

Exhibit 1

Part 3 of 6

to its individual investors. Madoff implemented the same split-strike conversion strategy across every account following that strategy – and every Sterling account but one followed this strategy.⁶⁵ It is highly inefficient for an investment adviser, following the same investment strategy for every investor, to implement the strategy using managed accounts instead of a commingled account (a collection of individual accounts administered as one account) or a fund structure. The inefficiencies at BLMIS were created in part due to the unusual number of small-sized accounts Madoff managed, as well as the large total number of accounts (thousands), making the execution more challenging. As a result, Madoff incurred significantly more administrative costs than would have been incurred had Madoff run his operations through a fund structure.

69. The fact that Madoff employed an operational structure that is significantly more costly than industry norms (costs borne by BLMIS and not clients) was a red flag and an indication of potentially suspicious activity. Further, while this administrative cost structure was dramatically higher than a traditional fund structure, the fees that Madoff purportedly collected were significantly lower, and an extreme departure from industry customs. An adviser like Madoff would be expected to receive both management and incentive fees.
70. Hedge funds (which Sterling likened Madoff to) typically charge two types of fees for managing a client's assets: management fees and performance fees.⁶⁶ These fees compensate the fund manager for managing the portfolio. They additionally compensate the fund manager for successful performance. Fees to pay broker-dealers for trading securities, as well as other expenses, are either charged for separately, or can be covered in management fees.
71. Madoff purportedly charged a transaction-based commission fee. This was the only fee

⁶⁵ Sterling had one account that did not follow a split-strike conversion strategy (account number 1C1073). This account was active from January 1992 through July 1997 and purportedly followed a convertible arbitrage strategy. SQL Database: StorQM Customer Statements (2002-2008). I have not addressed convertible arbitrage in my report.

⁶⁶ John C. Hull, *Options, Futures, and Other Derivatives* 9 (Prentice Hall: New Jersey, 6th Edition 2006).

that was supposedly charged to investors.⁶⁷ While this transaction-based commission only structure is consistent with services provided for simple broker-dealers, Madoff was serving investors, including Sterling, as an investment adviser, not a broker-dealer, and this fee structure is simply not used by investment advisers. One reason, among others, is that it would lead to a conflict of interest. If an investment adviser is compensated based on the number of transactions, it creates an incentive for more frequent trading and without regard necessarily for maximizing investor returns (i.e., “churning”).

72. A common industry fee structure for the investment adviser is the “1-and-20” structure, which consists of a management fee of one percent (1%) of AUM and a performance fee of twenty percent (20%) of profits. This fee structure varies depending on a manager’s experience and customer “demand” to “get in on” a particular fund.⁶⁸ Profits can consist of actual net profits for the period or profits in excess of a certain benchmark, such as the London Interbank Offer Rate (“LIBOR”). Madoff, however, charged no purported fees based on AUM or on performance. Instead, he merely charged a commission for executing trades, passing up many tens, if not hundreds, of millions of dollars in fees per year. Madoff’s fee structure suggested, on its face, that Madoff was lying about what he was doing as he was theoretically leaving hundreds of millions of dollars on the table annually for no discernable or economically rational reason.

3. Impossible Transaction Prices Early on in Sterling’s BLMIS Investments

a) Impossible Transaction Prices on Common Stock (mid to late 1980s)

73. During the mid to late 1980s, Arthur Friedman, one of the partners at Sterling, tracked the market prices on Sterling’s customer statements from BLMIS, comparing the prices to the

⁶⁷ This “fee” would have been charged to Sterling anyway as a standard transaction cost so Madoff charged nothing for his strategy/investment management services.

⁶⁸ Sterling Stamos, who ran a fund of funds, reportedly charged fees of 1-and-5 over 5. E.g., Sterling Stamos Security Fund, L.P. (February 2005) (SSMSAA0026027-57 at 54).

daily range.⁶⁹ A review of transactions from that time period suggests that an impossibly high percentage of equities were reportedly bought at the lowest possible price during the day, or sold at the highest possible price during the day.

74. Between 1985 and 1987, Sterling customer statements showed a total of 159 transactions. Of these 159 transactions, 147 were purported purchases of securities. In 60 out of the 147 equity purchases (over 40 percent), the security was reportedly bought exactly at the daily low price.⁷⁰
75. In fact, one of the trades actually occurred *below* the lowest price of the day. The customer statement for one Sterling account showed that on October 10, 1985, BLMIS purportedly bought 16,000 shares of Advanced Micro Devices for \$22 per share.⁷¹ However, the lowest price on that day was \$22.75 per share. It would be impossible for BLMIS to transact at that price because it was outside the possible range of transaction prices. This transaction was a clear indicia of fraud.
76. The remaining 12 equity transactions were purported sales of securities. Of these 12 transactions, four were reportedly sold exactly at the daily high price.⁷² This means that BLMIS would have sold securities at the maximum possible price approximately 33 percent of the time.
77. For a strategy such as Madoff's, trades are executed during the day, and each investor is offered the average price of those trades. In order for the average price to be the lowest or highest price of the day, all of the shares purchased must be at the low or high of the day respectively. This level of "success" is virtually impossible, as share prices move around during the day, with very few shares actually trading at the extreme high or low of any

⁶⁹ Arthur Friedman Dep. 124, June 22, 2010.

