

# The World's Largest Hedge Fund is a Fraud

November 7, 2005 Submission to the SEC  
Madoff Investment Securities, LLC  
[www.madoff.com](http://www.madoff.com)

## Opening Remarks:

I am the original source for the information presented herein having first presented my rationale, both verbally and in writing, to the SEC's Boston office in May, 1999 before any public information doubting Madoff Investment Securities, LLC appeared in the press. There was no whistleblower or insider involved in compiling this report. I used the Mosaic Theory to assemble my set of observations. My observations were collected first-hand by listening to fund of fund investors talk about their investments in a hedge fund run by Madoff Investment Securities, LLC, a SEC registered firm. I have also spoken to the heads of various Wall Street equity derivative trading desks and every single one of the senior managers I spoke with told me that Bernie Madoff was a fraud. Of course, no one wants to take undue career risk by sticking their head up and saying the emperor isn't wearing any clothes but....

I am a derivatives expert and have traded or assisted in the trading of several billion \$US in options strategies for hedge funds and institutional clients. I have experience managing split-strike conversion products both using index options and using individual stock options, both with and without index puts. Very few people in the world have the mathematical background needed to manage these types of products but I am one of them. I have outlined a detailed set of Red Flags that make me very suspicious that Bernie Madoff's returns aren't real and, if they are real, then they would almost certainly have to be generated by front-running customer order flow from the broker-dealer arm of Madoff Investment Securities, LLC.

Due to the sensitive nature of the case I detail below, its dissemination within the SEC must be limited to those with a need to know. The firm involved is located in the New York Region.

As a result of this case, several careers on Wall Street and in Europe will be ruined. Therefore, I have not signed nor put my name on this report. I request that my name not be released to anyone other than the Branch Chief and Team Leader in the New York Region who are assigned to the case, without my express written permission. The fewer people who know who wrote this report the better. I am worried about the personal safety of myself and my family. Under no circumstances is this report or its contents to be shared with any other regulatory body without my express permission. This report has been written solely for the SEC's internal use.

As far as I know, none of the hedge fund, fund of funds (FOF's) mentioned in my report are engaged in a conspiracy to commit fraud. I believe they are naïve men and women with a notable lack of derivatives expertise and possessing little or no quantitative finance ability.

## There are 2 possible scenarios that involve fraud by Madoff Securities:

1. Scenario # 1 (**Unlikely**): I am submitting this case under Section 21A(e) of the 1934 Act in the event that the broker-dealer and ECN depicted is actually providing the stated

returns to investors but is earning those returns by front-running customer order flow. Front-running qualifies as insider-trading since it relies upon material, non-public information that is acted upon for the benefit of one party to the detriment of another party. Section 21A(e) of the 1934 Act allows the SEC to pay up to 10% of the total fines levied for insider-trading. We have obtained approval from the SEC's Office of General Counsel, the Chairman's Office, and the bounty program administrator that the SEC is able and willing to pay Section 21A(e) rewards. This case should qualify if insider-trading is involved.

2. Scenario # 2 (**Highly likely**) Madoff Securities is the world's largest Ponzi Scheme. In this case there is no SEC reward payment due the whistle-blower so basically I'm turning this case in because it's the right thing to do. Far better that the SEC is proactive in shutting down a Ponzi Scheme of this size rather than reactive.

**Who:** The politically powerful Madoff family owns and operates a New York City based broker-dealer, ECN, and what is effectively the world's largest hedge fund. Bernard "Bernie" Madoff, the family patriarch started the firm.

According to the [www.madoff.com](http://www.madoff.com) website, "*Bernard L. Madoff was one of the five broker-dealers most closely involved in developing the NASDAQ Stock Market. He has been chairman of the board of directors of the NASDAQ Stock Market as well as a member of the board of governors of the NASD and a member of numerous NASD committees. Bernard Madoff was also a founding member of the International Securities Clearing Corporation in London.*

*His brother, Peter B. Madoff has served as vice chairman of the NASD, a member of its board of governors, and chairman of its New York region. He also has been actively involved in the NASDAQ Stock Market as a member of its board of governors and its executive committee and as chairman of its trading committee. He also has been a member of the board of directors of the Security Traders Association of New York. He is a member of the board of directors of the Depository Trust Corporation.*

**What:**

1. The family runs what is effectively the world's largest hedge fund with estimated assets under management of at least \$20 billion to perhaps \$50 billion, but no one knows exactly how much money BM is managing. That we have what is effectively the world's largest hedge fund operating underground is plainly put shocking. But then again, we don't even know the size of the hedge fund industry so none of this should be surprising. A super-sized fraud of this magnitude was bound to happen given the lack of regulation of these off-shore entities. My best guess is that approximately \$30 billion is involved.
2. However the hedge fund isn't organized as a hedge fund by Bernard Madoff (BM) yet it acts and trades exactly like one. BM allows third party Fund of Funds (FOF's) to private label hedge funds that provide his firm, Madoff Securities, with equity tranche funding. In return for equity tranche funding, BM runs a trading strategy, **as agent**, whose returns flow to the third party FOF hedge funds and their investors who put up equity capital to

fund BM's broker-dealer and ECN operations. *BM tells investors it earns its fees by charging commissions on all of the trades done in their accounts.*

**Red Flag # 1:** *Why would a US broker-dealer organize and fund itself in such an unusual manner? Doesn't this seem to be an unseemly way of operating under the regulator's radar screens? Why aren't the commissions charged fully disclosed to investors? Can a SEC Registered Investment Advisor charge **both** commissions and charge a principle fee for trades? **MOST IMPORTANTLY**, why would BM settle for charging only undisclosed commissions when he could earn standard hedge fund fees of 1% management fee + 20% of the profits? Doing some simple math on BM's 12% average annual return stream to investors, the hedge fund, before fees, would have to be earning average annual returns of 16%. Subtract out the 1% management fee and investors are down to 15%. 20% of the profits would amount to 3% (.20 x 15% = 3% profit participation) so investors would be left with the stated 12% annual returns listed in Attachment 1 (Fairfield Sentry Ltd. Performance Data). Total fees to the third party FOF's would amount to 4% annually. Now why would BM leave 4% in average annual fee revenue on the table unless he were a Ponzi Scheme? Or, is he charging a whole lot more than 4% in undisclosed commissions?*

