1.1012	1.0142	0.9610
	10/31/2004	0.0064	-0.0070	15.5961	1.0105	0.9805	0.9650
	11/30/2004	-0.0401	-0.0390	43.5961	0.9228	1.0508	0.9433
	12/31/2004	-0.0061	-0.0254	38.0757	0.8652	1.0054	0.9717
	1/31/2005	-0.0416	-0.0497	-30.6748	1.0264	0.9589	0.9638
	2/28/2005	-0.0841	-0.0689	22.3058	1.0322	1.0442	0.9471
	3/31/2005	-0.0312	-0.0289	-23.0342	1.0367	0.8907	0.9385
	4/30/2005	-0.0024	-0.0191	-23.7638	0.8806	0.9282	0.9651
	5/31/2005	-0.0458	-0.0345	34.6267	0.9621	0.9891	0.9703
	6/30/2005	-0.0489	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0216	-0.0325	42.8265	1.0172	1.0248	0.9433
	8/31/2005	-0.0276	-0.0202	-13.8738	1.1158	0.9648	0.9722
	9/30/2005	-0.0323	-0.0400	8.4566	0.9682	1.0496	0.9331
	10/31/2005	0.0081	-0.0109	-21.8234	0.8593	0.8923	0.9375
	11/30/2005	-0.0307	-0.0260	42.4472	0.9422	1.0406	0.9608
	12/31/2005	-0.0030	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0344	-0.0370	31.7668	1.0101	1.0681	0.9527
	2/28/2006	0.0283	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	0.0104	-0.0245	14.1468	1.0228	0.9660	0.9367
	4/30/2006	-0.0189	-0.0348	15.7566	1.0316	1.0269	0.9493
	5/31/2006	-0.0623	-0.0501	-40.5434	0.9582	0.8511	0.9499
	6/30/2006	-0.0427	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0391	-0.0416	6.4374	0.9867	0.9698	0.9692
	8/31/2006	-0.0600	-0.0828	27.1376	0.8937	0.9815	0.9743
	9/30/2006	-0.1776	-0.1043	32.0073	0.8775	0.9652	0.9658
	10/31/2006	-0.1306	-0.1068	42.0670	0.9614	1.0053	0.9641
	11/30/2006	-0.0813	-0.0560	22.6667	1.0389	1.0319	0.9684
	12/31/2006	-0.0697	-0.0674	17.6466	0.8940	1.0028	0.9428
	1/31/2007	-0.0572	-0.0413	19.9166	0.9439	0.9464	0.9555
	2/28/2007	-0.0199	-0.0213	-31.4435	1.0085	0.9521	0.9759
	3/31/2007	-0.0396	-0.0356	14.0172	1.0024	0.9961	0.9460
	4/30/2007	-0.0743	-0.0624	61.4872	0.9722	1.0027	0.9633
	5/31/2007	-0.0235	-0.0252	48.2267	0.9506	1.0049	0.9421
	6/30/2007	-0.0680	-0.0561	-27.2938	0.9980	1.0029	0.9493
	7/31/2007	-0.0281	-0.0366	-48.1033	1.0134	1.0088	0.9556
	8/31/2007	-0.0598	-0.0534	18.6977	0.9187	0.9355	0.9649
	9/30/2007	0.0135	-0.0097	52.7375	1.0613	1.0672	0.9594
	10/31/2007	0.0064	-0.0142	22.6069	1.0561	1.0688	0.9652
	11/30/2007	-0.0650	-0.0566	-68.2631	0.9231	0.8872	0.9603
	12/31/2007	-0.0158	-0.0413	-12.8022	1.0144	0.9615	0.9579
	1/31/2008	-0.0230	-0.0335	-89.8320	0.9557	0.8327	0.9705
	2/29/2008	-0.0241	-0.0182	-47.9405	1.0760	1.0312	0.9495
	3/31/2008	-0.0189	-0.0211	-7.9495	0.9427	0.9047	0.9499
	4/30/2008	-0.0217	-0.0289	62.8706	1.0366	1.0374	0.9615
	5/31/2008	-0.0300	-0.0339	14.7697	1.0495	0.9742	0.9431
	6/30/2008	-0.0405	-0.0280	-120.4005	1.0556	0.8571	0.9484
	7/31/2008	-0.0129	-0.0230	-12.6386	0.8398	0.9170	0.9486
	8/31/2008	-0.0098	-0.0206	15.4315	0.8902	0.8765	0.9617
	9/30/2008	-0.0127	-0.0236	-116.4890	0.8374	0.7816	0.8944
	10/31/2008	-0.0458	-0.0400	-197.6268	0.6810	0.6837	0.9018
	11/30/2008	-0.0271	-0.0328	-72.5216	0.8278	0.8823	1.0020
	12/31/2008	-0.0214	-0.0384	7.0004	0.8522	1.0347	1.0349
	1/31/2009	-0.0427	-0.0424	-77.3802	0.9219	0.8925	0.9615
	2/28/2009	-0.0915	-0.0543	-90.7974	0.9588	0.9016	0.9331
	3/31/2009	-0.0031	-0.0191	62.7776	1.0250	1.1002	0.9468
	4/30/2009	-0.0276	-0.0231	74.9344	0.9791	1.1214	0.9838
	5/31/2009	-0.0257	-0.0379	46.3212	1.1697	1.1252	0.9945
	6/30/2009	0.0163	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0169	-0.0252	68.1482	0.9747	1.0673	0.9992
	8/31/2009	-0.0170	-0.0265	33.1259	0.9508	0.9533	0.9683
	10/31/2009	-0.0691	-0.0559	36.4435	0.9784	1.0475	0.9706
	9/30/2009	-0.0001	-0.0250	-20.9076	1.0323	0.9589	0.9605
	11/30/2009	-0.0184	-0.0325	59.4226	0.9904	1.0012	0.9659
	12/31/2009	-0.0183	-0.0221	19.4502	0.9822	0.9968	0.9425
	1/31/2010	-0.0212	-0.0282	-41.2503	0.8853	0.9022	0.9693
	2/28/2010	-0.0346	-0.0398	30.5997	1.0231	0.9612	0.9581
	3/31/2010	-0.0385	-0.0517	64.9181	0.9832	1.0382	0.9560
	4/30/2010	-0.0601	-0.0428	17.2371	0.9960	0.9683	0.9717
	5/31/2010	-0.0078	-0.0270	-97.3030	0.8464	0.8669	0.9480
	6/30/2010	-0.0300	-0.0447	-58.7212	0.9730	0.9496	0.9757
	7/31/2010	-0.0274	-0.0252	70.8701	1.0185	1.0387	0.9759
	8/31/2010	-0.0144	-0.0148	-52.2910	0.9098	0.9371	0.9728
	9/30/2010	-0.0173	-0.0285	91.8501	1.0526	1.0674	0.9601
	10/31/2010	-0.0180	-0.0312	42.0388	0.9918	0.9868	0.9552
	11/30/2010	-0.0230	-0.0399	-2.7317	0.9794	0.9316	0.9467
	12/31/2010	-0.0427	-0.0444	77.0687	1.0559	1.0289	0.9461