⁷⁰ For example, on December 19, 1986, BLMIS supposedly purchased 12,600 shares of Bristol Myers Co. across nine accounts. These trades were reported on the customer statements at \$81 per share. According to Bloomberg market data, the daily low price on December 19, 1986 was \$81, implying that BLMIS bought these shares at the low price of the day. See, for example, the December 1986 customer statement for account 1KW014 (1-01138-3-0) (December 31, 1986) (MF00067323).

⁷¹ Account number 101994.

⁷² My analysis does not assume that a \$0.04 commission was included in the reported price.

given day. These transactions suggest an impossibly high percentage of equities were reportedly bought at the lowest possible price during the day, or sold at the highest possible price during the day, and as a result are indicia of fraud as well as a red flag that Madoff was not executing the strategy he purported to follow.

b) Impossible Transaction Prices on Options (mid to late 1980s)

78. In addition to equities trading at impossible prices, Sterling's BLMIS statements also showed option transactions at impossible prices. For example, in October 1987, Friedman noted that for a gain of \$3,900, BLMIS sold 1,500 call option contracts with an \$85 out-of-the-money strike price on Johnson & Johnson ("J&J") for \$6,700 and purchased an \$80 in-the-money put options for \$2,800.⁷³ Given that J&J's stock was trading at \$77.50 per share, these option prices could not have been achieved. These prices for the J&J options are completely inconsistent with the fundamental pricing models used to price basic options. If the price for the call options was accurate, then the price of the put options should have been approximately \$11,800, costing significantly more, and resulting in a net loss of \$5,100.⁷⁴ Put simply, the relationship between the puts and calls reported by BLMIS was impossible to achieve in the market. These inconsistent options transactions were red flags that Madoff was not transacting at the prices he said he was transacting because they would have been virtually impossible.⁷⁵ These option transactions were strong red flags and indicia of fraud because they were purportedly traded at impossible prices.

⁷³ Arthur Friedman Handwritten Maximum Gain & Loss Analysis (1987) (STESAF0125369); Friedman Dep. 173-174, June 22, 2010.

⁷⁴ Price for put option estimated based on Black-Scholes Model.

⁷⁵ Sterling also tracked potential gains and losses in its BLMIS accounts, and compared these to actual gains and losses realized in its BLMIS accounts. This transaction was included in documents related to the tracking. Arthur Friedman Dep. 123-124, June 22, 2010; Arthur Friedman Handwritten Maximum Gain & Loss Analysis (1987) (STESAF0125369).

4. Sterling Learns That A Business Partner and Friend Buys Fraud Insurance That Covers Madoff, Including Ponzi Schemes (February 2001)

79. In February 2001, Saul Katz, one of the Sterling general partners, learned that his friend and business partner in Sterling American Properties, Chuck Klein had purchased fraud insurance on behalf of Klein's investment vehicle (American Securities) for Madoff accounts, which included coverage for Ponzi schemes.⁷⁶ The fact that Klein purchased fraud insurance that covered Madoff was a strong red flag on its face. In my 25 years of working in the investment management industry, conducting due diligence, speaking with investors, and advising on investment decisions, this is the only time I have ever seen an insurance policy available to cover fraud committed by an investment adviser. If the suspicions about an investment adviser rise to a level that necessitates complete financial protection from fraudulent activities perpetrated by the investment adviser, the implications are obvious – significant concerns exist that the investment adviser may be a fraud.
80. Investment adviser fraud protection insurance policies are atypical if not an extraordinary departure from industry customs and practices concerning investment advisers. Instead of investigating the target of the insurance (Madoff) by conducting or having conducted independent due diligence – which would have been consistent with both my experience with high net worth individuals and industry customs – Sterling apparently contacted an insurance broker in the June 2001 time frame in order to explore potentially hedging their bets, by procuring such a policy.⁷⁷

⁷⁶ Friedman Dep. 420-421, 431, June 24, 2010.

⁷⁷ Friedman talked to Robert Duran, a Frank Crystal insurance broker, and learned that the policy covered fraud, had a \$500,000 deductible (as SIPC covers the first \$500,000), cost 30 basis points per face amount (\$0.30 for every \$100.00), and the cost to insure \$200 million would be \$600,000. Friedman was subsequently informed in June 2001 that only \$100 million could be covered. Interoffice Memo re: Madoff Insurance (February 26, 2001) (STESAA0021087); Interoffice Memo re: Madoff Insurance (June 13, 2001) (STESAP0000129 at 132). Ultimately, Sterling declined to purchase the insurance. Arthur Friedman Dep. 434, June 24, 2010.