3. The third parties organize the hedge funds and obtain investors but 100% of the money raised is actually managed by Madoff Investment Securities, LLC in a purported hedge fund strategy. The investors that pony up the money don't know that BM is managing their money. That Madoff is managing the money is purposely kept secret from the investors. Some prominent US based hedge fund, fund of funds, that "invest" in BM in this manner include:
  - A. Fairfield Sentry Limited (Arden Asset Management) which had \$5.2 billion invested in BM as of May 2005; 11<sup>th</sup> Floor, 919 Third Avenue; New York, NY 10022; Telephone 212.319.606; The Fairfield Greenwich Group is a global family of companies with offices in New York, London and Bermuda, and representative offices in the U.S., Europe and Latin America. Local operating entities are authorized or regulated by a variety of government agencies, including Fairfield Greenwich Advisors LLC, a U.S. SEC registered investment adviser, Fairfield Heathcliff Capital LLC, a U.S. NASD member broker-dealer, and Fairfield Greenwich (UK) Limited, authorized and regulated by the Financial Services Authority in the United Kingdom.
  - B. Access International Advisors; [www.aiagroup.com](http://www.aiagroup.com); a SEC registered investment advisor, telephone # 212.223.7167; Suite 2206; 509 Madison Avenue, New York, NY 10022 which had over \$450 million invested with BM as of mid-2002. The majority of this FOF's investors are European, even though the firm is US registered.
  - C. Broyhill All-Weather Fund, L.P. had \$350 million invested with BM as of March 2000.
  - D. Tremont Capital Management, Inc. Corporate Headquarters is located at 555 Theodore Fremd Avenue; Rye, New York 10580; T: (914) 925-1140 F: (914) 921-3499. Tremont oversees on an advisory and fully discretionary basis over \$10.5 billion in assets. Clients include institutional investors, public and private pension plans, ERISA plans, university endowments, foundations, and financial institutions, as well as high net worth individuals. Tremont is owned by Oppenhiemer Funds Inc. which is owned by Mass Mutual Insurance Company so they should have sufficient reserves to make investors whole. Mass Mutual is currently under investigation by the Massachusetts Attorney General, the Department of Justice, and the SEC.

- E. During a 2002 marketing trip to Europe every hedge fund FOF I met with in Paris and Geneva had investments with BM. They all said he was their best manager! A partial list of money managers and Private Banks that invest in BM is included at the end of this report in Attachment 3.
4. Here's what smells bad about the idea of providing equity tranche funding to a US registered broker-dealer:
- A. The investment returns passed along to the third party hedge funds are equivalent to BM borrowing money. These 12 month returns from 1990 – May 2005 ranged from a low of 6.23% to a high of 19.98%, with an average 12 month return during that time period of 12.00%. Add in the 4% in average annual management & participation fees and BM would have to be delivering average annual returns of 16% in order for the investors to receive 12%. No Broker-Dealer that I've ever heard of finances its operations at that high of an implied borrowing rate (source: Attachment 1; Fairfield Sentry Limited return data from December 1990 – May 2005). Ask around and I'm sure you'll find that BM is the only firm on Wall Street that pays an average of 16% to fund its operations.
  - B. BD's typically fund in the short-term credit markets and benchmark a significant part of their overnight funding to LIBOR plus or minus some spread. LIBOR + 40 basis points would seem a more realistic borrowing rate for a broker-dealer of BM's size.
  - C. **Red Flag # 2:** *why would a BD choose to fund at such a high implied interest rate when cheaper money is available in the short-term credit markets? One reason that comes to mind is that BM couldn't stand the due diligence scrutiny of the short-term credit markets. If Charles Ponzi had issued bank notes promising 50% interest on 3 month time deposits instead of issuing unregulated Ponzi Notes to his investors, the State Banking Commission would have quickly shut him down. The key to a successful Ponzi Scheme is to promise lucrative returns but to do so in an unregulated area of the capital markets. Hedge funds are not due to fall under the SEC's umbrella until February 2006.*
5. The third party hedge funds and fund of funds that market this hedge fund strategy that invests in BM don't name and aren't allowed to name Bernie Madoff as the actual manager in their performance summaries or marketing literature. Look closely at Attachment 1, Fairfield Sentry Ltd.'s performance summary and you won't see BM's name anywhere on the document, yet BM is the actual hedge fund manager with discretionary trading authority over all funds, as agent.
- Red Flag # 3:** *Why the need for such secrecy? If I was the world's largest hedge fund and had great returns, I'd want all the publicity I could garner and would want to appear as the world's largest hedge fund in all of the industry rankings. Name one mutual fund company, Venture Capital firm, or LBO firm which doesn't brag about the size of their largest funds' assets under management. Then ask yourself, why would the world's largest hedge fund manager be so secretive that he didn't even want his investors to know he was managing their money? Or is it that BM doesn't want the SEC and FSA to know that he exists?*
6. The third party FOF's never tell investors who is actually managing their money and describe the investment strategy as: This hedge fund's objective is long term growth on

a consistent basis with low volatility. The investment advisor invests exclusively in the U.S. and utilizes a strategy often referred to as a “split-strike conversion.” Generally this style involves purchasing a basket of 30 – 35 large-capitalization stocks with a high degree of correlation to the general market (e.g. American Express, Boeing, Citigroup, Coca-Cola, Dupont, Exxon, General Motors, IBM, Merck, McDonalds). To provide the desired hedge, the manager then sells out-of-the-money OEX index call options and buys out-of-the-money OEX index put options. The amount of calls that are sold and puts that are bought represent a dollar amount equal to the basket of shares purchases.

7. I personally have run split-strike conversion strategies and know that BM’s approach is far riskier than stated in 6 above. His strategy is wholly inferior to an all index approach and is wholly incapable of generating returns in the range of 6.23% to 19.98%. BM’s strategy should not be able beat the return on US Treasury Bills Due to the glaring weakness of the strategy:

A. Income Part of the strategy is to buy 30 – 35 large-cap stocks, sell out-of-the-money index call options against the value of the stock basket. There are three possible sources of income in this strategy.

- 1) We earn income from the stock’s dividends. Let’s attribute a 2% average return to this source of funds for the 14 ½ year time period. This explains 2% of the 16% average gross annual returns before fees and leaves 14% of the returns unexplained.
- 2) We earn income from the sale of OTC OEX index call options. Let’s also assume that we can generate an additional 2% annual return via the sale of OTC out-of-the-money OEX index call options which leaves 12% of the 16% gross returns unexplained. On Friday, October 14, 2005 the OEX (S&P 100) index closed at 550.49 and there were only 163,809 OEX index call option contracts outstanding (termed the “open interest”). 163,809 call option calls outstanding x \$100 contract multiplier x 550.49 index closing price = \$9,017, 521,641 in stock equivalents hedged.
- 3) We can earn income from capital gains by selling the stocks that go up in price. This portion of the return stream would have to earn the lion’s share of the hedge fund strategy’s returns. We have 12% of the return stream unexplained so far. However, the OTC OEX index puts that we buy will cost AT LEAST <8%> per year (a lot more in most years but I’m giving BM the benefit of every doubt here). Therefore, BM’s stock selection would have to be earning an average of 20% per year. That would mean that he’s been the world’s best stock-picker since 1990 beating out such luminaries as Warren Buffet and Bill Miller. Yet no one’s ever heard of BM as being a stock-picker, much less the world’s best stock-picker. Why isn’t he famous if he was able to earn 20% average annual returns?