	1/31/2011	-0.0326	-0.0379	28.4575	0.9958	0.9306	0.9562
	2/28/2011	-0.0594	-0.0436	41.0774	1.0130	0.9486	0.9584
	3/31/2011	-0.0744	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0230	-0.0385	37.7572	1.0044	0.9870	0.9728
	5/31/2011	-0.0274	-0.0273	-18.4330	0.8908	0.9287	0.9698
	6/30/2011	-0.0160	-0.0243	-24.5825	0.9044	0.9401	0.9454
	7/31/2011	-0.0057	-0.0218	-28.3821	0.9844	0.9513	0.9808
	8/31/2011	-0.0296	-0.0305	-73.4113	0.9421	0.8668	0.9564
	9/30/2011	-0.0188	-0.0275	-87.4900	0.8346	0.8109	0.9572
	10/31/2011	-0.0148	-0.0261	121.8617	1.0551	1.0888	0.9759
	11/30/2011	-0.0115	-0.0337	-6.3602	0.9742	0.8917	0.9336
	12/31/2011	-0.0357	-0.0405	10.6200	0.9388	0.9458	0.9786
	1/31/2012	-0.0211	-0.0330	54.7901	0.9831	1.0711	0.9790
	2/29/2012	0.0088	-0.0142	53.2496	1.0235	1.0176	0.9648
	3/31/2012	-0.0024	-0.0217	42.7689	0.9377	0.9235	0.9461
	4/30/2012	-0.0313	-0.0387	-10.5816	0.9531	0.9439	0.9659
	5/31/2012	-0.0311	-0.0345	-87.6011	0.8292	0.8420	0.9623
	6/30/2012	-0.0458	-0.0285	51.8106	0.9641	0.9929	0.9629
	7/31/2012	-0.0466	-0.0306	17.1398	1.0194	0.9748	0.9880
	8/31/2012	-0.0189	-0.0304	27.2401	1.0203	0.9533	0.9571
	9/30/2012	-0.0175	-0.0417	34.0699	0.9449	1.0171	0.9633
	10/31/2012	-0.0611	-0.0405	-28.5304	0.9166	0.9514	0.9670
	11/30/2012	-0.0287	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0532	-0.0548	9.9913	0.9533	1.0065	0.9556
	1/31/2013	-0.0788	-0.0497	71.9012	1.0032	0.9718	0.9471
	2/28/2013	-0.0486	-0.0346	16.5506	0.9185	0.9452	0.9644
	3/31/2013	-0.0401	-0.0334	54.4904	0.9692	0.9400	0.9540
	4/30/2013	-0.0018	-0.0339	28.3598	0.9120	0.9631	0.9731
	5/31/2013	-0.0124	-0.0469	33.1499	0.9443	0.9293	0.9303
	6/30/2013	-0.0137	-0.0359	-24.4803	0.9519	0.8907	0.9290
Credit Suisse Equity Market Neutral Hedge Fund Index	1/31/2004	-0.0442	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0516	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0076	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0302	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0361	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0234	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0239	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0664	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0320	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0047	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0568	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0246	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0512	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0743	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0370	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0359	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0548	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0403	-0.0396	-0.1936	1.0288	0.9897	0.9653