5. MAR/Hedge and Barron's Articles (April 2001)

81. In the same time period that Sterling learned that a friend bought insurance to protect himself against Madoff stealing his money, copies of two articles were circulated to the Sterling partnership that questioned the legitimacy of Madoff's returns.⁷⁸ While media publications are routinely reviewed in the industry, and can create headline risk (i.e., the risk that a story will spread throughout various media publications, and negatively impact the investment adviser), news stories are not indicia of fraud in and of themselves. Nevertheless, when articles like these are published, industry customs and practices are that further due diligence be conducted.
82. The first article was published in May 2001 in *MAR/Hedge* titled "Madoff tops charts; skeptics ask how."⁷⁹ Highlights from the article include, but are not limited to, the following:
- Madoff is supposedly running one of the largest and most successful hedge funds in the world, based on historical returns;⁸⁰
 - The opinions of a dozen industry professionals indicate that the split-strike conversion strategy Madoff claimed to use would not produce the degree of returns Madoff allegedly attained in the early 1990s to 2001. A few reasons included: (1) the fact that Madoff's returns had little to no volatility compared to firms that implemented a similar trading strategy, (2) Madoff seemed to consistently be able to "time the market" perfectly, and (3) not one person or firm was able to duplicate his

⁷⁸ Michael Ocrant, *Madoff tops charts; skeptics ask how*, *MAR/Hedge* (Issue No. 89, May 2001) (STESAP0000204-08); Erin Arvedlund, *Don't Ask, Don't Tell: Bernie Madoff is so secretive, he even asks his investors to keep mum*, *Barron's* (May 7, 2001) (STESAP0000203).

⁷⁹ Letter to F. Wilpon from Richard Papert, handwritten cc to all partners, attaching *MAR/Hedge* article (April 30, 2001) (STESAP0000204); See Michael Ocrant, *Madoff tops charts; skeptics ask how*, *MAR/Hedge* (Issue No. 89, May 2001) (STESAP0000204-08). While the article came out in the May edition of the magazine, it is likely the magazine was distributed to customers prior to May.

⁸⁰ Michael Ocrant, *Madoff tops charts; skeptics ask how*, *MAR/Hedge* (Issue No. 89, May 2001) (STESAP0000204-08). The article noted that although Madoff did not provide the amount of Assets Under Management (AUM) in his fund, he did not dispute that the AUM was around \$6 - \$7 billion as of 2001.

strategy (including Gateway, a mutual fund following a split-strike conversion strategy),⁸¹ and

- A few of the contacted experts claimed Madoff must have been using financial instruments outside of the S&P 100—or something different than what investors, including Sterling, were being told. Madoff also explained his strong returns by citing a low-to-no fee structure, stating that BLMIS was “just happy” to make trading commissions.

83. Around the same time period Sterling’s partners received another article covering similar red flags related to BLMIS, this one published in *Barron’s*.⁸² Highlights from the article include, but are not limited to:

- BLMIS had been averaging returns of 15 percent per year for more than a decade and never had a down year. When Madoff was asked how he accomplished such a feat, he stated “[i]t’s a proprietary strategy. I can’t go into it;”
- Certain industry professionals responded to BLMIS’s remarkable returns by suggesting that Madoff’s market-making operations may have been using market information to front-run trades, which would have been a fraudulent operation;
- Three options strategists at major banks could not understand Madoff’s returns via the split-strike conversion strategy. A former Madoff investor is quoted as saying that any “seasoned hedge fund investor knows the split-strike strategy is not the whole story;” and
- Madoff’s refusal to charge fees for his money management services or fees on money he managed in private accounts remained a mystery.

84. Typical industry customs and practices, upon reading these articles, would have been to

⁸¹ Michael Ocrant, *Madoff tops charts; skeptics ask how*, MAR/Hedge (Issue No. 89, May 2001) (STESAP0000204-08).

⁸² Fax to Arthur Friedman from Bob Zimmerman, handwritten cc to all partners, attaching *Barron’s* article (May 7, 2001) (STESAP0000203); Erin Arvedlund, *Don’t Ask, Don’t Tell: Bernie Madoff is so secretive, he even asks his investors to keep mum*, *Barron’s* (May 7, 2001).

conduct due diligence into BLMIS and Madoff. A few months earlier in February (as noted above), Sterling's business partner and friend had purchased fraud insurance in order to protect against, among other things, Madoff stealing money; thus, the questions concerning how Madoff generated returns, possibly illegal front-running, were in my opinion red flags that required further due diligence. The fact that these articles suggested that Madoff might not have been executing the very strategy it purported to implement is precisely the type of red flag that in my experience should (and would) prompt more thorough due diligence.

6. Madoff's Purported Strategy Was Unscalable

85. One of the key pieces of information disclosed in the *MAR/Hedge* article was the fact that Madoff was managing upwards of \$6-7 billion in assets.⁸³ This amount under management is not by itself a red flag. However, the fact that Madoff was operating a split-strike conversion strategy using the S&P 100, and was doing so with up to \$7 billion in assets was a red flag because of the implications on the scalability of the strategy.⁸⁴
86. Operating any strategy using the S&P 100 has certain associated limitations. First, the S&P 100 contains arguably the most efficiently-traded and tracked stocks in the world, limiting the possible gains to be had from any market inefficiencies. Second, a strategy limited to the S&P 100 is by design limited to only 100 stocks, and therefore limited to the

⁸³ Michael Ocran, *Madoff tops charts; skeptics ask how*, *MAR/Hedge* (Issue No. 89, May 2001) (STESAP0000204-08). The article noted that although Madoff did not provide the amount of AUM in his fund, he did not dispute that the AUM was around \$6 - \$7 billion as of 2001.