**Red Flag # 4:** *\$9.017 billion in total OEX listed call options outstanding is not nearly enough to generate income on BM’s total amount of assets under management which I estimate to range between \$20 - \$50 billion. Fairfield Sentry Ltd. alone has \$5.1 billion with BM. And, while BM may say he only uses Over-the-Counter(OTC) index options, there is no way that this is*

*possible. The OTC market should never be several times larger than the exchange listed market for this type of plain vanilla derivative.*

- B. Protection Part of the strategy is to buy out-of-the-money OEX index put options. This costs you money each and every month. This hurts your returns and is the main reason why BM's strategy would have trouble earning 0% average annual returns much less the 12% net returns stated in Fairfield Sentry Ltd.'s performance summary. Even if BM earns a 4% return from the combination of 2% stock dividends and 2% from the sale of call options, the cost of the puts would put this strategy in the red year in and year out. No way he can possibly be delivering 12% net to investors. The math just doesn't support this strategy if he's really buying index put options.

**Red Flag # 5:** *BM would need to be purchasing at-the-money put options because he has only 7 small monthly losses in the past 14 ½ years. His largest monthly loss is only <0.55%>, so his puts would have to be at-the-money. At-the-money put options are very, very expensive. A one-year at-the-money put option would cost you <8%> or more, depending upon the market's volatility. And <8%> would be a cheap price to pay in many of the past 14 ½ years for put protection!! Assuming BM only paid <8%> per year in put protection, and assuming he can earn +2% from stock dividends plus another +2% from call option sales, he's still under-water <4%> performance wise. <8%> put cost + 2% stock dividends + 2% income from call sales = <4%>. And, I've proven that BM would need to be earning at least 16% annually to deliver 12% after fees to investors. That means the rest of his returns would have to be coming from stock selection where he picked and sold winning stocks to include in his 35-stock basket of large-cap names. Lots of luck doing that during the past stock market crises like 1997's Asian Currency Crises, the 1998 Russian Debt / LTCM crises, and the 2000-2002 killer bear market. And index put option protection was a lot more expensive during these crises periods than 8%. Mathematically none of BM's returns listed in Attachment 1 make much sense. They are just too unbelievably good to be true.*

- C. The OEX index (S&P 100) closed at 550.49 on Friday, October 14, 2005 meaning that each put option hedged \$55,049 dollars worth of stock (\$100 contract multiplier x 550.49 OEX closing index price = \$55,049 in stock hedged). As of that same date, the total open interest for OEX index put options was 307,176 contracts meaning that a total of \$16,909,731,624 in stock was being hedged by the use of OEX index puts (307,176 total put contracts in existence as of Oct 14th x \$55,049 hedge value of 1 OEX index put = \$16,909,731,624 in stock hedged). Note: I excluded a few thousand OEX LEAP index put options from my calculations because these are long-term options and not relevant for a split-strike conversion strategy such as BM's.

**Red Flag # 6:** *At my best guess level of BM's assets under management of \$30 billion, or even at my low end estimate of \$20 billion in assets under management, BM would have to be over 100% of the total OEX put option contract open interest in order to hedge his stock holdings as depicted in the third party hedge funds marketing literature. In other words, there are not enough index option put contracts in existence to hedge the way BM says he is hedging! And there is no*

*way the OTC market is bigger than the exchange listed market for plain vanilla S&P 100 index put options.*

- D. Mathematically I have proven that BM cannot be hedging using listed index put and call options. One hedge fund FOF has told me that BM uses only Over-the-Counter options and trades exclusively thru UBS and Merrill Lynch. I have not called those two firms to check on this because it seems implausible that a BD would trade \$20 - \$50 billion worth of index put options per month over-the-counter thru only 2 firms. That plus the fact that if BM was really buying OTC index put options, then there is no way his average annual returns could be positive!! At a minimum, using the cheapest way to buy puts would cost a fund <8%> per year. To get the put cost down to <8%>, BM would have to buy a one-year at-the-money put option and hold it for one-year. No way his call sales could ever hope to come even fractionally close to covering the cost of the puts.

**Red Flag # 7:** *The counter-party credit exposures for UBS and Merrill would be too large for these firms credit departments to approve. The SEC should ask BM for trade tickets showing he has traded OTC options thru these two firms. Then the SEC should visit the firms' OTC derivatives desks, talk the to heads of trading and ask to see BM's trade tickets. Then ask the director of operations to verify the tickets and ask to see the inventory of all of the stock and listed options hedging the OTC puts and calls. If these firms can't show you the off-setting hedged positions then they are assisting BM as part of a conspiracy to commit fraud. If any other brokerage firms equity derivatives desk is engaged in a conspiracy to cover for BM, then this scandal will be a doozy when it hits the financial press but at least investors would have firms with deep pockets to sue.*

**Red Flag # 8:** *OTC options are more expensive to trade than listed options. You have to pay extra for the customization features and secrecy offered by OTC options. Trading in the size of \$20 - \$50 billion per month would be impossible and the bid-ask spreads would be so wide as to preclude earning any profit whatsoever. These Broker/Dealers would need to offset their short OTC index put option exposure to a falling stock market by hedging out their short put option risk by either buying listed put options or selling short index futures and the derivatives markets are not deep and liquid enough to accomplish this without paying a penalty in prohibitively expensive transaction costs.*

**Red Flag # 9:** *Extensive and voluminous paperwork would be required to keep track of and clear each OTC trade. Plus, why aren't Goldman, Sachs and Citigroup involved in handling BM's order flow? Both Goldman and Citigroup are a lot larger in the OTC derivatives markets than UBS or Merrill Lynch.*

- E. My experience with split-strike conversion trades is that the best a good manager is likely to obtain using the strategy marketed by the third-party FOF's is T-bills less management fees. And, if the stock market is down by more than 2%, the return from this strategy will range from a high of zero return to a low of a few percent depending upon your put's cost and how far out-of-the-money it is.
- F. In 2000 I ran a regression of BM's hedge fund returns using the performance data from Fairfield Sentry Limited. BM had a .06 correlation to the equity market's return which confirms the .06 Beta that Fairfield Sentry Limited lists in its return numbers.