	7/31/2005	-0.0500	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0405	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0448	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0317	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0282	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0234	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0434	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	-0.0050	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0284	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0303	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0974	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0299	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0372	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.4458	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0596	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.0554	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0472	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0419	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0358	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0303	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0382	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0412	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0306	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0344	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0365	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0357	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0263	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0283	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0452	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0373	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0357	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0338	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0312	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0248	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0366	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0352	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0325	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0316	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0374	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0393	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0382	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0287	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0386	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0331	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0211	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0251	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0363	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0273	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0269	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0395	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0330	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0323	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0327	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0380	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0392	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0447	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0435	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0370	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0311	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0378	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0327	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0387	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0410	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0359	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0200	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0382	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0329	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0392	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0447	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0424	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0334	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0331	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0320	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0380	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0346	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0307	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0407	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0345	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0367	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0291	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0373	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0334	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0419	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0382	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0331	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0382	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0372	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0416	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0356	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0229	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0361	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0284	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0360	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0333	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0410	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0401	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Event Driven Hedge Fund Index	1/31/2004	-0.0629	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0474	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0299	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0439	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0269	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0233	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0020	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0398	-0.0431	2.4960	0.9200	0.9979	0.9805

	9/30/2004	-0.0233	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0093	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0453	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0257	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0571	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0720	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0224	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0128	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0369	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0271	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0185	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0197	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0370	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0124	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0196	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0180	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0311	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0009	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0265	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0397	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0526	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0334	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0539	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0734	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0922	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.0988	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0429	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0666	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0428	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0224	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0362	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0585	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0328	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0657	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0381	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0581	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0122	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0253	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0601	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0316	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0340	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0089	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0261	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0286	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0258	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0207	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0255	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0204	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0190	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0353	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0308	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0409	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0338	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0422	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0238	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0263	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0379	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0121	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0268	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0285	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0595	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0306	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0328	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0186	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0284	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0358	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0477	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0356	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0254	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0393	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0185	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0086	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0289	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0286	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0368	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0413	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0317	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0404	-0.0436	41.0768	1.0130	0.9486	0.9584

	3/31/2011	-0.0362	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0368	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0318	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0197	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0264	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0292	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0260	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0233	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0327	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0318	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0233	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0178	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0162	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0312	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0350	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0186	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0314	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0156	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0431	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0433	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0386	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0723	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0706	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0401	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0339	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0294	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0447	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0295	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Event Driven Distressed Hedge Fund Index	1/31/2004	-0.0483	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0412	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0299	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0423	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0327	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0223	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0140	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0380	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0281	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0206	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0477	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0303	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0523	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0663	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0244	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0149	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0384	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0211	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0162	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0205	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0342	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0075	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0201	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0188	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0269	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0002	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0233	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0401	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0533	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0419	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0667	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0913	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0979	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.0931	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0420	-0.0560	22.6664	1.0389	1.0319	0.9684