⁸⁴ Similar to the law of diminishing returns, scalability refers to the concept that as a fund increases its AUM, it becomes increasingly difficult for that fund to find investment opportunities of a scale proportional to the growing size of the fund. In particular, many trading strategies are only profitable using small amounts of capital, hence the returns those strategies generate as a percentage of the fund decrease as the fund grows larger. Press Release, Alternative Investment Management Association (AIMA), *AIMA Launches New Due Diligence Questionnaires* (London: April 12, 2007), http://www.aima.org/en/media_centre/press-releases.cfm/id/51A9EFBE-E15D-4CEC-83A; Vikas Agarwal, Naveen D. Daniel, Narayan Y. Naik, *Flows, Performance, and Managerial Incentives in Hedge Funds* (Glasgow: European Finance Association (EFA) 2003); Roger M. Edelen, Richard Evans, Gregory B. Kadlec, *Scale effects in mutual fund performance: The role of trading costs* (March 17, 2007), <http://ssrn.com/abstract=951367>; Harry M. Kat & Helder P. Palaro, *FundCreator-Based Evaluation of Hedge Fund Performance* (February 22, 2007), <http://ssrn.com/abstract=964301>.

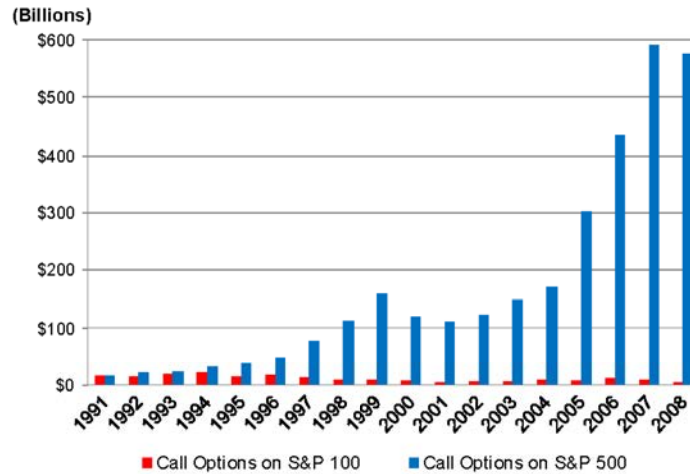
total number of publicly-available shares for these 100 stocks, as well as options on that particular index.

87. A useful comparison for purposes of scalability is the Gateway fund, a \$1.3 billion fund as of 2001 that actually implemented a split-strike conversion strategy, but did so with the S&P 500.⁸⁵ One of the reasons why Gateway uses the S&P 500 is to avail itself of more securities and more market value, allowing it to invest a larger asset base in the strategy.⁸⁶ This strategy tends not to be scalable, and Gateway gives itself as much of an advantage as possible by utilizing 500 stocks instead of 100 stocks, and the associated increase in available market value. This means that Gateway has significantly more opportunity to implement its strategy than if it relied on stocks in the S&P 100. This advantage is not limited to the stocks. The volume of options available on the S&P 500 is significantly more than the volume of options available on the S&P 100, again contributing to the ability of Gateway to scale the strategy. The following figure illustrates this point. The figure shows that the notional value of call options (i.e., the number of option shares outstanding times the value of the index at the time) is significantly greater for the S&P 500 than the S&P 100.

⁸⁵ BarclayHedge Database (August 2011); Press Release, Natixis, *Natixis Global Asset Management, L.P. Acquires Gateway Investment Advisers, L.P.* (Boston: February 19, 2008).

⁸⁶ Gateway's portfolio typically consists of 250 to 400 stocks, as compared to BLMIS's 35 to 50. Gateway Trust SEC Form N-1A (July 20, 2007).

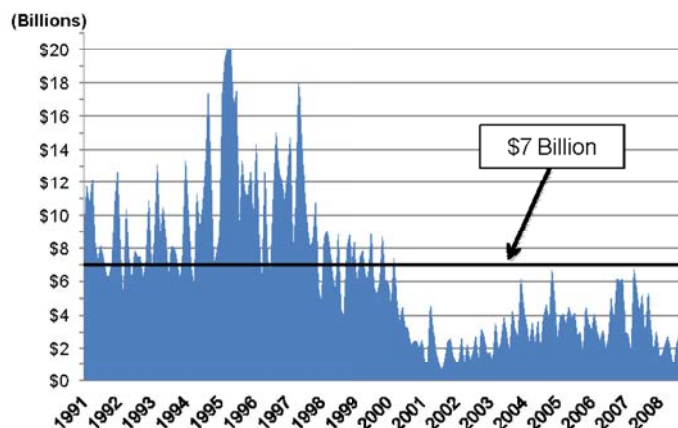
Figure 1
Notional Value of Call Options 1991-2008: S&P 100 v. S&P 500⁸⁷



88. A closer analysis of the outstanding notional value for S&P 100 call options reveals that it would have been impossible for Madoff to implement his SSC strategy. In order to implement the strategy, Madoff needed to sell call options, where the notional value of the call option would have corresponded to the funds invested in the market. That is, if Madoff bought \$100 of stock, he needed to sell roughly \$100 of notional value in call options. Therefore, if Madoff was managing an approximately \$7 billion fund (as had been reported by 2001) he would need approximately \$7 billion in call options in terms of notional value. However, as the following chart illustrates, by 2001, and every period thereafter there was simply not enough call option notional value to support Madoff's strategy.

⁸⁷ Source for option data is Chicago Board Options Exchange ("CBOE").