**Red Flag # 10:** *It is mathematically impossible for a strategy using index call options and index put options to have such a low correlation to the market where its returns are supposedly being generated from. This makes no sense! The strategy depicted retains 100% of the single-stock downside risk since they own only index put options and not single stock put options. Therefore if one or more stocks in their portfolio were to tank on bad news, BM's index put would offer little protection and their portfolio should feel the pain. However, BM's performance numbers show only 7 extremely small losses during 14 ½ years and these numbers are too good to be true. The largest one month loss was only -55 basis points (-0.55%) or just over one-half of one percent! And BM never had more than a one month losing streak! Either BM is the world's best stock and options manager that the SEC and the investing public has **never** heard of or he's a fraud. You would have to figure that at some point BM owned a WorldCom, Enron, GM or HealthSouth in their portfolio when bad or really bad news came out and caused these stocks to drop like a rock.*

8. **Red Flag # 11** *Two press articles, which came to print well after my initial May 1999 presentation to the SEC, do doubt Bernie Madoff's returns and they are:*
- A. The May 7, 2001 edition of Barron's, in an article entitled, "**Don't Ask, Don't Tell; Bernie Madoff is so secretive, he even asks his investors to keep mum,**" written by Erin Arvedlund, published an expose about Bernie Madoff a few years ago with no resulting investigation by any regulators. Ms. Arvedlund has since left Barron's. I have attached a copy of the Barrons' article which lists numerous red flags.
  - B. Michael Ocrant, formerly a reporter for MAR Hedge visited Bernie Madoff's offices and wrote a very negative article that doubted the source of BM's returns. He reported to a colleague that he saw some very unusual things while at Madoff's offices. The SEC should contact him. Michael Ocrant is currently serving as the Director of Alternative Investments; Institutional Investor; New York, NY 10001; Telephone # 212-224-3821 or 212-213-6202; Email: [mocrant@iiconferences.com](mailto:mocrant@iiconferences.com)
9. Fund of funds with whom I have spoken to that have BM in their stable of funds continually brag about their returns and how they are generated thanks to BM's access to his broker-dealer's access to order flow. They believe that BM has perfect knowledge of the market's direction due to his access to customer order flow into his broker-dealer.
- Red Flag # 12:** *Yes, BM has access to his customer's order flow thru his broker-dealer but he is only one broker out of many, so it is impossible for him to know the market's direction to such a degree as to only post monthly losses once every couple of years. All of Wall Street's big wire houses experience trading losses on a more regular frequency than BM. Ask yourself how BM's trading experience could be so much better than all of the other firms on Wall Street. Either he's the best trading firm on the street and rarely ever has large losing months unlike other firms or he's a fraud.*
10. **Red Flag # 13:** *I believe that BM's returns can be real ONLY if they are generated from front-running his customer's order flow. In other words, yes, if he's buying at a penny above his customer's buy orders, he can only lose one penny if the stock drops but can*



*make several pennies if the stock goes up. For example, if a customer has an order to buy 100,000 shares of IBM at \$100, BM can put in his own order to buy 100,000 share of IBM at \$100.01. This is what's known as a right-tail distribution and is very similar to the payoff distribution of a call option. Doing this could easily generate returns of 30% - 60% or more per anum. He could be doing the same thing by front-running customer sell orders. However, if BM's returns are real but he's generating them from front-running there are two problems with this:*

- A. Problem # 1: front-running is one form of insider-trading and is illegal*
- B. Problem # 2: generating real returns from front-running but telling hedge fund investors that you are generating the returns via a complex (but unworkable) stock and options strategy is securities fraud.*

Some time ago, during different market conditions, I ran a study using the Black-Scholes Option Pricing Model to analyze the value of front-running with the goal of putting a monetary value on front-running where the insider knew the customer's order and traded ahead of it. When I ran the study the model inputs were valued at: OEX component stocks annualized volatility on a cap-weighted basis was 50% (during a bear market period), the T-bill rate was 5.80%, and the average stock price was \$46. I then calculated the value of an at-the-money call options over time intervals of 1 minute, 5 minutes, 10 minutes, and 15 minutes. I used a 253 trading day year. The SEC should be able to duplicate these results:

1 minute option = 3 cents worth of trade information value  
5 minute option = 7 cents worth of trade information value  
10 minute option = 10 cents worth of trade information value  
15 minute option = 12 cents worth of trade information value

**Conclusion:** Bernie Madoff used to advertise in industry trade publications that he would pay 1 cent per share for other broker's order flow. If he was paying 1 cent per share for order flow and front-running these broker's customers, then he could easily be earning returns in the 30% - 60% or higher annually. In all time intervals ranging from 1 minute to 15 minutes, having access to order flow is the monetary equivalent of owning a valuable call option on that order. The value of these implicit call options ranges between 3 – 12 times the one penny per share paid for access to order flow. If this is what he's doing, then the returns are real but the stated investment strategy is illegal and based solely on insider-trading.

**NOTE:** I am pretty confident that BM is a Ponzi Scheme, but in the off chance he is front-running customer orders and his returns are real, then this case qualifies as insider-trading under the SEC's bounty program as outlined in Section 21A(e) of the 1934 Act. However, if BM was front-running, a highly profitable activity, then he wouldn't need to borrow funds from investors at 16% implied interest. Therefore it is far more likely that BM is a Ponzi Scheme. Front-running is a very simple fraud to commit and requires only access to inside information. The elaborateness of BM's fund-raising, his need for secrecy, his high 16% average cost of funds, and reliance on a derivatives investment scheme that few investors (or regulators) would be capable of comprehending lead to a weight of the evidence conclusion that this is a Ponzi Scheme.