	12/31/2006	-0.0672	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0464	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0263	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0389	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0517	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0396	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0583	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0407	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0543	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0272	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0299	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0586	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0437	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0318	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0205	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0256	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0286	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0292	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0242	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0245	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0254	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0148	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0363	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0298	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0422	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0337	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0374	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0261	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0240	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0392	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0161	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0240	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0250	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0423	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0289	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0313	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0248	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0292	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0400	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0419	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0348	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0258	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0358	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0221	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0146	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0227	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0290	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0357	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0361	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0307	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0387	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0347	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0354	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0324	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0171	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0240	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0292	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0215	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0192	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0311	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0299	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0150	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0186	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0086	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0294	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0324	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0101	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0296	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0022	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0485	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0438	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0385	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0840	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0792	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0394	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0324	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0290	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0476	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0255	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Event Driven Multi-Strategy Hedge Fund Index	1/31/2004	-0.0721	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0511	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0300	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0450	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0225	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0239	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	0.0065	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0409	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0196	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0010	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0437	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0223	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0610	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0766	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0204	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0106	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0356	-0.0345	34.6262	0.9621	0.9891	0.9703

	6/30/2005	-0.0323	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0200	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0187	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0392	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0161	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0190	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0172	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0342	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0018	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0286	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0397	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0525	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0280	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0462	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0630	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0890	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.1030	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0433	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0666	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0404	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0193	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0345	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0634	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0287	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0707	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0363	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0607	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0029	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0231	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0616	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0233	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0352	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	0.0018	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0269	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0287	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0232	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0170	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0254	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0174	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0205	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0344	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0310	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0402	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0335	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0456	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0212	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0278	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0370	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0081	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0286	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0310	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0723	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0313	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0337	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0128	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0275	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0324	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0525	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0359	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0245	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0420	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0151	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0025	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0340	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0278	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0375	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0447	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0320	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0422	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0366	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0384	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0308	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0212	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0284	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0279	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0303	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0266	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0349	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0332	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0285	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0176	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0210	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0308	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0350	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0215	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0320	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0208	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0403	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0425	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0369	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0652	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0675	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0404	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0350	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0295	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0417	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0305	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Event Driven Risk Arbitrage Hedge Fund Index	1/31/2004	-0.0417	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0518	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0239	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0354	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0334	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0324	-0.0344	20.1350	0.9087	0.9609	0.9594

	7/31/2004	-0.0299	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0557	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0475	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0182	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0382	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0252	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0403	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0565	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0423	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0344	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0383	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0373	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0375	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0310	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0397	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0253	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0318	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0301	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0324	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	-0.0228	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0341	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0248	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0344	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0375	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0253	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0415	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0719	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.0762	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0529	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0452	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0425	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0431	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0325	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0251	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0287	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0423	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0476	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0493	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0200	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0091	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0478	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0370	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0413	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0409	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0198	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0284	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0298	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0393	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0364	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0112	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0429	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0391	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0378	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0367	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0393	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0428	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0383	-0.0191	62.7746	1.0250	1.1002	0.9468

	4/30/2009	-0.0316	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0355	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0250	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0328	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0312	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0525	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0390	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0353	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0367	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0334	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0381	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0467	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0404	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0367	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0422	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0281	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0246	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0321	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0350	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0395	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0565	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0388	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0369	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0471	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0340	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0363	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0330	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0313	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0371	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0292	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0318	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0297	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0365	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0338	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0157	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0261	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0440	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0484	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0452	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0360	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0392	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0361	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0469	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0536	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0686	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0530	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0410	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0325	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0313	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0535	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0384	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Fixed Income Arbitrage Hedge Fund Index	1/31/2004	-0.0407	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0392	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0321	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0444	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0320	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0245	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0352	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0339	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0303	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0258	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0289	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0293	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0321	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0492	-0.0689	22.3055	1.0322	1.0442	0.9471