Figure 2
Notional Value of S&P 100 Call Options⁸⁸



89. That Madoff was operating an approximately \$7 billion split-strike conversion strategy was a warning sign that should have prompted due diligence.⁸⁹ Madoff was operating with more assets and fewer stocks and fewer opportunities than a comparable strategy being implemented by Gateway, and due diligence would typically have been conducted in order to understand how, if at all, Madoff was able to do so and still generate consistently appreciable returns.⁹⁰

7. Madoff Does Not Want Sterling's BLMIS Investments to be Disclosed if Sterling Stamos Files as an RIA (2002)

90. Typically, the relationship between an investor and investment adviser is one at arm's-

⁸⁸ Madoff's strategy required selling call options that were out-of-the-money, therefore the chart depicts the monthly maximum notional value of call options that are out-of-the-money (and expiration date of less than six months). The maximum reflects the highest notional value reported on any day within the month. Data was obtained from CBOE.

⁸⁹ The issues associated with implementing a split-strike conversion strategy on the S&P 100 with a large asset base were further magnified in 2007 and 2008 when BLMIS publicly disclosed that it was managing \$13 billion and \$17 billion respectively. SEC Form ADV, Bernard L Madoff Investment Securities (January 24, 2007) (PUBLIC0003763-96 at 3771). SEC Form ADV, Bernard L. Madoff Investment Securities, January 7, 2008 (PUBLIC0003834-64 at 3840).

⁹⁰ Andre F. Perold and Robert S. Salomon, Jr., *The Right Amount of Assets Under Management*, Financial Analysts Journal (May-June 1991).

length, and limited to the services under contract. However, when Sterling Stamos considered registering as an RIA in 2002, Peter Stamos testified that Saul Katz informed him Madoff was concerned that Sterling Stamos registering would require disclosure of Sterling's investments with Madoff.⁹¹ Peter Stamos also testified that, due to Madoff's concerns, Saul Katz was concerned that Sterling Stamos's registration would interfere with his relationship with Madoff.⁹²

91. This response by Madoff, that registration might bring unwanted attention to BLMIS, was a significant red flag and should have prompted additional due diligence because there was no rational reason for Madoff to be so concerned about regulatory or other disclosure. In my experience, I have never known of any investment adviser requesting an investor take steps in order to avoid public disclosures of the manager, or the investor's relationship with that investment manager.

8. Sterling's Cumulative Returns are Over 48 Percent while the Market's Cumulative Returns are Down 27-44 Percent for a Three-Year Period

92. The end of 2002 saw the end of a three-year period during which the stock market fell dramatically while Sterling's BLMIS accounts showed returns of over 45 percent.⁹³ For example, documents in Sterling's possession show that it compared its BLMIS account returns against the Dow Jones Industrial Average ("DJIA")⁹⁴ in 1996 and then annually between 2000 and 2004, the results of which indicate that between 1999 and 2002 its

⁹¹ Stamos Dep. 49-53, August 19, 2010.

⁹² Stamos Dep. 49-53, August 19, 2010.

⁹³ When performing comparisons of returns between and among funds and indices, it is standard industry practice to use full year or full month returns, regardless of whether a fund's assets are invested in the market, in treasuries, or in illiquid securities over the relevant time period. Investors are most interested in total returns, which would include periods "in the market" as well as "out of the market." While the fact that BLMIS was purportedly not "in the market" every trading day (i.e. was theoretically "parking" money in T-bills) is atypical for an investment manager, any comparison of returns between BLMIS and other funds or indices should not differentiate between when BLMIS was "in the market" versus "out of the market," as that is not the standard. For this report, I performed certain analyses pertaining to just those periods that Madoff was "in the market."

⁹⁴ The DJIA is an index of 30 large publicly-traded companies, and is one of a number of commonly-followed market indices. John Downes & Jordan E. Goodman, *Dictionary of Finance and Investment Terms* 402 (New York: Barron's 2nd ed. 1987).