11. **Red Flag # 14:** *Madoff subsidizes down months! Hard to believe (and I don't believe this) but I've heard two FOF's tell me that they don't believe Madoff can make money in big down months either. They tell me that Madoff "subsidizes" their investors in down months, so that they will be able to show a low volatility of returns. These types of stories are commonly found around Ponzi Schemes. These investors tell me that Madoff only books winning tickets in their accounts and "eats the losses" during months when the market sells off hard. The problem with this is that it's securities fraud to misstate either returns or the volatility of those returns. These FOF professionals who heard BM tell them that he subsidizes losses were professionally negligent in not turning BM in to the SEC, FSA and other regulators for securities fraud.*
- Red Flag # 15:** *Why would a fund of funds investor believe any broker-dealer that commits fraud in a few important areas – such as misstating returns and misstating volatility of returns – yet believe him in other areas? I'd really like to believe in the tooth fairy, but I don't after catching my mother putting a quarter underneath my pillow one night.*
12. **Red Flag # 16:** *Madoff has perfect market-timing ability. One investor told me, with a straight face, that Madoff went to 100% cash in July 1998 and December 1999, ahead of market declines. He said he knows this because Madoff faxes his trade tickets to his firm and the custodial bank. However, since Madoff owns a broker-dealer, he can generate whatever trade tickets he wants. And, I'll bet very few FOF's ask BM to fax them trade tickets. And if these trade tickets are faxed, have the FOF's then matched them to the time and sales of the exchanges? For example, if BM says he bot 1 million shares of GM, sold \$1 million worth of OTC OEX calls and bot \$1 million worth of OTC OEX puts, we should see prints somewhere. The GM share prints would show on either the NYSE or some other exchange while the broker-dealers he traded OTC options thru would show prints of the hedges they traded to be able to provide BM with the OTC options at the prices listed on BM's trade tickets.*
13. **Red Flag # 17:** *Madoff does not allow outside performance audits. One London based hedge fund, fund of funds, representing Arab money, asked to send in a team of Big 4 accountants to conduct a performance audit during their planned due diligence. They were told "No, only Madoff's brother-in-law who owns his own accounting firm is allowed to audit performance for reasons of secrecy in order to keep Madoff's proprietary trading strategy secret so that nobody can copy it. Amazingly, this fund of funds then agreed to invest \$200 million of their client's money anyway, because the low volatility of returns was so attractive!! Let's see, how many hedge funds have faked an audited performance history?? Wood River is the latest that comes to mind as does the Manhattan Fund but the number of bogus hedge funds that have relied upon fake audits has got to number in the dozens.*
14. **Red Flag # 18:** *Madoff's returns are not consistent with the one publicly traded option income fund with a history as long as Madoff's. In 2000, I analyzed the returns of Madoff and measured them against the returns of the Gateway Option Income Fund (Ticker GATEX). During the 87 month span analyzed, Madoff was down only 3 months versus GATEX being down 26 months. GATEX earned an annualized return of 10.27% during the period studied vs. 15.62% for Bernie Madoff and 19.58% for the S&P 500. GATEX has a more flexible investment strategy than BM, so GATEX's returns should be*

*superior to BM's but instead they are inferior. This makes no sense. How could BM be better using an inferior strategy?*

15. **Red Flag # 19:** *There have been several option income funds that went IPO since August 2004. None of them have the high returns that Bernie Madoff has. How can this be? They use similar strategies only they should be making more than BM in up months because most of these option income funds don't buy expensive index put options to protect their portfolios. Thus the publicly traded option income funds should make more money in up markets and lose more than Madoff in down markets. Hmm....that Madoff's returns are so high yet he buys expensive put options is just another reason to believe he is running the world's largest Ponzi Scheme. A good study for the SEC would be to compare 2005 performance of the new option income funds to Bernie Madoff while accounting for the cost of Bernie's index put option protection. There's no way Bernie can have positive returns in 2005 given what the market's done and where volatility is.*
16. **Red Flag # 20:** *Madoff is suspected of being a fraud by some of the world's largest and most sophisticated financial services firms. Without naming names, here's an abbreviated tally:*

A. A managing director at Goldman, Sachs prime brokerage operation told me that his firm doubts Bernie Madoff is legitimate so they don't deal with him.

B. From an Email I received this past June 2005 I now suspect that the end is near for BM. All Ponzi Schemes eventually topple of their own weight once they become too large and it now appears that BM is having trouble meeting redemptions and is attempting to borrow sizeable funds in Europe.

ABCDEFGH and I had dinner with a savvy European investor that studies the HFOF market. He stated that both RBC and Socgen have removed Madoff some time ago from approved lists of individual managers used by investors to build their own tailored HFOFs.

More importantly, Madoff was turned down, according to this source, for a borrowing line from a Euro bank, I believe he said Paribas. Now why would Madoff need to borrow more funds? This Euro Investor said that Madoff was in fact running "way over" our suggested \$12-14 billion (Fairfield Sentry is running \$5.3 BB by themselves!). Madoff's 12 month returns is about 7% net of the feeder fund's fees. Looks like he is stepping down the pay out.

C. An official from a Top 5 money center bank's FOF told me that his firm wouldn't touch Bernie Madoff with a ten foot pole and that there's no way he's for real.

17. **Red Flag # 21:** *ECN's didn't exist prior to 1998. Madoff makes verbal claims to his third party hedge FOF's that he has private access to ECN's internal order flow, which Madoff pays for, and that this is a substantial part of the return generating process. If this is true, then where did the returns come from in the years 1991 – 1997, prior to the ascendance of the ECN's? Presumably, prior to 1998, Madoff only had access to order flow on the NASDAQ for which he paid 1 cent per share for. He would have no such advantage pre-1998 on the large-cap, NYSE listed stocks the marketing literature says he buys (Exxon, McDonalds, American Express, IBM, Merck, etc...).*

18. **Red Flag # 22:** *The Fairfield Sentry Limited Performance Chart (Attachment 1) depicted for Bernie Madoff's investment strategy are misleading. The S&P 500 return line is accurate because it is moving up and down, reflecting positive and negative returns. Fairfield Sentry's performance chart is misleading, it is almost a straight line rising at a 45 degree angle. This chart cannot be cumulative in the common usage of the term for reporting purposes, which means "geometric returns." The chart must be some sort of arithmetic average sum, since a true*

*cumulative return line, given the listed monthly returns would be exponentially rising (i.e. curving upward at an increasing rate). My rule of thumb is that if the manager misstates his performance, you can't trust him. Yet somehow Madoff is now running the world's largest, most clandestine hedge fund so clearly investors aren't doing their due diligence. And why does he provide the S&P 500 as his benchmark when he is actually managing using a S&P 100 strategy? Shouldn't the performance line presented be the S&P 100's (OEX) performance?*

**19. Red Flag # 23:** *Why is Bernie Madoff borrowing money at an average rate of 16.00% per annum and allowing these third party hedge fund, fund of funds to pocket their 1% and 20% fees bases upon Bernie Madoff's hard work and brains? Does this make any sense at all? Typically FOF's charge only 1% and 10%, yet BM allows them the extra 10%. Why? And why do these third parties fail to mention Bernie Madoff in their marketing literature? After all he's the manager, don't investors have a right to know who's managing their money?*

**20. Red Flag # 24:** *Only Madoff family members are privy to the investment strategy. Name one other prominent multi-billion dollar hedge fund that doesn't have outside, non-family professionals involved in the investment process. You can't because there aren't any. Michael Ocran, the former MAR Hedge Reporter listed above saw some highly suspicious red flags during his visit to Madoff's offices and should be interviewed by the SEC as soon as possible.*

**21. Red Flag # 25:** *The Madoff family has held important leadership positions with the NASD, NASDAQ, SIA, DTC, and other prominent industry bodies therefore these organizations would not be inclined to doubt or investigate Madoff Investment Securities, LLC. The NASD and NASDAQ do not exactly have a glorious reputation as vigorous regulators untainted by politics or money.*