	3/31/2005	-0.0238	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0269	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0406	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0211	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0337	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0242	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0219	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0136	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0175	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0048	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0230	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0020	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0220	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0239	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0312	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0365	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0493	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0973	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.1817	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.1093	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0483	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0450	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0460	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0287	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0206	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.1056	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0479	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0385	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0392	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0438	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0298	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0228	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0500	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0609	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0392	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0389	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0313	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0323	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0292	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0401	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0341	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0297	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0339	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0415	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0415	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0389	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0351	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0332	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0208	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0356	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0407	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0271	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0368	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0471	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0386	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0401	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0362	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0313	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0465	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0537	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0476	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0386	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0322	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0404	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0352	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0301	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0299	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0491	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0454	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0343	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0342	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0350	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0279	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0462	-0.0385	37.7567	1.0044	0.9870	0.9728

	5/31/2011	-0.0326	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0290	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0333	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0361	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0367	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0297	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0392	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0511	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0379	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0285	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0288	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0371	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0314	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0287	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0281	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0466	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0640	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0527	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0290	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0305	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0348	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0269	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0278	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0350	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0326	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0310	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Global Macro Hedge Fund Index	1/31/2004	-0.0524	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0476	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0167	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0398	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0285	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0490	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0146	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0465	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0251	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0141	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0265	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0348	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0357	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0476	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0248	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0375	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0303	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0306	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0556	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0061	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0392	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0136	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0327	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0235	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0498	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	-0.0266	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0394	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0410	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0392	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0180	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0302	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0259	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.0926	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.1076	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0550	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0677	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0213	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0233	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0572	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0583	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0002	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	0.0031	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0263	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0430	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0141	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0003	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0475	-0.0566	-68.2623	0.9231	0.8872	0.9603

	12/31/2007	-0.0317	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0291	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0234	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0242	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0292	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0363	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0284	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0277	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0269	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0305	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0411	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0490	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0277	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0369	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0473	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0127	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0307	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0290	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0076	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0255	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0305	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0499	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0170	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0342	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0309	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0361	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0406	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0438	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0362	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0273	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0344	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0341	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0171	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0291	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0462	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0488	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0331	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0365	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0408	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0399	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0316	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0294	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0268	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0227	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0358	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0404	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0109	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0283	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0424	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0250	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0117	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0197	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0479	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0226	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0210	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0328	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0290	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0341	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0337	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0291	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0198	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0271	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0335	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0243	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0432	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0361	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0149	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Long/Short Equity Hedge Fund Index	1/31/2004	-0.0562	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0581	-0.0509	13.7842	1.0301	1.0036	0.9639

	3/31/2004	-0.0243	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0385	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0241	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0386	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0071	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0367	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0213	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	0.0096	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0525	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0160	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0620	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0826	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0384	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0114	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0281	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0563	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0244	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0221	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0534	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0090	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0271	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0114	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0417	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0110	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0159	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0227	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0547	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0430	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0307	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0554	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.1126	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.1194	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0624	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0756	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0546	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0122	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0193	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0619	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0207	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0818	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0371	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0584	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0040	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0082	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0551	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0482	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0371	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0182	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0123	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0226	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0342	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0298	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0205	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0153	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0194	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0404	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0259	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0418	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0514	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0697	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0179	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0168	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0399	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	0.0005	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0135	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0191	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0642	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0211	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0301	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0145	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0222	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0362	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0568	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0527	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0210	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0497	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0156	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0089	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0269	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0177	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0404	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0555	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0347	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0449	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0553	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0393	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0238	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0213	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0173	-0.0218	-28.3816	0.9844	0.9513	0.9808

	8/31/2011	-0.0243	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0167	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0292	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0309	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0386	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0334	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0045	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0169	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0370	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0434	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0420	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0337	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0356	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0405	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0460	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0312	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0708	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0539	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0333	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0352	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0322	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0512	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0473	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Managed Futures Hedge Fund Index	1/31/2004	-0.0720	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0857	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	0.0127	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0689	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0153	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0495	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	0.0129	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0824	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	0.0016	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0136	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	0.0074	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0563	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0371	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0816	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0224	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	0.0012	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0232	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0794	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0913	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	0.0081	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0630	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0116	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0321	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0456	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0645	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	-0.0328	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0737	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0631	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0429	-0.0501	-40.5428	0.9582	0.8511	0.9499