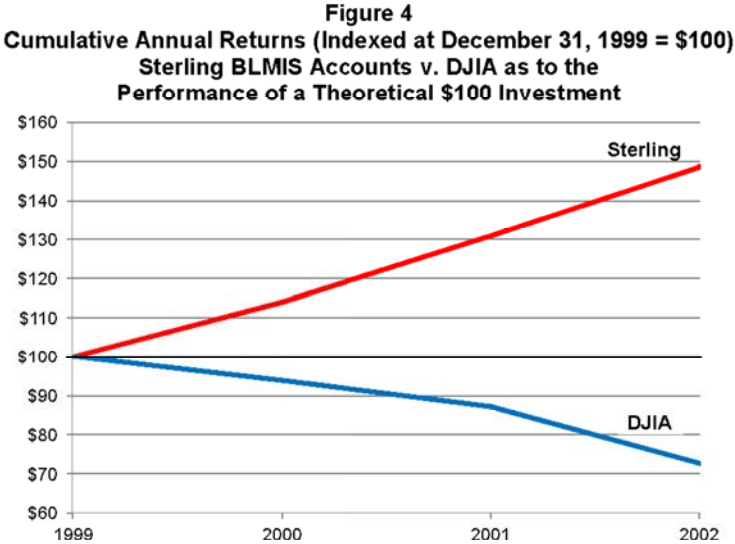
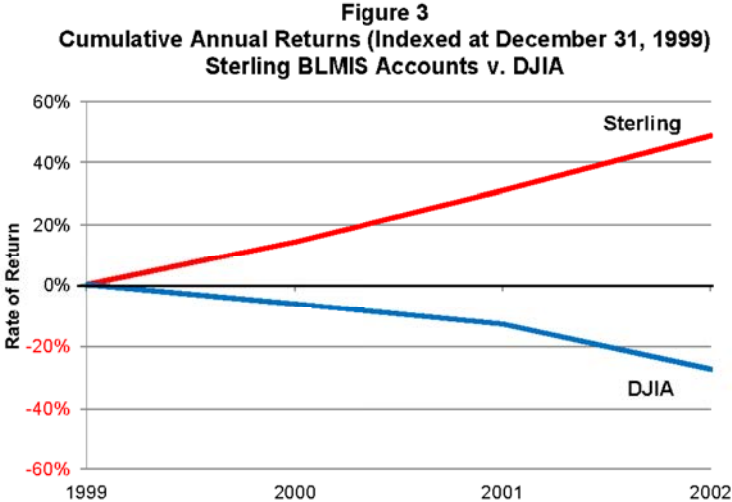
BLMIS accounts had cumulative returns of 48.7 percent, while the DJIA fell 27.5 percent over the same time period.⁹⁵ Sterling's BLMIS returns and the DJIA returns went in precisely the opposite direction over a three-year period, creating a 76.2 percentage point variance (the difference between up 48.7 percentage points and down 27.5 percentage points). That is, if an investor held \$100 in Sterling's BLMIS account in December 1999, that \$100 would have become roughly \$149 by December 2002 (an increase of 49 percent). Similarly, if an investor held \$100 in the DJIA in December 1999, that \$100 would have become roughly \$73 by December 2002 (a decrease of 27 percent).

93. The following figures illustrate (as reported by Sterling) the annual declines in the DJIA of 6.2 percent, 7.1 percent, and 16.8, that, when compounded together, result in a three-year decline of roughly 27 percent.⁹⁶ This compares to the annual increases in Sterling's BLMIS accounts (as reported by Sterling) of 14.1 percent, 14.8 percent, and 13.5 percent, for a cumulative three-year increase of roughly 49 percent.⁹⁷

⁹⁵ Sterling kept a monthly Excel sheet tracking the balances in its BLMIS accounts. Arthur Friedman Dep. 336, 396, June 23, 2010. In spreadsheets containing account balances as of December 31, 2000, 2001, and 2002, Sterling also included entries listing Sterling's BLMIS annual returns followed by the DJIA annual returns. 1996 (STESAZ0001186); 2000 (STESAZ0000273); 2001 (STESAZ0000411); 2002 (STESAZ0000681); 2003 (STESAZ0000832); 2004 (STESAZ0001010); *See also* Spreadsheet titled "Madoff vs. DJIA Annual Percentage Change" (2005) (STESAJ0010051).

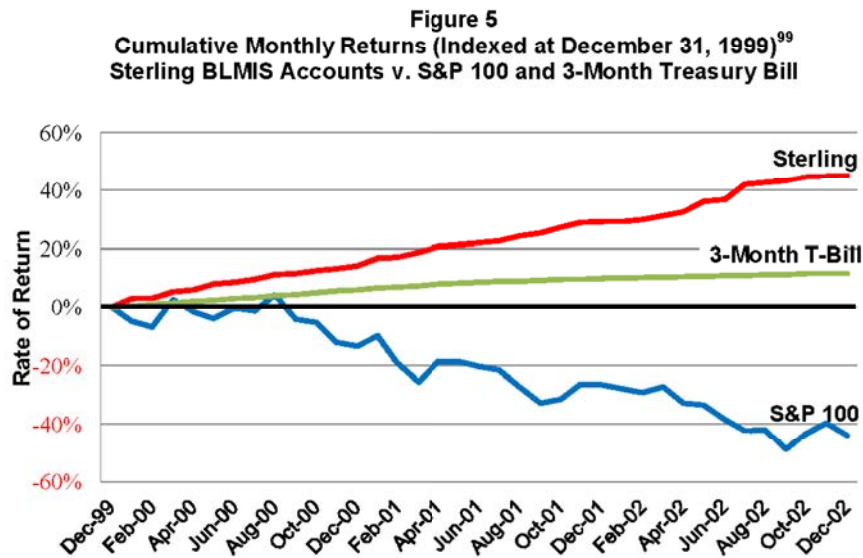
⁹⁶ $(1 - 0.062) * (1 - 0.071) * (1 - 0.168) - 1 = -0.275$.

⁹⁷ $(1 + 0.141) * (1 + 0.148) * (1 + 0.135) - 1 = 0.487$.