**22. Red Flag # 26:** *BM goes to 100% cash for every December 31<sup>st</sup> year-end according to one FOF invested with BM. This allows for "cleaner financial statements" according to this source. Any unusual transfers or activity near a quarter-end or year-end is a red flag for fraud. Recently, the BD REFCO Securities engaged in "fake borrowing" with Liberty, a hedge fund, that made it appear that Liberty owed REFCO over \$400 million in receivables. This allowed REFCO to mask its true debt position and made all of their equity ratios look better than they actually were. And of course, Grant Thornton, REFCO's external auditor missed this \$400 million entry. As did the two lead underwriters who were also tasked with due-diligence on the IPO - CSFB and Goldman Sachs. BM uses his brother-in-law as his external auditor, so in this case there isn't even the façade of having an independent and vigilant auditor verifying the accounting entries.*

**23. Red Flag # 27:** *Several equity derivatives professionals will all tell you that the split-strike conversion strategy that BM runs is an outright fraud and cannot possibly achieve 12% average annual returns with only 7 down months during a 14 ½ year time period. Some derivatives experts that the SEC should call to hear their opinions of how and why BM is a fraud and for some insights into the mathematical reasons behind their belief, the SEC should call:*

- a. Leon Gross, Managing Director of Citigroup's world-wide equity derivatives research unit; 3<sup>rd</sup> Floor, 390 Greenwich Street; New York, NY 10013; Tel# 800.492.9833 or 212.723.7873 or [leon.j.gross@citigroup.com](mailto:leon.j.gross@citigroup.com) [ Leon can't believe that the SEC hasn't shut down Bernie Madoff yet. He's also amazed that FOF's actually believe this stupid options strategy is capable of earning a positive return much less a 12% net average annual return. He thinks the strategy would have trouble earning 1% net much less 12% net. Leon is a free spirit, so if you ask him he'll tell you but you'd understand it better if you met him at his

workplace in a private conference room and tell him he won't need to have Citigroup lawyers present, you're just there for some friendly opinions. He talks derivatives at a high level, so ask simple "yes or no" type questions to start off the interview then drill down.]

- b. Walter "Bud" Haslett, CFA; Write Capital Management, LLC; Suite 455; 900 Briggs Road; Mount Laurel, NJ 08065; Tel#: 856.727.1700 or [bud.haslett@writecapital.com](mailto:bud.haslett@writecapital.com) [www.writecapital.com](http://www.writecapital.com) [ Bud's firm runs \$ hundreds of millions in options related strategies and he knows all of the math. ]
- c. Joanne Hill, Ph.D.; Vice-President and global head of equity derivatives research, Goldman Sachs (NY), 46<sup>th</sup> Floor; One New York Plaza, New York, NY 10004; Tel# 212.902.2908 [ Again, make sure she doesn't lawyer up or this conversation will be useless to you. Tell her you want her opinion and no one will hold her to it or ever tell she gave the SEC an opinion without legal counsel present. ]

- 24. **Red Flag # 28:** *BM's Sharpe Ratio of 2.55 (Attachment 1: Fairfield Sentry Ltd. Performance Data) is UNBELIEVABLY HIGH compared to the Sharpe Ratios experienced by the rest of the hedge fund industry. The SEC should obtain industry hedge fund rankings and see exactly how outstanding Fairfield Sentry Ltd.'s Sharpe Ratio is. Look at the hedge fund rankings for Fairfield Sentry Ltd. and see how their performance numbers compare to the rest of the industry. Then ask yourself how this is possible and why hasn't the world come to acknowledge BM as the world's best hedge fund manager?*
- 25. **Red Flag # 29:** *BM tells the third party FOF's that he has so much money under management that he's going to close his strategy to new investments. However, I have met several FOF's who brag about their "special access" to BM's capacity. This would be humorous except that too many European FOF's have told me this same seductive story about their being so close to BM that he'll waive the fact that he's closed his funds to other investors but let them in because they're special. It seems like every single one of these third party FOF's has a "special relationship" with BM.*

## Conclusions:

1. I have presented 174 months (14 ½ years) of Fairfield Sentry's return numbers dating back to December 1990. Only 7 months or 4% of the months saw negative returns. Classify this as "definitely too good to be true!" No major league baseball hitter bats .960, no NFL team has ever gone 96 wins and only 4 losses over a 100 game span, and you can bet everything you own that no money manager is up 96% of the months either. It is inconceivable that BM's largest monthly loss could only be -0.55% and that his longest losing streaks could consist of 1 slightly down month every couple of years. Nobody on earth is that good of a money manager unless they're front-running.
2. There are too many red flags to ignore. REFCO, Wood River, the Manhattan Fund, Princeton Economics, and other hedge fund blow ups all had a lot fewer red flags than Madoff and look what happened at those places.
3. Bernie Madoff is running the world's largest unregistered hedge fund. He's organized this business as "hedge fund of funds private labeling their own hedge funds which Bernie Madoff **secretly** runs for them using a split-strike conversion strategy getting paid only trading commissions which are not disclosed." If this isn't a regulatory dodge, I don't know what is. This is back-door marketing and financing scheme that is opaque and rife with hidden fees (he charges only commissions on the trades). If this product isn't marketed correctly, what is the chance that it is managed correctly? In my financial industry experience, I've found that wherever there's one cockroach in plain sight, many more are lurking behind the corner out of plain view.
4. Mathematically this type of split-strike conversion fund should never be able to beat US Treasury Bills much less provide 12.00% average annual returns to investors net of fees. I and other derivatives professionals on Wall Street will swear up and down that a split-strike conversion strategy cannot earn an average annual return anywhere near the 16% gross returns necessary to be able to deliver 12% net returns to investors.
5. BM would have to be trading more than 100% of the open interest of OEX index put options every month. And if BM is using only OTC OEX index options, it is guaranteed that the Wall Street firms on the other side of those trades would have to be laying off a significant portion of that risk in the exchange listed index options markets. Every large derivatives dealer on Wall Street will tell you that Bernie Madoff is a fraud. Go ask the heads of equity derivatives trading at Morgan Stanley, Goldman Sachs, JP Morgan and Citigroup their opinions about Bernie Madoff. They'll all tell the SEC that they can't believe that BM hasn't been caught yet.
6. The SEC is slated to start overseeing hedge funds in February 2006, yet since Bernie Madoff is not registered as a hedge fund but acting as one but via third party shields, the chances of Madoff escaping SEC scrutiny are very high. If I hadn't written this report, there's no way the SEC would have known to check the facts behind all of these third party hedge funds.