	6/30/2006	-0.0469	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0176	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0091	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	0.0083	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.0470	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0661	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0833	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	0.0066	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0269	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0628	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0466	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	0.0248	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	0.0000	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0381	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0508	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0007	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	0.0100	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0874	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0892	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0110	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	0.0100	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0011	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0667	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0851	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0187	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0008	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0191	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0240	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0528	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0274	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0656	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0617	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0683	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0121	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0005	-0.0231	74.9313	0.9791	1.1214	0.9838
	5/31/2009	-0.0675	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0142	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0666	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	0.0004	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0610	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0275	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0500	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0335	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	0.0009	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0051	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0758	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0376	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0405	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0952	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0341	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	0.0170	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	0.0069	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0217	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0566	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0608	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0697	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0518	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.1059	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0499	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	0.0276	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0304	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	0.0129	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0359	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0335	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0573	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0307	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0688	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0634	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	0.0101	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0274	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.1023	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	0.0230	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	0.0194	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	0.0137	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0622	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0916	-0.0417	34.0694	0.9449	1.0171	0.9633

	10/31/2012	-0.0002	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0077	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	0.0199	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	0.0450	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0062	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0574	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0504	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0653	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0540	-0.0359	-24.4800	0.9519	0.8907	0.9290
Credit Suisse Multi-Strategy Hedge Fund Index	1/31/2004	-0.0477	-0.0549	19.1841	0.9569	0.9912	0.9665
	2/29/2004	-0.0418	-0.0509	13.7842	1.0301	1.0036	0.9639
	3/31/2004	-0.0328	-0.0233	-18.7554	0.9711	0.9677	0.9638
	4/30/2004	-0.0334	-0.0401	-18.9349	0.9849	0.8741	0.9203
	5/31/2004	-0.0274	-0.0275	13.3551	0.9998	0.9359	0.9458
	6/30/2004	-0.0215	-0.0344	20.1350	0.9087	0.9609	0.9594
	7/31/2004	-0.0243	-0.0123	-39.1443	1.0324	0.9377	0.9662
	8/31/2004	-0.0383	-0.0431	2.4960	0.9200	0.9979	0.9805
	9/30/2004	-0.0210	-0.0221	10.3159	1.1012	1.0142	0.9610
	10/31/2004	-0.0134	-0.0070	15.5958	1.0105	0.9805	0.9650
	11/30/2004	-0.0412	-0.0390	43.5954	0.9228	1.0508	0.9433
	12/31/2004	-0.0247	-0.0254	38.0752	0.8652	1.0054	0.9717
	1/31/2005	-0.0494	-0.0497	-30.6744	1.0264	0.9589	0.9638
	2/28/2005	-0.0632	-0.0689	22.3055	1.0322	1.0442	0.9471
	3/31/2005	-0.0317	-0.0289	-23.0339	1.0367	0.8907	0.9385
	4/30/2005	-0.0269	-0.0191	-23.7635	0.8806	0.9282	0.9651
	5/31/2005	-0.0357	-0.0345	34.6262	0.9621	0.9891	0.9703
	6/30/2005	-0.0357	-0.0396	-0.1936	1.0288	0.9897	0.9653
	7/31/2005	-0.0295	-0.0325	42.8258	1.0172	1.0248	0.9433
	8/31/2005	-0.0317	-0.0202	-13.8736	1.1158	0.9648	0.9722
	9/30/2005	-0.0301	-0.0400	8.4565	0.9682	1.0496	0.9331
	10/31/2005	-0.0127	-0.0109	-21.8231	0.8593	0.8923	0.9375
	11/30/2005	-0.0270	-0.0260	42.4466	0.9422	1.0406	0.9608
	12/31/2005	-0.0114	-0.0159	-1.2133	0.9967	1.0163	0.9662
	1/31/2006	-0.0251	-0.0370	31.7664	1.0101	1.0681	0.9527
	2/28/2006	0.0015	-0.0007	0.5567	0.8748	0.9566	0.9612
	3/31/2006	-0.0189	-0.0245	14.1466	1.0228	0.9660	0.9367
	4/30/2006	-0.0375	-0.0348	15.7564	1.0316	1.0269	0.9493
	5/31/2006	-0.0422	-0.0501	-40.5428	0.9582	0.8511	0.9499
	6/30/2006	-0.0078	-0.0304	0.0873	0.9800	0.9541	0.9498
	7/31/2006	-0.0565	-0.0416	6.4373	0.9867	0.9698	0.9692
	8/31/2006	-0.0876	-0.0828	27.1372	0.8937	0.9815	0.9743
	9/30/2006	-0.1107	-0.1043	32.0069	0.8775	0.9652	0.9658
	10/31/2006	-0.1148	-0.1068	42.0664	0.9614	1.0053	0.9641
	11/30/2006	-0.0539	-0.0560	22.6664	1.0389	1.0319	0.9684
	12/31/2006	-0.0660	-0.0674	17.6464	0.8940	1.0028	0.9428
	1/31/2007	-0.0408	-0.0413	19.9163	0.9439	0.9464	0.9555
	2/28/2007	-0.0293	-0.0213	-31.4431	1.0085	0.9521	0.9759
	3/31/2007	-0.0347	-0.0356	14.0170	1.0024	0.9961	0.9460
	4/30/2007	-0.0602	-0.0624	61.4864	0.9722	1.0027	0.9633
	5/31/2007	-0.0440	-0.0252	48.2261	0.9506	1.0049	0.9421
	6/30/2007	-0.0594	-0.0561	-27.2935	0.9980	1.0029	0.9493
	7/31/2007	-0.0444	-0.0366	-48.1027	1.0134	1.0088	0.9556
	8/31/2007	-0.0527	-0.0534	18.6974	0.9187	0.9355	0.9649
	9/30/2007	-0.0111	-0.0097	52.7369	1.0613	1.0672	0.9594
	10/31/2007	-0.0236	-0.0142	22.6066	1.0561	1.0688	0.9652
	11/30/2007	-0.0553	-0.0566	-68.2623	0.9231	0.8872	0.9603
	12/31/2007	-0.0439	-0.0413	-12.8020	1.0144	0.9615	0.9579
	1/31/2008	-0.0376	-0.0335	-89.8307	0.9557	0.8327	0.9705
	2/29/2008	-0.0184	-0.0182	-47.9397	1.0760	1.0312	0.9495
	3/31/2008	-0.0244	-0.0211	-7.9493	0.9427	0.9047	0.9499
	4/30/2008	-0.0331	-0.0289	62.8696	1.0366	1.0374	0.9615
	5/31/2008	-0.0293	-0.0339	14.7694	1.0495	0.9742	0.9431
	6/30/2008	-0.0243	-0.0280	-120.3985	1.0556	0.8571	0.9484
	7/31/2008	-0.0236	-0.0230	-12.6384	0.8398	0.9170	0.9486
	8/31/2008	-0.0187	-0.0206	15.4312	0.8902	0.8765	0.9617
	9/30/2008	-0.0252	-0.0236	-116.4868	0.8374	0.7816	0.8944
	10/31/2008	-0.0381	-0.0400	-197.6218	0.6810	0.6837	0.9018
	11/30/2008	-0.0355	-0.0328	-72.5192	0.8278	0.8823	1.0020
	12/31/2008	-0.0394	-0.0384	7.0002	0.8522	1.0347	1.0349
	1/31/2009	-0.0413	-0.0424	-77.3773	0.9219	0.8925	0.9615
	2/28/2009	-0.0424	-0.0543	-90.7932	0.9588	0.9016	0.9331
	3/31/2009	-0.0255	-0.0191	62.7746	1.0250	1.1002	0.9468
	4/30/2009	-0.0208	-0.0231	74.9313	0.9791	1.1214	0.9838