94. The difference in returns between Sterling’s BLMIS accounts and the market is more pronounced when Sterling’s BLMIS returns are compared against the underlying index in

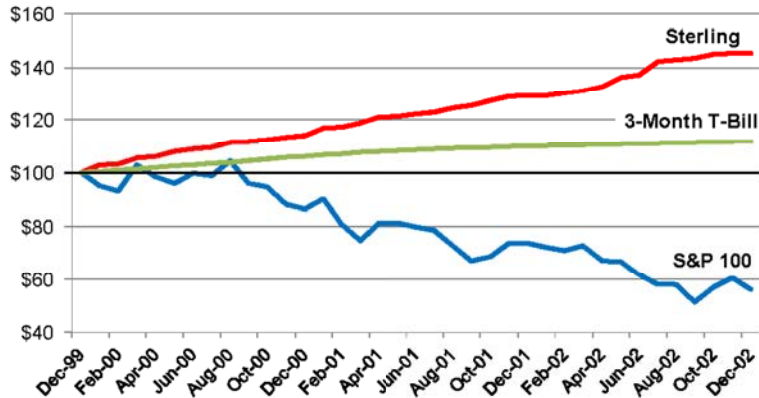
Madoff's SSC strategy—the S&P 100. As the charts below show, the end of 2002 saw the end of a three-year period during which the S&P 100 fell by roughly 44 percent,⁹⁸ as compared to Sterling's BLMIS returns. The figures also include cumulative returns for Treasury Bills, a default risk-free investment.



⁹⁸ This analysis relies on monthly returns calculated from data available in the record. The cumulative return for Sterling's BLMIS accounts over the three-year period is 44 percent, which is less than the cumulative returns as calculated using documents in Sterling's possession (i.e., 49 percent). As such, the analysis based on monthly returns is conservative.

⁹⁹ Sources include StorQM Customer Statement, Settled Cash table (weighted average across Sterling accounts), Bloomberg market data, Federal Reserve FRB H:15 Release. Monthly returns for Sterling are calculated using the Modified Dietz method. The Modified Dietz method "[c]alculates a capital-weighted rate of return by taking the exact length of time that cash flow is present in the portfolio. The major advantage of this method is that it does not require daily calculation of the portfolio value." Noel Amenc and Veronique LeSourd, *Performance Analysis* 40-41 (est Sussex, England: Wiley, 2003).

Figure 6
Cumulative Monthly Returns (Indexed at December 31, 1999 = \$100)¹⁰⁰
Sterling BLMIS Accounts v. S&P 100 and 3-Month Treasury Bill as to the
Performance of a Theoretical \$100 Investment



95. This consistent, inexplicable over-performance with respect to the DJIA, the S&P 100 and Treasury Bills, over a three-year period, where global economic markets were down substantially, was a serious indicia of fraud that Madoff could not and simply was not doing what he claimed to be doing.
96. Sterling received documents stating that the SSC strategy would not perform well in a down market.¹⁰¹ Madoff's SSC strategy is exposed to market movements within the strike range,¹⁰² and in such a long, protracted downward move of the market, it would be statistically improbable to achieve this result.¹⁰³

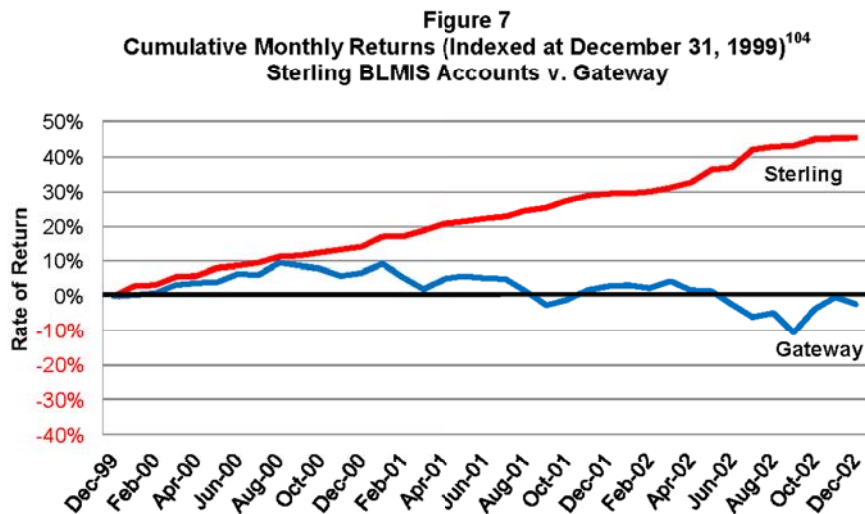
¹⁰⁰ Sources include StorQM Customer Statement, Settled Cash table, Bloomberg market data, Federal Reserve FRB H:15 Release.

¹⁰¹ See, e.g., Gonder Memorandum (August 24, 1990) (STESAH0007078 at 80); Friedman Dep. 132, June 22, 2010. Madoff's ability to generate positive returns in periods of market stress was not limited to this time period. As addressed in Section IX.D.3, Madoff outperformed the S&P 100 during a number of periods of significant market stress.

¹⁰² The strike range includes index prices above the strike price on the put option and below the strike price on the call option. Within this range, the options have no impact on investment performance, and the portfolio will move in tandem with the underlying index.