## **Potential Fall Out if Bernie Madoff turns out to be a Ponzi Scheme:**

1. If the average hedge fund is assumed to be levered 4:1, it doesn't take a rocket scientist to realize that there might be anywhere from a few hundred billion on up in selling pressure in the wake of a \$20 - \$50 billion hedge fund fraud. With the hedge fund market estimated to be \$1 trillion, having one hedge fund with 2% - 5% of the industry's assets under management suddenly blow up, it is hard to predict the severity of the resulting shock wave. You just know it'll be unpleasant for anywhere from a few days to a few weeks but the fall out shouldn't be anywhere near as great as that from the Long Term Capital Management Crises. Using the hurricane scale with which we've all become quite familiar with this year, I'd rate BM turning out to be a Ponzi Scheme as a Category 2 or 3 hurricane where the 1998 LTCM Crises was a Category 5.
2. Hedge fund, fund of funds with greater than a 10% exposure to Bernie Madoff will likely be faced with forced redemptions. This will lead to a cascade of panic selling in all of the various hedge fund sectors whether equity related or not. Long -short and market neutral managers will take losses as their shorts rise and their longs fall. Convertible arbitrage managers will lose as the long positions in underlying bonds are sold and the short equity call options are bought to close. Fixed income arbitrage managers will also face losses as credit spreads widen. Basically, most hedge funds categories with two exceptions will have at least one big down month thanks to the unwinding caused by forced redemptions. Dedicated Short Funds and Long Volatility Funds are the two hedge fund categories that will do well.
3. The French and Swiss Private Banks are the largest investors in Bernie Madoff. This will have a huge negative impact on the European capital markets as several large fund of funds implode. I figure one-half to three-quarters of Bernie Madoff's funds come from overseas. The unwinding trade will hurt all markets across the globe but it is the Private European Banks that will fare the worst.
4. European regulators will be seen as not being up to the task of dealing with hedge fund fraud. Hopefully this scandal will serve as a long overdue wake-up call for them and result in increased funding and staffing levels for European Financial Regulators.
5. In the US Fairfield Sentry, Broyhill, Access International Advisors, Tremont and several other hedge fund, fund of funds will all implode. There will be a call for increased hedge fund regulation by scared and battered high net worth investors.
6. The Wall Street wire house FOF's are not invested in Madoff's strategy. As far as I know the wire house's internal FOF's all think he's a fraud and have avoided him like the plague. But these very same wire houses often own highly profitable hedge fund prime brokerage operations and these operations will suffer contained, but painful nonetheless, losses from loans to some hedge funds that go bust during the panic selling. As a result, I predict that some investment banks will pull out of the prime brokerage business deeming it too volatile from an earnings standpoint. Damage to Wall Street will be unpleasant in that hedge funds and FOF's are a big source of trading revenues. If the

hedge fund industry fades, Wall Street will need to find another revenue source to replace them.

7. US Mutual fund investors and other long-term investors in main stream investment products will only feel a month or two's worth of pain from the selling cascade in the hedge fund arena but their markets should recover afterwards.
8. Congress will be up in arms and there will be Senate and House hearings just like there were for Long Term Capital Management.
9. The SEC's critics who say the SEC shouldn't be regulating private partnerships will be forever silenced. Hopefully this leads to expanded powers and increased funding for the SEC. Parties that opposed SEC entry into hedge fund regulation will fall silent. The SEC will gain political strength in Washington from this episode but only if the SEC is proactive and launches an immediate, full scale investigation into all of the Red Flags surrounding Madoff Investment Securities, LLC. Otherwise, it is almost certain that NYAG Elliot Spitzer will launch his investigation first and once again beat the SEC to the punch causing the SEC further public embarrassment.
10. Hedge funds will face increased due diligence from regulators, investors, prime brokers and counter-parties which is a good thing and long overdue.



### **Potential Fall Out if Bernie Madoff is found out to be front-running customer order flow:**

1. This would be just one more black eye among many for the brokerage industry and the NYSE and NASDAQ. At this point the reputations of both the NYSE and NASDAQ are already at rock bottom, so there's likely little downside left for these two troubled organizations.
2. The industry wouldn't miss a beat other than for the liquidation of Madoff Investment Securities, LLC. Figure it will be similar to REFCO's demise only there won't be a buyer of the firm given that they cheated customers who would all be embarrassed to remain customers once the news they've been ripped off is on the front-pages. These former customers are more likely to sue for damages than remain customers. Unsecured lenders would face losses but other than that the industry would be better off.
3. At least the returns are real, in which case determining restitution could keep the courts busy for years. The Class Action Bar would be thrilled. A lot of the FOF's are registered offshore in places where the long arm of the law might not reach. My guess is that the fight for the money off-shore would keep dozens of lawyers happily employed for many years.
4. The FOF's would suffer little in the way of damage. All could be counted on to say "*We didn't know the manager was generating returns illegally. We relied upon the NYSE and NASDAQ to regulate their markets and prevent front-running therefore we see no reason to return any funds.*"

### **Attachments:**

1. 2 page Summary of Fairfield Sentry Ltd with performance data from December 1990 – May 2005
2. Copy of the May 7, 2001 Barrons' article, "***Don't Ask, Don't Tell; Bernie Madoff is so secretitive, he even asks his investors to keep mum,***" written by Erin E. Arvedlund.
3. Partial list of French and Swiss money-managers and private banks with investments in Bernie Madoff's hedge fund. Undoubtedly there are dozens more European FOF's and Private Banks that are invested with BM.
4. 2 page offering memorandum, faxed March 29, 2001, for an investment in what I believe is Fairfield Sentry Ltd., one of several investment programs run by Madoff Investment Securities, LLC for third party hedge fund, fund of funds. I do not know who the source was who faxed this document since the fax heading is blank. The document number listed at the bottom of the page appears to read I:\Data\WPDOCS\AG\_\94021597

# ATTACHMENT 1: Fairfield Sentry Performance Data

**Fairfield Sentry Ltd**

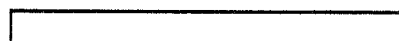
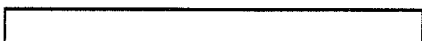
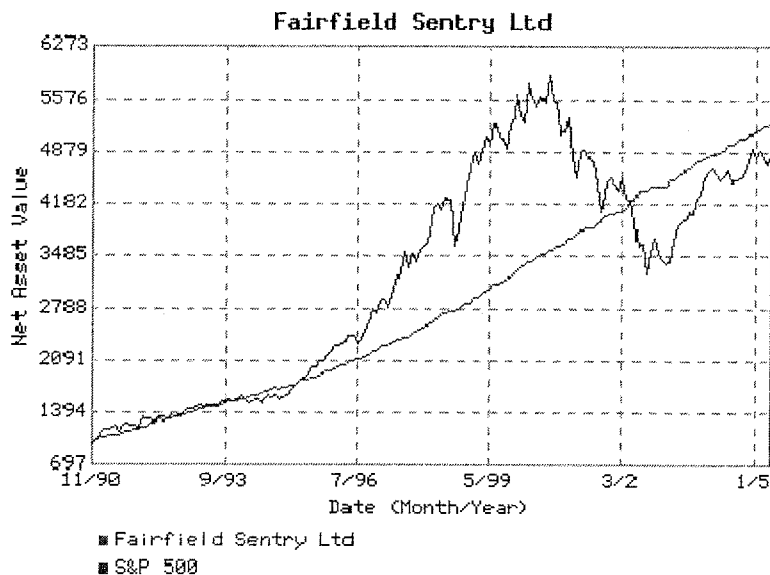
**Fund Category(s):**  
Long/Short Equity