	5/31/2009	-0.0344	-0.0379	46.3195	1.1697	1.1252	0.9945
	6/30/2009	-0.0137	-0.0090	0.1685	0.9749	0.9434	0.9814
	7/31/2009	-0.0224	-0.0252	68.1462	0.9747	1.0673	0.9992
	8/31/2009	-0.0283	-0.0265	33.1250	0.9508	0.9533	0.9683
	10/31/2009	-0.0516	-0.0559	36.4426	0.9784	1.0475	0.9706
	9/30/2009	-0.0252	-0.0250	-20.9071	1.0323	0.9589	0.9605
	11/30/2009	-0.0309	-0.0325	59.4213	0.9904	1.0012	0.9659
	12/31/2009	-0.0187	-0.0221	19.4498	0.9822	0.9968	0.9425
	1/31/2010	-0.0295	-0.0282	-41.2495	0.8853	0.9022	0.9693
	2/28/2010	-0.0506	-0.0398	30.5992	1.0231	0.9612	0.9581
	3/31/2010	-0.0523	-0.0517	64.9170	0.9832	1.0382	0.9560
	4/30/2010	-0.0401	-0.0428	17.2368	0.9960	0.9683	0.9717
	5/31/2010	-0.0312	-0.0270	-97.3014	0.8464	0.8669	0.9480
	6/30/2010	-0.0412	-0.0447	-58.7201	0.9730	0.9496	0.9757
	7/31/2010	-0.0288	-0.0252	70.8688	1.0185	1.0387	0.9759
	8/31/2010	-0.0202	-0.0148	-52.2900	0.9098	0.9371	0.9728
	9/30/2010	-0.0354	-0.0285	91.8484	1.0526	1.0674	0.9601
	10/31/2010	-0.0356	-0.0312	42.0381	0.9918	0.9868	0.9552
	11/30/2010	-0.0372	-0.0399	-2.7316	0.9794	0.9316	0.9467
	12/31/2010	-0.0442	-0.0444	77.0674	1.0559	1.0289	0.9461
	1/31/2011	-0.0404	-0.0379	28.4571	0.9958	0.9306	0.9562
	2/28/2011	-0.0426	-0.0436	41.0768	1.0130	0.9486	0.9584
	3/31/2011	-0.0381	-0.0471	-1.4130	1.0090	1.0156	0.9516
	4/30/2011	-0.0372	-0.0385	37.7567	1.0044	0.9870	0.9728
	5/31/2011	-0.0374	-0.0273	-18.4328	0.8908	0.9287	0.9698
	6/30/2011	-0.0253	-0.0243	-24.5822	0.9044	0.9401	0.9454
	7/31/2011	-0.0181	-0.0218	-28.3816	0.9844	0.9513	0.9808
	8/31/2011	-0.0325	-0.0305	-73.4101	0.9421	0.8668	0.9564
	9/30/2011	-0.0292	-0.0275	-87.4883	0.8346	0.8109	0.9572
	10/31/2011	-0.0245	-0.0261	121.8594	1.0551	1.0888	0.9759
	11/30/2011	-0.0340	-0.0337	-6.3601	0.9742	0.8917	0.9336
	12/31/2011	-0.0379	-0.0405	10.6198	0.9388	0.9458	0.9786
	1/31/2012	-0.0303	-0.0330	54.7892	0.9831	1.0711	0.9790
	2/29/2012	-0.0217	-0.0142	53.2488	1.0235	1.0176	0.9648
	3/31/2012	-0.0258	-0.0217	42.7683	0.9377	0.9235	0.9461
	4/30/2012	-0.0337	-0.0387	-10.5814	0.9531	0.9439	0.9659
	5/31/2012	-0.0402	-0.0345	-87.5998	0.8292	0.8420	0.9623
	6/30/2012	-0.0266	-0.0285	51.8097	0.9641	0.9929	0.9629
	7/31/2012	-0.0359	-0.0306	17.1396	1.0194	0.9748	0.9880
	8/31/2012	-0.0237	-0.0304	27.2397	1.0203	0.9533	0.9571
	9/30/2012	-0.0313	-0.0417	34.0694	0.9449	1.0171	0.9633
	10/31/2012	-0.0329	-0.0405	-28.5300	0.9166	0.9514	0.9670
	11/30/2012	-0.0330	-0.0328	4.0006	0.9780	0.9704	0.9523
	12/31/2012	-0.0508	-0.0548	9.9911	0.9533	1.0065	0.9556
	1/31/2013	-0.0404	-0.0497	71.9002	1.0032	0.9718	0.9471
	2/28/2013	-0.0328	-0.0346	16.5504	0.9185	0.9452	0.9644
	3/31/2013	-0.0333	-0.0334	54.4897	0.9692	0.9400	0.9540
	4/30/2013	-0.0343	-0.0339	28.3594	0.9120	0.9631	0.9731
	5/31/2013	-0.0440	-0.0469	33.1495	0.9443	0.9293	0.9303
	6/30/2013	-0.0416	-0.0359	-24.4800	0.9519	0.8907	0.9290