¹⁰³ As an example, I performed a linear regression of simulated SSC returns on the S&P 100 from 1990 to 2000. The beta of this regression, or the investments' dependence on market movement, is calculated to be 30%. This

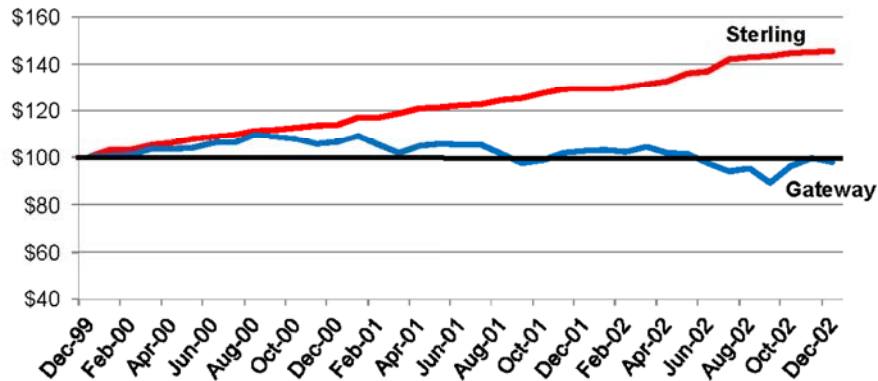
97. If the market experiences prolonged movement in either direction, it should have been reflected in the returns of Sterling's BLMIS accounts. The expected performance of Madoff's strategy in the face of a 27-44 percent drop in market values can be observed through Gateway, a mutual fund that employed a SSC strategy similar in nature to Madoff's SSC strategy. As the following figures illustrate, Gateway's performance over this time period was nowhere near the performance reflected in Sterling's statements and, in fact, was negative:



means that subject to error, and manager ability, the strategy is expected to be down 30% as much as the market's decline. The standard error of the regression is too small to allow for such a radical divergence as the stated results.

¹⁰⁴ Sources include StorQM Customer Statements, Settled Cash table, and Morningstar Direct Database.

Figure 8
Cumulative Monthly Returns (Indexed at December 31, 1999 = \$100)¹⁰⁵
Sterling BLMIS Accounts v. Gateway Based on a Theoretical \$100 Investment



98. As compared to the analyses above, where the S&P explained less than 5 percent of the change in Sterling's BLMIS returns, the S&P 100 explained 83 percent of the change in Gateway's returns, and the S&P 500 explained 84 percent of the change in Gateway's returns. This result is expected, as Gateway's SSC strategy was based on using stocks in the S&P 500 index, and therefore should be more strongly correlated to the return of the S&P 500.
99. Sterling's BLMIS return over this three-year period is also a major red flag because of its obvious and stark lack of correlation with the S&P 100. In a strategy that was expected to be correlated to the S&P 100, results like these are indicia of fraud and warning signs that Madoff was lying to investors about the strategy he claimed to be following. Industry customs and practices would be, at a minimum, to perform significant additional due diligence to understand or try to confirm how Madoff was possibly able to generate these returns, especially when the returns departed so significantly from the realm of expectation for Madoff's purported SSC strategy.

¹⁰⁵ Sources include StorQM Customer Statements, Settled Cash table, and Morningstar Direct Database.

9. Sterling Was Cautioned by a Consultant that he “Couldn’t Make Bernie’s Math Work” and that “Something Wasn’t Right” (2003)

100. Tim Dick, a venture capital investor, entrepreneur, and consultant to Sterling, reportedly told Saul Katz that he “could not make Madoff’s math work” and that “something wasn’t right.”¹⁰⁶ Hearing that “something wasn’t right,” especially in light of the many other red flags preceding this discussion, was another red flag that Madoff was not doing what he purported to be doing. Basic due diligence practices would have been to further analyze and investigate “the math,” to test the specific steps Dick undertook to try and make Madoff’s math work, and to fully understand and evaluate the implications of what it specifically meant for the math to “not work.”

10. Inconsistent Explanations About the Strategy’s Implementation and Execution (January 2004)

101. A tell-tale red flag that an investment adviser is a fraud is when the adviser gives shifting descriptions of the strategy, and what drives its performance. In a memorandum dated January 6, 2004, Sterling’s Arthur Friedman documented a conversation he had with BLMIS’s Frank DiPascali regarding Madoff’s 2003 returns.¹⁰⁷ In this conversation, Friedman asked DiPascali about a prior comment made by DiPascali regarding the existence of a “committee” at BLMIS responsible for investment decisions. Several minutes after this memorialized conversation with DiPascali, Friedman received a call directly from Madoff during which Madoff confirmed the existence of such a committee. Madoff further stated that he was the head of the “committee,” DiPascali was a senior

¹⁰⁶ Email from Tim Dick to Peter Stamos re: Madoff (December 13, 2008) (SSMSAA1010527); *See also Startup Capital Ventures – General Partners*, Startup Capital Ventures (last visited November 2, 2011), http://www.startupcv.com/ourteam/gen_partners.html#tdick; Stamos Dep. 246, August 19, 2010. Peter Stamos testified that this conversation occurred in late 2002/early 2003. Stamos Dep. 314, August 19, 2010.

¹⁰⁷ Friedman Memorandum re: Madoff (January 6, 2004) (STESAA0021058). The memo mentions that BLMIS was not invested in the market in December, when the market had been up 4 percent. In fact, Sterling’s accounts were never invested in the market at the end of any calendar quarter beginning in the third quarter of 2002, which is highly suspicious. An opportunistic strategy such as Madoff’s purported strategy cannot afford to intentionally be uninvested for artificial reasons without seriously compromising the chance to maximize returns. SQL Database: StorQM Customer Statements; Gonder Memorandum (August 24, 1990) (STESAH0007078-80).