**Strategy Description:**

The Fund seeks to obtain capital appreciation of its assets principally through the utilization of a nontraditional options trading strategy described as "split strike conversion", to which the Fund allocates the predominant portion of its assets. This strategy has defined risk and profit parameters, which may be ascertained when a particular position is established. Set forth below is a description of the "split strike conversion" strategies ("SSC Investments"). The establishment of a typical position entails (i) the purchase of a group or basket of equity securities that are intended to highly correlate to the S&P 100 Index, (ii) the sale of out-of-the-money S&P 100 Index call options in an equivalent contract value dollar amount to the basket of equity securities, and (iii) the purchase of an equivalent number of out-of-the-money S&P 100 Index put options. An index call option is out-of-the-money when its strike price is greater than the current price of the index; an index put option is out-of-the-money when the strike price is lower than the current price of the index. The basket typically consists of approximately 35 to 45 stocks in the S&P 100. The logic of this strategy is that once a long stock position has been established, selling a call against such long position will increase the standstill rate of return, while allowing upward movement to the short call strike price. The purchase of an out-of-the-money put, funded with part or all of the call premium, protects the equity position from downside risk. A bullish or bearish bias of the positions can be achieved by adjustment of the strike prices in the S&P 100 puts and calls. The further away the strike prices are from the price of the S&P 100, the more bullish the strategy. However, the dollar value underlying the put options always approximates the value of the basket of stocks.

Contact Info	Fees & Structure
Fund: Fairfield Sentry Ltd General Partner: Arden Asset Management Address: 919 Third Avenue 11th th Floor New York NY 10022 USA Tel: 212-319-6060 Fax: Email: fairfieldfunds@fggus.com Contact Person: Fairfield Funds Portfolio Manager:	Fund Assets: \$5100.00million Strategy Assets: \$5300.00million Firm Assets: \$8300million Min. Investment: \$ 0.10million Management Fee: 1.00% Incentive Fee: 20.00% Hurdle Rate: High Water Mark: Yes Additions: Monthly Redemptions: Monthly Lockup: Inception Date: Dec-1990 Money Invested In: United States Open to New Investments: Yes

Annual Returns															
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
2.83%	18.58%	14.67%	11.68%	11.49%	12.95%	12.99%	14.00%	13.40%	14.18%	11.55%	10.68%	9.33%	8.21%	7.07%	2.52%



Year To Date:	2.52%
Highest 12 Month Return:	19.98%
Lowest 12 Month Return:	6.23%
<b>Average Annual Return:</b>	<b>12.00%</b>
Average Monthly Return:	0.96%
Highest Monthly Return:	3.36%
<b>Lowest Monthly Return:</b>	<b>-0.55%</b>
Average Gain:	1.01%
Average Loss:	-0.24%
<b>Profitable Percentage:</b>	<b>95.98%</b>
Compounded Monthly Return:	0.96%
<b>Longest Losing Streak:</b>	<b>1 mo.</b>
Maximum Drawdown:	-0.55%

Sharpe Ratio (Rolling 12):	2.56
<b>Sharpe Ratio (Annualized):</b>	<b>2.55</b>
Std. Dev. (Monthly):	0.75%
Std. Dev. (Rolling 12):	2.74%
<b>Beta:</b>	<b>0.06</b>
Alpha:	0.91
R:	0.30
R Squared:	0.09

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1990	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.83% E
1991	3.08% E	1.46% E	0.59% E	1.39% E	1.88% E	0.37% E	2.04% E	1.07% E	0.80% E	2.82% E	0.08% E	1.63% E
1992	0.49% E	2.79% E	1.01% E	2.86% E	-0.19% E	1.29% E	0.00% E	0.92% E	0.40% E	1.40% E	1.42% E	1.43% E
1993	0.00% E	1.93% E	1.86% E	0.06% E	1.72% E	0.86% E	0.09% E	1.78% E	0.35% E	1.77% E	0.26% E	0.45% E
1994	2.18% E	-0.36% E	1.52% E	1.82% E	0.51% E	0.29% E	1.78% E	0.42% E	0.82% E	1.88% E	-0.55% E	0.66% E
1995	0.92% E	0.76% E	0.84% E	1.69% E	1.72% E	0.50% E	1.08% E	-0.16% E	1.70% E	1.60% E	0.51% E	1.10% E
1996	1.49% E	0.73% E	1.23% E	0.64% E	1.41% E	0.22% E	1.92% E	0.27% E	1.22% E	1.10% E	1.58% E	0.48% E
1997	2.45% E	0.73% E	0.86% E	1.17% E	0.63% E	1.34% E	0.75% E	0.35% E	2.39% E	0.55% E	1.56% E	0.42% E
1998	0.91% E	1.29% E	1.75% E	0.42% E	1.76% E	1.28% E	0.83% E	0.28% E	1.04% E	1.93% E	0.84% E	0.33% E
1999	2.06% E	0.17% E	2.29% E	0.36% E	1.51% E	1.76% E	0.43% E	0.94% E	0.73% E	1.11% E	1.61% E	0.39% E
2000	2.20% E	0.20% E	1.84% E	0.34% E	1.37% E	0.80% E	0.65% E	1.32% E	0.25% E	0.92% E	0.68% E	0.43% E
2001	2.21% E	0.14% E	1.13% E	1.32% E	0.32% E	0.23% E	0.44% E	1.01% E	0.73% E	1.28% E	1.21% E	0.19% E
2002	0.03% E	0.60% E	0.46% E	1.16% E	2.12% E	0.26% E	3.36% E	-0.06% E	0.13% E	0.73% E	0.16% E	0.06% E
2003	-0.27% E	0.04% E	1.97% E	0.10% E	0.95% E	1.00% E	1.44% E	0.22% E	0.93% E	1.32% E	-0.08% E	0.32% E
2004	0.94% E	0.50% E	0.05% C	0.43% C	0.66% C	1.28% C	0.08% C	1.33% E	0.53% E	0.03% E	0.79% E	0.24% E
2005	0.51% E	0.37% E	0.85% C	0.14% C	0.63% C	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**END ATTACHMENT # 1 FAIRFIELD SENTRY LTD. PERFORMANCE DATA**